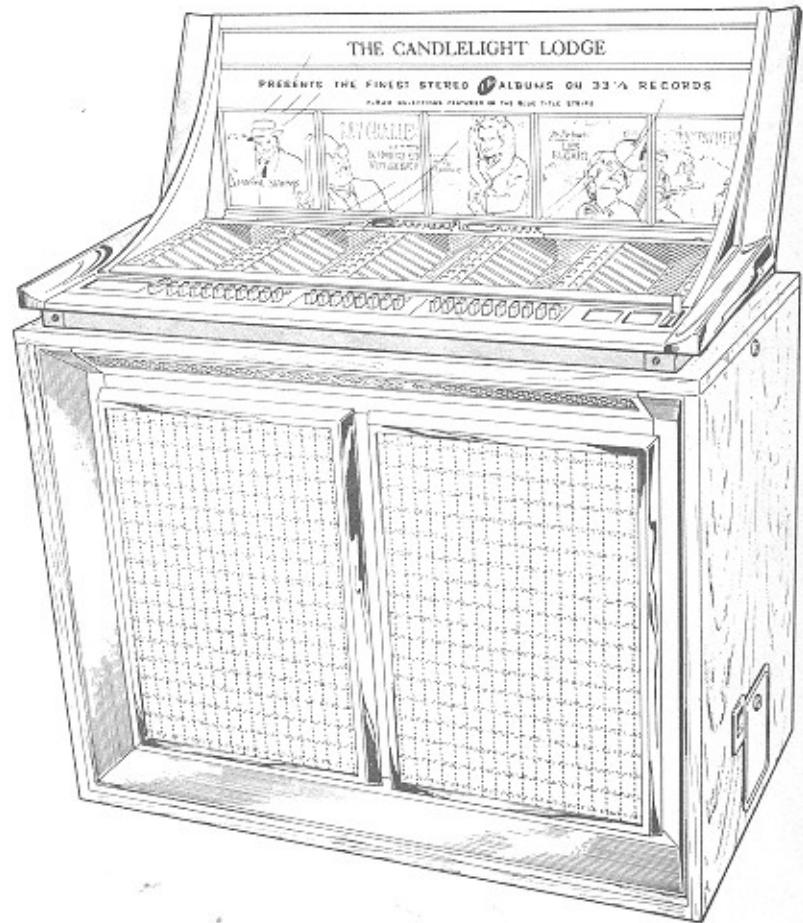


SEEBURG LP CONSOLE

MODELS
LPC1B
LPCIBR



INSTALLATION & OPERATION MANUAL

MANUAL NO. 488494

THE SEEBURG CORPORATION
CHICAGO 22, ILLINOIS U. S. A.

SEEBURG LP CONSOLE, Models LPC1B and LPC1BR

- NOTICE -

INSTALLATION AND OPERATION information for Seeburg LP Console Models LPC1B and LPC1BR is the same as for Models LPC1 and LPC1R discussed in Manual No. 487390 which should be used for reference.

THE MAJOR DIFFERENCE in the "B" Models is in the cabinet finish and speaker grille cloth. The cabinet is finished in a high pressure Decarlite Laminate, Oyster Ash.

INSTALLATION AND OPERATION

DESCRIPTION

The Select-O-Matic LPC1 Model is a coin operated phonograph designed for selective playing of any of the selections in a program of 80, 33-1/3 r.p.m. and 45 r.p.m., 7-inch diameter records. It will play either side of the records in Single Play Operation or with but one selection, both sides in Album Play. The Album Play feature provides for the playing of both sides of a record - left side first, then the right side - if either the left or right side has been selected. Single Play is conventional operation in which only the selected side of a record is played.

The LPC1 model phonograph is equipped with a fully transistorized stereo amplifier for stereophonic sound reproduction but monaural records may also be used.

Model LPC1R incorporates remote control facilities which permit the use of Seeburg Stereo Consolette, Type SC1 for remote selection and local reproduction of musical programs.

Both the LPC1 and LPC1R Models have a Type APU1, Album Pricing Unit which provides extreme flexibility in setting-up pricing combinations as detailed on Pages 5 and 7.

Model LPC1 contains a Type IT1 Income Totalizer which totals nickels, dimes, quarters and half dollars deposited in the phonograph and indicates actual total cash value. Model LPC1R is equipped with a Type IT1R-56, Income Totalizer which is designed to indicate total cash deposited in both the phonograph and all remote Stereo Consoles.

INSTALLATION

Damage Caused By Shipping

Examine the instrument immediately after unpacking. If any damage is found, notify the transportation representative.

Cabinet Lid Support

The lid support rod is normally retained in horizontal position and snapped in place as shown dotted in Figure 1. To support the cabinet lid, unsnap the lid support rod, swing into position and hook stud into keyhole slot in latch plate.

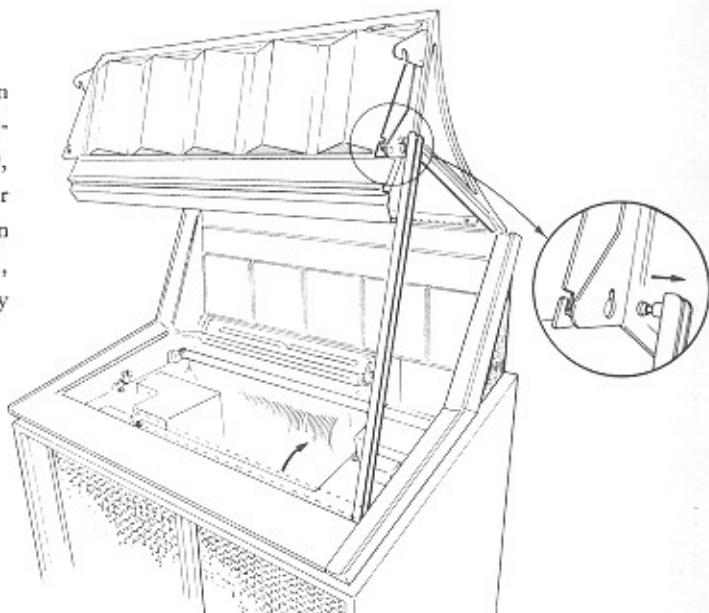


Figure 1. Cabinet Lid Support.

CAUTION: Be certain that the support rod is fully engaged in the slot before the lid is released. Do not move the cabinet while the lid is resting on the support.

Opening Front Doors

The cabinet door Latch Rod Handle is located behind the selector panel as shown in Figure 2. Turn the handle to disengage it from its retaining clips and lift upwards to release the right hand cabinet door. Swing the door open. Unlatch the left hand door at its lower right hand corner and swing out.

NOTE: When closing doors, apply pressure!

The entire lower cabinet compartment containing all electronic units and interconnecting cables is now exposed for unblocking and servicing operations.

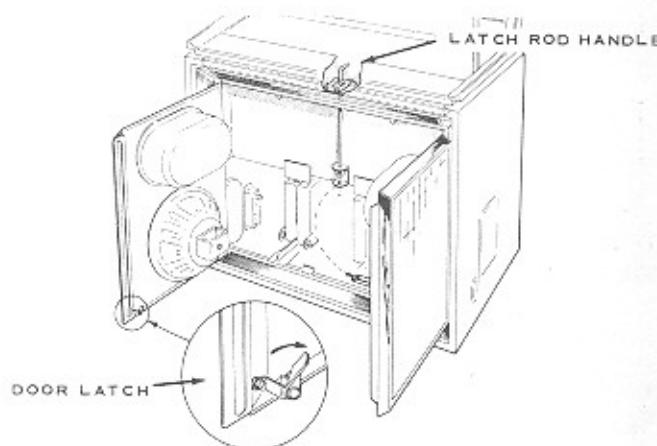


Figure 2. Opening Front Doors.

Unblocking

Before placing this phonograph in operation, it is necessary to remove or loosen shipping hardware. Carefully follow instructions on the tags and remove blocks and shipping supports accordingly.

CAUTION: Do not attempt mechanism operation by manually turning the flywheel; this may damage the mechanism. Use the service switch.

NOTE: Do not put packing blocks, instruction cards, or any other material on the air intake screen in the floor of the cabinet, as this will obstruct ventilation and cause overheating. Overheating will warp records and shorten the life of the equipment. Store blocking material for future use.

Tubes and Plugs

This instrument is shipped with tubes and plugs installed. See that they are firmly seated in the sockets before inserting the line cord.

Voltage Rating

Before connecting the line cord make certain that the voltage and frequency are correct. Although this equipment is designed for 117 volt operation, it will perform satisfactorily at any line voltage between 100 and 130 volts.

CAUTION: In locations where the line voltage exceeds 130 volts, voltage regulator, Seeburg Type VR1-56, is required for protection of the amplifier.

However, this Voltage Regulator will not protect other electrical parts and assemblies in case of prolonged operation (in excess of 1 hour) above 130 volts.

For 220 Volt operation use auto-transformer, Seeburg Part No. 402399.

Placing the Select-O-Matic

To obtain best performance and long service from this equipment, it should be placed on a firm, reasonably level floor, away from excessive moisture and heat.

WARNING: To prevent warping records, place phonograph where the records will not at any time be exposed to direct sunlight or any other radiant heat. Do not reduce ventilation by obstructing the vent screens.

A space of at least two inches must be allowed between the back of the cabinet and the wall, to assure adequate ventilation.

Service Switch Operation

The Service Switch and Manual Credit Switch Assembly (together with the Album Selector Terminal Board) is mounted on the right hand side of the upper cabinet, to the right of the mechanism as shown in Figure 3.

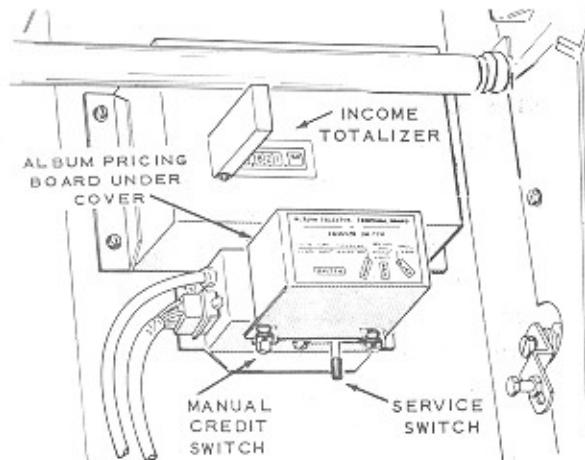


Figure 3. Service Switch & Manual Credit Switch.

When the service switch lever (right of the two switches) is moved to the "SCAN" position (to the left against the spring return) and is permitted to return to the center position, the record playing mechanism will scan past selections previously established, then return and come to rest at the left hand end of the base.

With the mechanism scanning and the service switch in the center position, the mechanism may be stopped at any point of travel by pushing the Manual Credit Switch (left switch) twice to the right.

The service switch must be set to the right of center position for normal operation of the phonograph.

Manual Credit Switch

SERVICE SWITCH

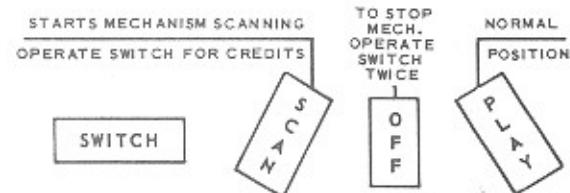


Figure 4. Service Switch Operating Instruction Plate.

With the Service Switch held in "SCAN" position, a credit is obtained when the Manual Credit Switch is pushed to the right, and a selection may be made after the Service Switch is returned to "PLAY" position.

Loading Records

To obtain optimum performance it is necessary that only new or nearly new records be used. Use only standard 7-inch commercial records.

Push up the Main Switch (on left side of cabinet rear) to the "ON" position. Scan the carriage to the right hand end of its base and stop it there as described in Service Switch Operation.

Starting at the left end of the magazine, insert one record in each record space. The Record Playing Indicator refers to the left sides of the records regardless of whether the left side or the right side selection is being played. Note that the first twenty (20) record spaces at the left end of the magazine are intended for Album records.

In the LPC1 and LPC1R Models, A1, C1, E1, G1, etc. will be left sides of records and B1, D1, F1, H1, etc. will be right sides of records.

CAUTION: Do not force records into record spaces! Any normal record will roll very freely into the record space. A record which is warped badly enough to have a tendency to bind in the magazine space would not be properly played in any automatic mechanism and should not be used.

When the left half of the magazine has been loaded, scan the carriage to the left and load the right half of the magazine. After the carriage has been loaded, set the Service Switch to the "PLAY" position (to the right).

CAUTION: Occasionally records will be found that have an undersized center hole. In some cases, this is caused by the paper label which has been pushed into the center hole. An undersized record center hole may make the record stick on the record pin.

Loading Program Holders

The program holders are retained in a five-unit assembly which is hinged on to the cabinet lid. To release the assembly for insertion of program strips, push inwards on the retaining latches, Figure 5a, and swing down as shown in Figure 5b. The entire unit may be unhooked from the lid to facilitate servicing as shown in Figure 5c.

CAUTION: Make certain that Program Holder Assembly is POSITIVELY LATCHED after being returned to normal display position. Neglecting to do so may cause jamming of cabinet lid when closed.

A supply of Duplex 33-1/3 Stereo Title Strips, Part No. 484745, will be found in the phonograph cash bag. Album Title Strips, applied at the head of each program holder section, are supplied with each album programmed.

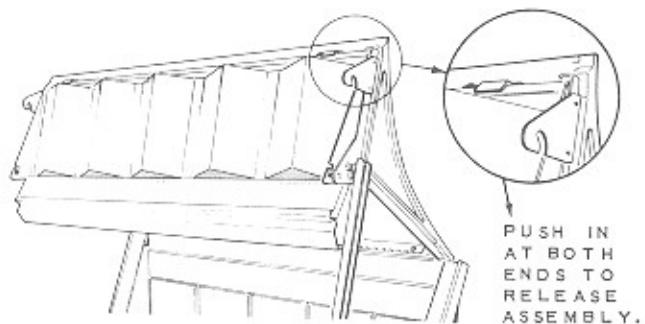


Figure 5a.

Releasing Program Holders.

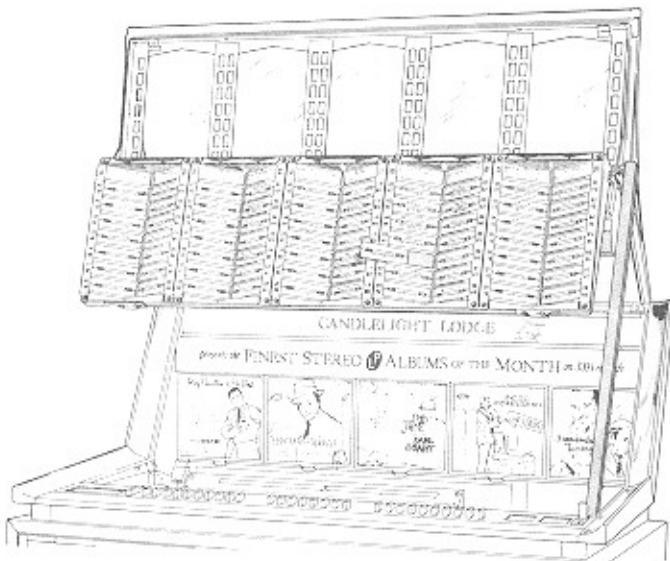


Figure 5b.

Loading Program Holders.



Figure 5c.

Removal of Program Holder Assembly.

Albums Of The Month

"The Albums of The Month" record package consists of the following items:

- A. One (1) 33-1/3 r.p.m. stereo 7-inch record, recorded by one artist.
- B. One (1) lithographed colored album record jacket with appropriate display of featured artist.
- C. Five (5) printed plastic L.P. album title strips for the record.
- D. Three (3) lithographed L.P. miniature facsimiles of the album record jacket to be used on the remote Seeburg Stereo Consoles.

Album Jacket Installation

Five album holders are located behind the upper lid glass to display the album record jackets listed in "B" of the record package.



Figure 6a. Removal of Jacket Frame.

Push holder up against album holder retainer spring and lift out as shown in Figure 6a. Remove records from the album jacket and insert two (2) jackets back to back as shown in Figure 6b. Replace loaded album holder in lid frame making certain that lip latches securely. Note that album holders are reversible so that either album jacket may be displayed by merely removing, turning around and re-installing.

Insert the L.P. Album Title Strips supplied with the record package as described in previous



Figure 6b. Insertion of Album Jacket

section headed "Loading Program Holders".

Location Display Sign



Figure 7. Display Sign Installation.

The LPC Phonograph Models feature an illuminated display panel which may be used to identify the location. The panel frame assembly is located under the lid glass above the album jacket holders.

Letters, numbers, spacers, etc. required to make up the sign are available from your Seeburg distributor under Part No. 509072, Type ACK-2 Alphabet Case Kit.

Carefully unsnap both ends of the nameplate frame as shown in Figure 7. Slide letters into position making certain that all characters are close together, on the same plane and that the completed display is centered. Replace the entire Display Sign Assembly in the phonograph.

POPULARITY METER

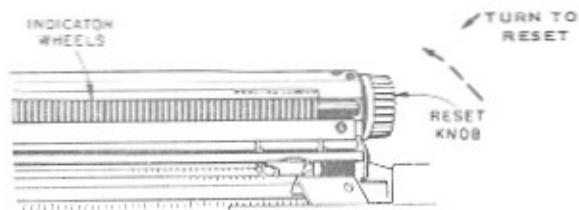


Figure 8. Popularity Meter.

The popularity meter indicates the number of times (up to forty) each record has been played.

The Popularity Reset Knob is located at the right end of the Popularity Meter. To reset turn the knob in a clockwise direction; continue turning until all the wheels indicate zero.

ALBUM PROGRAMMING

The LPC phonograph is prepared at the factory to program twenty (20) Album records in the first twenty (20) record spaces at the left end of the magazine. This includes selections A1, C1, E1 etc. through U2. Only one selection is necessary to play both sides of an "Album" record. For example: if either C1 or D1 is selec-

ted, both sides of the record will be played automatically - left side first.

Additional groups may be set for Album Play as noted below.

ELECTRICAL SELECTOR PRICING TABS

Removal of the Electrical Selector Cover exposes the Pricing Treadle Bar, *Figure 9a*, to which are attached eight (8) Pricing Tabs. The tab which corresponds to the required number group is placed in position "A", *Figure 9b*. Tabs 1 and 2 are permanently set for "Album Play".

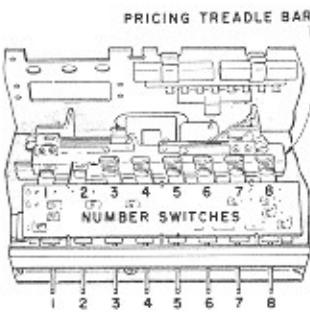


Figure 9a.
Pricing Tab Location.

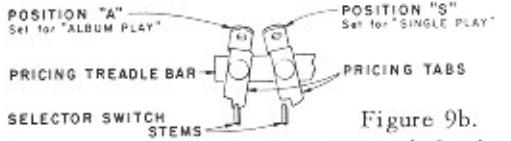


Figure 9b.
Pricing Tab Setting.

ALBUM SELECTOR TERMINAL BOARD

Loosen—do not remove two (2) thumb nuts to release the album terminal board cover, *Figure 3*. The taper tab corresponding to the number group *Figure 10*, is connected for Album Play and conforms to the Pricing Tab set-up on the Electrical Selector. *NOTE: Taper tabs 1 and 2 are permanently soldered in place for "Album Play".*

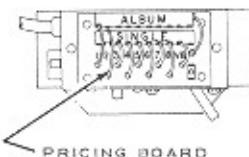


Figure 10.

COMPLETE ALBUM PROGRAMMING

For complete Album Programming of the LPC Phonograph, refer to Album Programming Instruction Sheet, Part No. 487585. It illustrates and details requirements involving adjustments of the APU1 and associated Program Identification Label, Coin and Credit Windows and Pricing Windows.

PRICING WINDOW KIT (25¢ and 50¢ only)

The Pricing Window Kit, Part No. 509140, makes it possible to set up the slug rejector for quarter or half dollar play only. Nickels and dimes deposited are automatically returned. A new Pricing Window and Coin and Credit Window are included in the kit which is available from your Seeburg Distributor.

COIN LOCKOUT SOLENOID

The Coin Lockout Solenoid is energized and coins are locked out during Album subtract motor operation only.

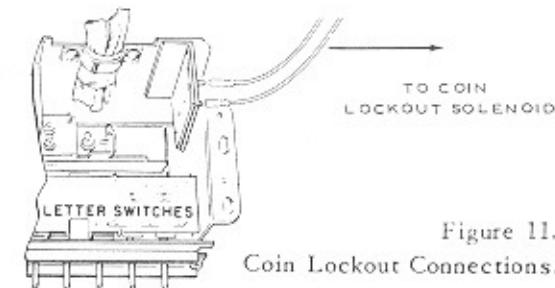


Figure 11.
Coin Lockout Connections.

CAUTION: Coin Lockout Circuit must never be left completely disconnected as this could result in damage to the pricing unit or the wrong selection.

KEY RELEASE BUTTON

If a number button is pressed before a letter button and it is desired to switch to another number, press the Key Release Button (located on the selector panel). This will unlatch the selector key and permit a new number selection.

ALBUM PRICING UNIT, Type APU1

The Album Pricing Unit is designed for use with the LPC1 and LPC1R Model Select-O-Matic phonographs. It exemplifies the ultimate in accumulative credit units and is capable of extreme flexibility in setting up pricing combinations and Album programming.

The value in mixed coins that can be accumulated is dependent upon premiums given for Quarters and Half Dollars. Example of accumulated value is shown below for pricing combinations of:

5¢ play, 6 for Quarter, 12 for Half Dollar or
10¢ play, 3 for Quarter, 6 for Half Dollar.

\$1.50 for combination of Nickels and Dimes;
\$1.25 for 5 Quarters;
\$1.30 for 2 Half Dollars and 6 Nickels (or 3 Dimes); \$1.35 for 1 Half Dollar, 1 Quarter and any combination of Nickels and Dimes totalling 60¢.

Figure 15 constitutes a chart condensing information regarding the capabilities and set-up requirements for seven (7) popular pricing combinations. Lithographed pricing windows, Part Numbers 487569, 487571 and 487574 are supplied with the phonograph. Part Numbers 487570, 487572, 487573 and 487575 are available from your Seeburg Distributor.

Installation

The pricing information window is located at the left end of the phonograph Selector Key Panel. To gain access to the pricing window, open the cabinet doors. Unscrew two (2) retaining screws and remove the pricing window bracket. Install the pricing window transparency selected on the underside of the clear glass window. Adjust the Album Pricing Unit as indicated in the chart and illustrated in Adjustments on Page 8.

ALBUM PRICING UNIT ADJUSTMENTS

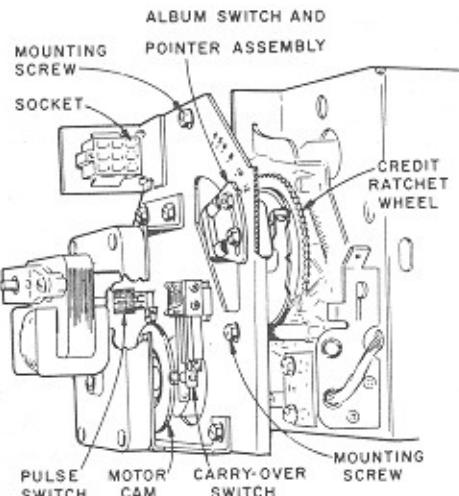


Figure 12. Pricing Unit Identification.

Remove the motor panel before proceeding with price change adjustments. Loosen screw No. 1, remove screw No. 2, loosen screw No. 3 and turn latch to the left as shown in Figure 13. Unplug the motor panel assembly and remove from the lower chassis deck.

CAUTION: When reassembling, make certain that the teeth of Driver and Credit Ratchet Wheel mesh freely. One revolution of driver in "Out" position must remove ten (10) credits and overdrive from 1/64 inch minimum to 1/2 tooth maximum.

Final Adjustment On Album Switch

Starting with "ZERO" credits, manually put on the required number of credits for an "Album Selection". Move pointer to corresponding number on the plate, adjust pointer to left or right until album light is just "ON". Manually remove 1 credit ---- Album light is just "OFF". eg: if albums are a half-dollar, put on 12 CREDITS, move pointer to number 12 on the plate and check light operation.

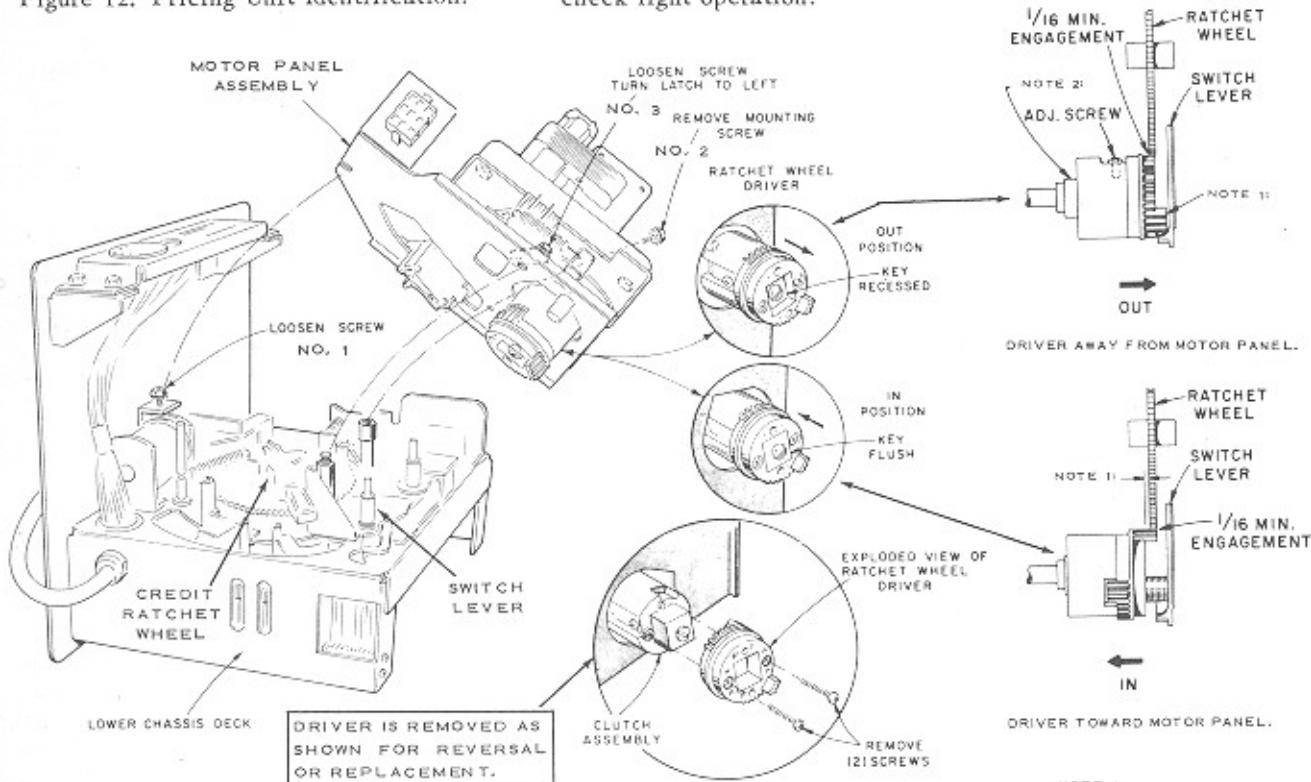


Figure 13. Motor Panel Disassembly

Driver Adjustment

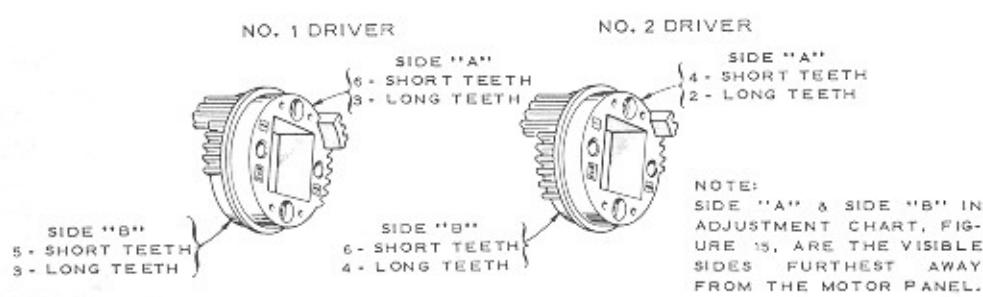


Figure 14. Ratchet Wheel Driver Identification.

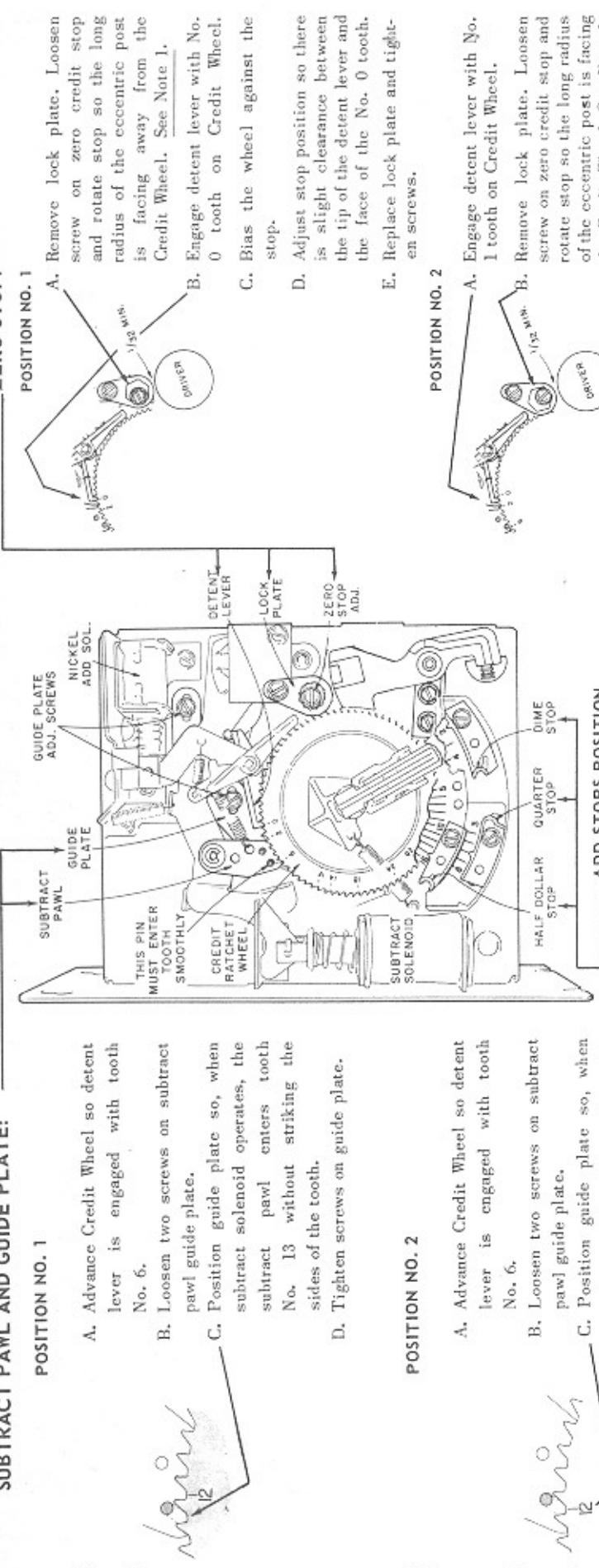
Figure 15. Album Pricing Unit Adjustment Chart.

PART NO.	PRICING WINDOW	ADD STOP POSITIONS		* ALBUM SWITCH POINTER POSITION	ZERO STOP	SUBTRACT PAWL	SLUG REJECTOR	PRICING UNIT AND INCOME TOTALIZER JUMPERS	** RATCHET WHEEL DRIVER POSITION
		DIME	QUARTER						
487569	singles: 10¢ per selection QUARTER 3 selections HALF DOLLAR 6 selections P albums: <blue title stripes> HALF DOLLAR 2 QUARTERS per album			IN POSITION 12	IN POSITION 12	POSITION 1	POSITION 2	POSITION 1	DRIVER NO. 1 SIDE "A" "OUT" POSITION
487570	singles: 10¢ per selection QUARTER 3 selections HALF DOLLAR 6 selections P albums: <blue title stripes> QUARTER per album			IN POSITION 12	IN POSITION 12	POSITION 1	POSITION 2	POSITION 1	DRIVER NO. 1 SIDE "A" "IN" POSITION
487571	singles: 10¢ per selection QUARTER 5 selections HALF DOLLAR 10 selections P albums: <blue title stripes> HALF DOLLAR 2 QUARTERS per album			IN POSITION 10	IN POSITION 10	POSITION 1	POSITION 2	POSITION 1	DRIVER NO. 1 SIDE "B" "OUT" POSITION
487572	singles: 10¢ per selection QUARTER 5 selections HALF DOLLAR 10 selections P albums: <blue title stripes> QUARTER per album			IN POSITION 10	IN POSITION 10	POSITION 1	POSITION 2	POSITION 2	DRIVER NO. 1 SIDE "B" "IN" POSITION
487573	singles: 5¢ per selection QUARTER 6 selections HALF DOLLAR 12 selections P albums: <blue title stripes> QUARTER per album			IN POSITION 12	IN POSITION 12	POSITION 1	POSITION 2	POSITION 1	DRIVER NO. 2 SIDE "A" "IN" POSITION
487574	singles: 10¢ per selection QUARTER 4 selections HALF DOLLAR 8 selections P albums: <blue title stripes> HALF DOLLAR 2 QUARTERS per album			IN POSITION 8	IN POSITION 8	POSITION 1	POSITION 2	POSITION 1	DRIVER NO. 2 SIDE "A" "OUT" POSITION
487575	singles: 10¢ per selection QUARTER 4 selections HALF DOLLAR 8 selections P albums: <blue title stripes> QUARTER per album			IN POSITION 8	IN POSITION 8	POSITION 1	POSITION 2	POSITION 2	DRIVER NO. 2 SIDE "A" "IN" POSITION

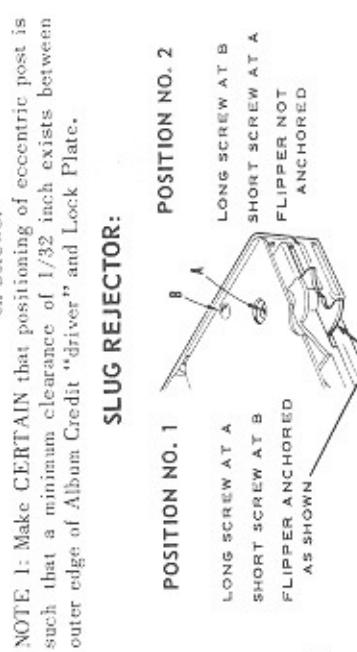
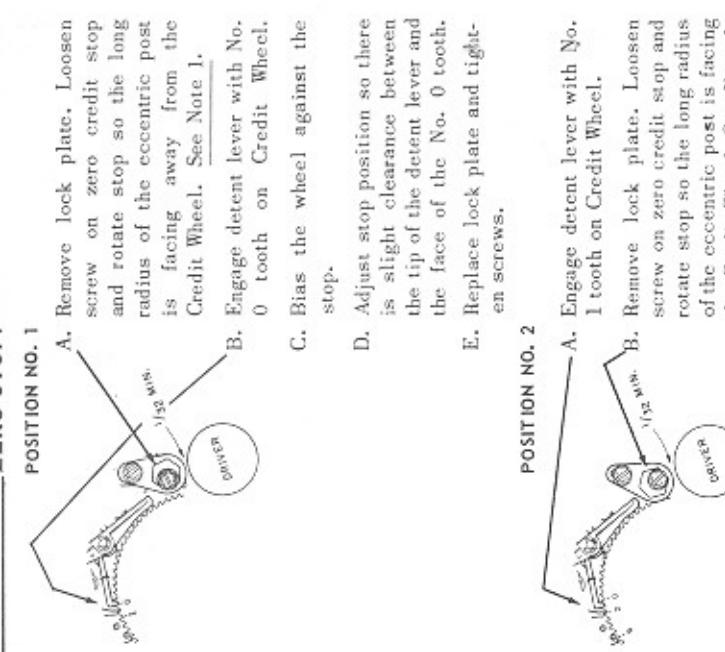
* REFER TO PAGE 6 FOR FINAL ADJUSTMENT ON ALBUM SWITCH,

** RATCHET WHEEL DRIVER "IN" AND "OUT" POSITIONS ARE ILLUSTRATED IN FIGURE 13, SIDES "A" AND "B" ARE IDENTIFIED IN FIGURE 14.

ZERO STOP:

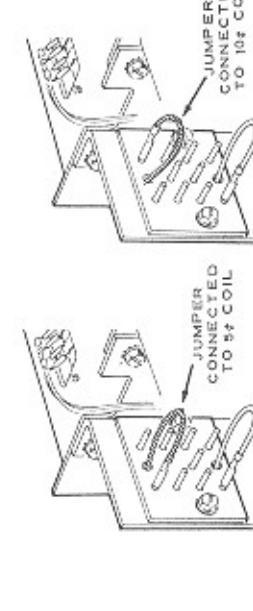


ZERO STOP:

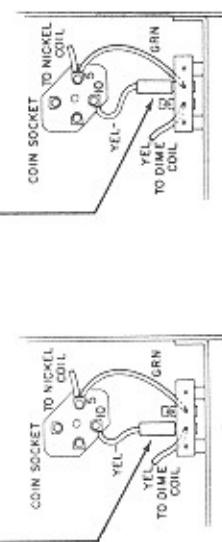


NOTE 1: Make CERTAIN that positioning of eccentric post is such that a minimum clearance of 1/32 inch exists between outer edge of Album Credit "driver" and Lock Plate.

SLUG REJECTOR:



INCOME TOTALIZER JUMPER



INCOME TOTALIZER

The LPC Model phonograph is equipped with an Income Totalizer which is located on the upper right hand side of the cabinet above the service switch as shown in *Figure 15*.

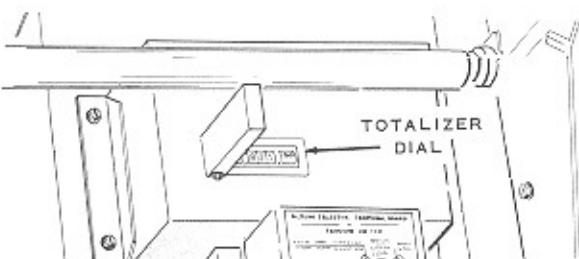


Figure 15. Totalizer Dial.

Model LPC1 contains a Type IT1 Income Totalizer which totals nickels, dimes, quarters and half dollars deposited in the phonograph and indicates actual value aggregated in the operation of the phonograph.

Phonograph Model LPC1R has a Type IT1R-56 totalizer which is designed to indicate total cash deposited in both the phonograph and all remote Stereo Consoles connected to it.

An indicating light located on the right side of the record playing indicator panel is connected to the totalizer. It is momentarily illuminated at the time a coin is deposited either in the Phonograph or the Console. Duration of lighting depends on the value of the coin — shortest for nickels and longest for half dollars. This light is provided as a visual test that the totalizer is functioning properly.

SELECT-O-MATIC MECHANISM REMOVAL

The Select-O-Matic mechanism can be removed from the back of the cabinet for the purpose of repair or replacement.

To gain access remove twelve (12) No. 8 screws from the rear access panel. Then open cabinet lid and secure as described under "Cabinet Lid Support". Remove two (2) hex nuts which secure access panel bolts, as shown in *Figure 16*. The access panel can now be removed from the cabinet.

Pull pins out of mechanism mounting channels. Unplug cable assemblies and slide mechanism from cabinet.

COMPONENT REMOVAL

The Transistorized Stereo Amplifier, the Auto-Speed Unit, the Tormat Control Center as well as the Remote Control Stepper Unit can be slid out or completely removed from the cabinet for

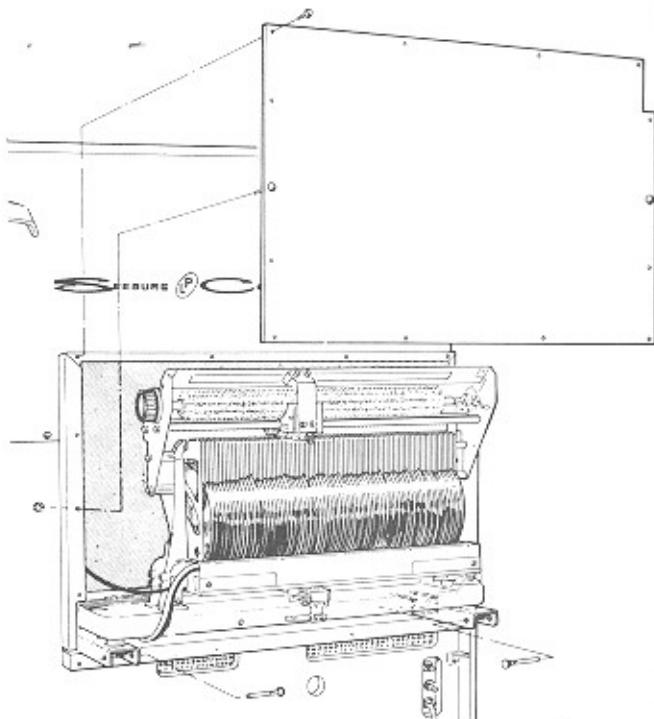


Figure 16. Mechanism Removal.

repair or replacement. These units are accessible by opening the front doors of the phonograph.

They are hung in pairs onto two slide channel assemblies; amplifier and Auto-Speed Unit on one channel assembly, Tormat Control Center and Stepper Unit on the other.

To remove one of these units from the cabinet, disconnect all cable assemblies leading to it. Then lift up the chassis release lever above the unit and pull the unit out by the handle on the chassis.

AUDIO CONTROLS

The Transistorized stereo amplifier, Type TSA1, is equipped with (1) a 3-position Bass Control, (2) a 3-position Treble Control and (3) a 3-position Automatic Record Quality Compensator. The first two controls, i.e. bass and treble, are dual controls to assure simultaneous adjustments for both Left and Right Channel Audio. They are adjusted to provide proper tone balance to suit location acoustics and personal preference as detailed in Tone Control Settings Chart, *Figure 17*. Item (3), Automatic Record Quality Compensator* is used to obtain the best possible performance from records consistent with their quality. Its effect is of a dynamic nature. It allows full range operation, but automatically reduces surface noise when music is at low level. Refer to *Figure 18* for settings.

* Pat Pending.

LOCATION CONDITIONS	TONE CONTROL SETTINGS	
ACOUSTICALLY LIVE - HARD WALLS, CEILING AND FLOOR-LITTLE OR NO UPHOLSTERY AND DRAPERY.	BASS MAX - MED TREBLE MIN	
AVERAGE ROOM - AVERAGE AMOUNT OF SOUND DEADENING MATERIAL.	BASS MED TREBLE MED	
ACOUSTICALLY DEAD - ACOUSTIC TILE, HEAVY DRAPERY AND CARPETS, UPHOLSTERED BOOTH.	BASS MED - MIN TREBLE MAX	

ROOM SIZE - IN SMALL ROOMS REDUCE TREBLE RANGE ONE POSITION. IN LARGE ROOMS WITHOUT REMOTE SPEAKERS INCREASE TREBLE RANGE ONE POSITION.

NOISE - THE NOISE ENCOUNTERED IN SOME LOCATIONS (RESTAURANTS, ETC.) HAS A MASKING EFFECT ON HIGH FREQUENCIES. FINAL CONTROL SETTINGS SHOULD BE MADE UNDER ACTUAL NOISE CONDITIONS WITH A REPRESENTATIVE NUMBER OF PEOPLE PRESENT.

Figure 17. Tone Control Setting Chart.

CONDITION OF RECORDS	A.R.Q.C. SETTINGS
NEW (GOOD QUALITY)	MINIMUM
FAIR (AVERAGE)	MEDIUM
POOR (WORN AND SCRATCHED)	MAXIMUM

Figure 18. Automatic Record Quality Compensation.

Twenty-seven (27) different combinations of control settings of controls (1), (2) and (3) permit optimum adjustments for a wide variety of field conditions.

MASTER VOLUME CONTROL

The Master Volume Control controls both Left and Right Channels simultaneously and is accessible through a hole in the rear of the cabinet. Its shaft is slotted for use with a screw driver.

SELECT-O-MATIC PHONOGRAPH SPEAKERS

The phonograph speaker system includes four speakers: Two heavy duty 12-inch speakers and two wide range 8-inch speakers, are mounted inside the cabinet on the cabinet doors and connected through a stereo network to their respective amplifier channel. The 8-inch speakers are individually enclosed in acoustical chambers.

LONG PLAYING CONSOLE SPEAKER KIT, Type LPSK1

The kit consists of two completely assembled directional speaker units supplied with mounting hardware and cables for installation on the LPC Model phonograph cabinet. They are mounted on hinge brackets which permit directing to provide best stereo effect in a required listening area.

TWIN STEREO SPEAKERS

The Seeburg Twin Stereo Speakers are specifically designed to be used in pairs. The following types are available:

- A. Package of two, Type TW1-8, Twin Stereo Speakers for wall type installation (Part No. 512350).
- B. Package of two, Type TC1-8, Twin Stereo Speakers for corner installation (Part No. 512351).
- C. Package of two, Type TR1-8, Twin Stereo Speakers for recessed type installation (ceiling or wall) (Part No. 512352).

NOTE: Series TW1 Wall Speakers may be readily converted for corner installation by the addition of Corner Adapters available as a package of two each, Type CA1, Part No. 502881.

- D. Package of two, Type EBWC2-12 Stereo Speakers for wall or corner installation requiring the optimum bass response (Part No. 512392).

STEREO SPEAKER CONTROL

Type S10LT-3 (Accessory)

The Stereo Speaker Control, Type S10LT-3, is used for volume level adjustment of stereo speakers connected to constant voltage speaker lines. One or more pairs of stereo speakers may be controlled in seven 3 db steps (or turned off) without affecting other speakers connected to the stereo amplifier.

POWERED REMOTE VOLUME CONTROL

Type PRVC2 (Accessory)

The Powered Remote Volume Control, Type PRVC2, is an accessory which may be used with the phonograph to remotely control the volume and cancel selections.

The set includes a motor which is installed on the amplifier volume control and is operated by the remote switch to increase or decrease volume of the phonograph. A slip clutch permits volume adjustment at the phonograph independently of the remote control.

STEREO CONSOLETTE, Type SC1

The remote choice of "Album" or "Single" play selection is made possible by the Seeburg Stereo Consolette when used in conjunction with Model LPC1R phonographs. The consolette is equipped with a pair of speakers - Right Channel and Left Channel - which provide for localized reproduction of selections. Speaker volume may be controlled at the consolette by push buttons marked LOW, MEDIUM and HIGH.

THE SEEBURG STEREOPHONIC SYSTEM BASIC RULES FOR INSTALLATION

THE FOLLOWING BASIC RULES FOR THE INSTALLATION OF THE SEEBUGR STEREOPHONIC SYSTEM ARE GUIDEPOSTS TOWARD THE SUCCESSFUL ACHIEVEMENT OF STEREOPHONIC REPRODUCTION.

1. ALL LOCATIONS: There is not a location in the country, regardless of size, which cannot successfully and to good advantage use a Stereo System.

2. "LP" CONSOLE SPEAKERS: Seeburg "LP" Console Speakers should be positioned to provide best audio coverage in listening area near the phonograph.

3. TWIN STEREO SPEAKERS: In rooms too large for adequate audio coverage by the phonograph speaker array, at least one pair of remote twin Stereo Speakers, properly placed, is essential to the reproduction of stereo. Use additional pairs as required to obtain good distribution throughout the listening area.

4. SPEAKERS IN PAIRS-OPOSITE: Remote Twin Stereo Speakers should be installed in pairs (approximately opposite one another) and the speakers of each pair should face into the same area.

5. HEIGHT FROM FLOOR: The proper distance from the floor to the grille centers of wall and corner speakers should be as follows:

<u>ROOM WIDTH</u>	<u>HEIGHT ABOVE FLOOR</u>
(Distance between channels)	
8 feet	7 feet to 7½ feet
12 feet	7½ feet to 8 feet
18 feet	8 feet to 8½ feet
25 feet to 30 feet	8½ feet to 9½ feet

6. PHASING: The connections must be such that the phasing of all remote twin stereo speakers and phonograph speakers will be alike.

7. SPACING WITHIN A CHANNEL: The spacing between the left channel remote speakers shall be about 15 to 20 feet; likewise, the spacing between the right channel remote speakers shall be about 15 to 20 feet - depending upon room dimensions.

8. SPACING BETWEEN CHANNELS: The distance between remote speaker channels should be not less than 8 feet, and not more than 30 feet.

9. TEN PAIRS IS MAXIMUM: At no time shall more than ten remote speakers be connected to either channel of an amplifier. If additional speakers are required, use a type HFA3 or a type HFA4 amplifier in each channel.

10. BALANCE CHANNELS WATTS: The sum of the wattage settings of all remote speakers must be the same for each channel.

11. MORE BASS AT FAR POINTS: When a pair of remote twin Stereo Speakers is installed more than 40 feet from a stereo phonograph, or in a separate room, a wire jumper should be placed from "VC1" to "GND" of each of these speakers. In these areas where the listener cannot hear the bass from the stereo phonograph it is important that twin stereo speakers, type EBWC1-12 be used.

12. SPEAKERS JUMPERED - 8 WATTS MAX: Remote speakers with wire jumpers from "VC1" to "GND" must never be connected for more than 8 watts each. Exception is the EBWC1-12 series which may be connected for 16 watts each.

13. 25 WATTS MAXIMUM: Add total watts of all remote speakers in a channel with jumpers between "VC1" and "GND" to the wattage set-up of the phono speaker. This total must not exceed 25 watts. When individual remote speakers are connected for monaural operation, divide the wattage setting by two (2) to get loading on each channel.

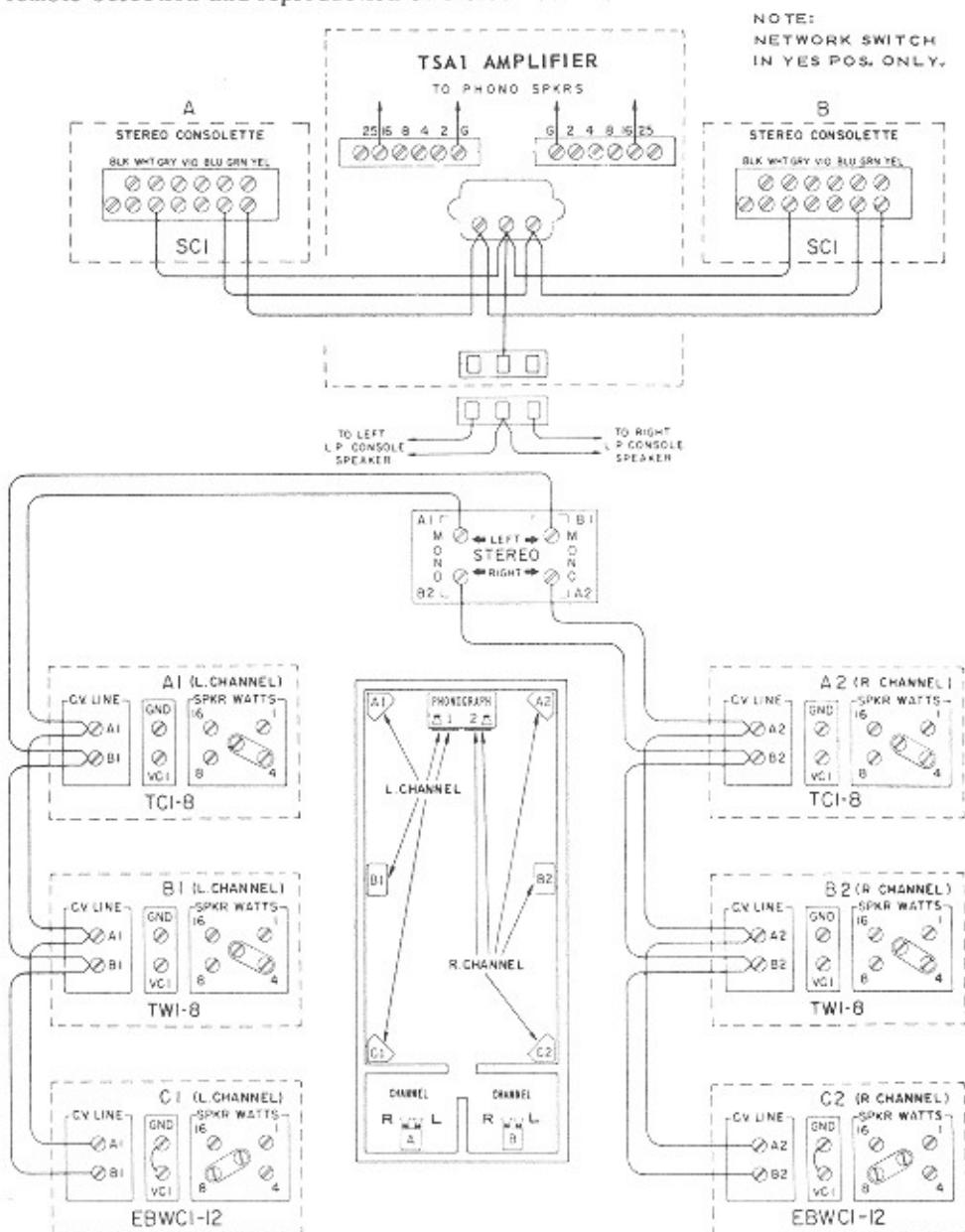
14. PHONO SPEAKER WATTAGE: Add total watts of all remote speakers in a channel without jumpers between "VC1" and "GND". This must approximately equal the wattage of the phono speaker as set up on the Select-O-Matic speaker terminal strip. The "LPC" speaker loading may be considered as 4 watts per speaker without jumpers. The "LPSR" speaker loading may be considered at 1 watt per speaker without jumper.

15. NETWORK SETTING: Make sure that stereo network switch is set in "yes" position when using twin stereo speakers.

16. BALANCING: A stereo installation is never complete without a final test of balance between the two channels, using an output meter and a monaural record. Never attempt to balance system with a conventional stereo record.

COMPLETE STEREO SPEAKER SYSTEM INSTALLATION

Large room containing an LPC Model phonograph equipped with a Type LPCSK1 Speaker Kit and six remote speakers, set up exclusively for stereo reproduction. Two small adjoining rooms each provided with a Seeburg Stereo Consolette for remote selection and reproduction of stereo selections.



LEFT CHANNEL LOADING

"A" STEREO CONSOLETTE SPEAKER ----- 1 WATT
 "B" STEREO CONSOLETTE SPEAKER ----- 1 WATT
 LEFT SPCSK1 SPEAKER ----- 4 WATTS
 A1 (NO "VC1" TO "GND" JUMPER) SET AT ----- 4 WATTS
 B1 (NO "VC1" TO "GND" JUMPER) SET AT ----- 4 WATTS

TOTAL 14 WATTS

WHICH APPROXIMATES PHONOGRAPH SPEAKER
TAP SETTING OF 16 WATTS.

C1 (WITH "VC1" TO "GND" JUMPER) SET AT ----- 8 WATTS
 PHONOGRAPH SPEAKER TAP SETTING OF ----- 16 WATTS

TOTAL 24 WATTS

WHICH IS SATISFACTORY AMPLIFIER LOADING.

RIGHT CHANNEL LOADING

"A" STEREO CONSOLETTE SPEAKER ----- 1 WATT
 "B" STEREO CONSOLETTE SPEAKER ----- 1 WATT
 RIGHT SPCSK1 SPEAKER ----- 4 WATTS
 A2 (NO "VC1" TO "GND" JUMPER) SET AT ----- 4 WATTS
 B2 (NO "VC1" TO "GND" JUMPER) SET AT ----- 4 WATTS

TOTAL 14 WATTS

WHICH APPROXIMATES PHONOGRAPH SPEAKER
TAP SETTING OF 16 WATTS.

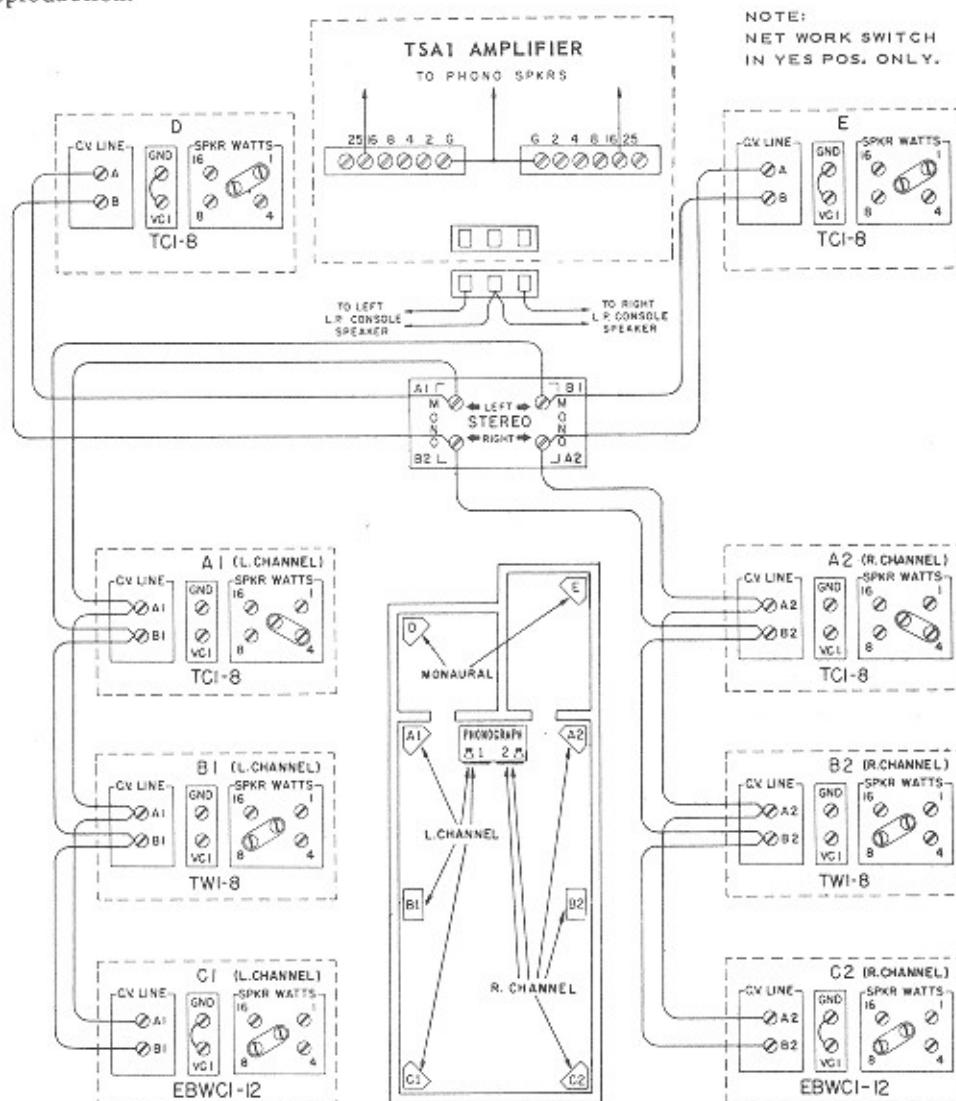
C2 (WITH "VC1" TO "GND" JUMPER) SET AT ----- 8 WATTS
 PHONOGRAPH SPEAKER TAP SETTING OF ----- 16 WATTS

TOTAL 24 WATTS

WHICH IS SATISFACTORY AMPLIFIER LOADING.

COMBINED STEREO AND MONAURAL SPEAKER SYSTEM INSTALLATION

Large room containing LPC Model phonograph equipped with a Type LPCSK1 Speaker Kit and six remote speakers, set up for stereo reproduction. Two smaller adjoining rooms equipped with separate speakers for simultaneous monaural reproduction.



LEFT CHANNEL LOADING

LEFT LPCSK1 SPEAKER -----	4 WATTS
A1 (NO "VC1" TO "GND" JUMPER) SET AT -----	4 WATTS
B1 (NO "VC1" TO "GND" JUMPER) SET AT -----	8 WATTS

TOTAL 16 WATTS

WHICH IS EQUAL TO PHONOGRAPH SPEAKER TAP SETTING
OF 16 WATTS

C1 (WITH "VC1" TO "GND" JUMPER) SET AT -----	8 WATTS
D (WITH "VC1" TO "GND" JUMPER) -----	$\frac{1}{2}$ WATT
E (WITH "VC1" TO "GND" JUMPER) -----	$\frac{1}{2}$ WATT

TOTAL 9 WATTS

PHONOGRAPH SPEAKER TAP SETTING OF ----- 16 WATTS

TOTAL 25 WATTS

WHICH IS SATISFACTORY AMPLIFIER LOADING.

RIGHT CHANNEL LOADING

RIGHT LPCSK1 SPEAKER -----	4 WATTS
A2 (NO "VC1" TO "GND" JUMPER) SET AT -----	4 WATTS
B2 (NO "VC1" TO "GND" JUMPER) SET AT -----	8 WATTS

TOTAL 16 WATTS

WHICH IS EQUAL TO PHONOGRAPH SPEAKER TAP SETTING
OF 16 WATTS

C2 (WITH "VC1" TO "GND" JUMPER) SET AT -----	8 WATTS
D (WITH "VC1" TO "GND" JUMPER) SET AT -----	$\frac{1}{2}$ WATT
E (WITH "VC1" TO "GND" JUMPER) SET AT -----	$\frac{1}{2}$ WATT

TOTAL 9 WATTS

PHONOGRAPH SPEAKER TAP SETTING OF ----- 16 WATTS

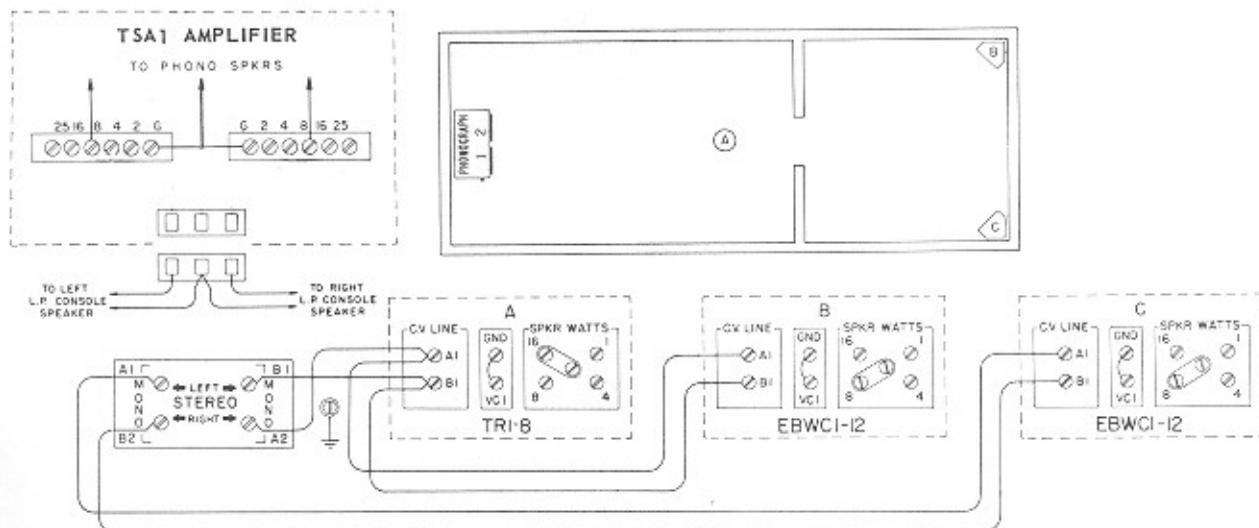
TOTAL 25 WATTS

WHICH IS SATISFACTORY AMPLIFIER LOADING.

NOTE: "D" and "E" speakers are operated monaurally only because of their connections at the amplifier terminal setup. This is a preferred connection where a single speaker is used in a listening area.

MONAURAL ONLY SPEAKER SYSTEM INSTALLATION

Large room containing phonograph and one remote speaker. Smaller room equipped with two corner speakers only.



POWER DRAWN BY ALL SPEAKERS

A (WITH "VCI" TO "GND" JUMPER) SET AT 16 WATTS WHICH IS $16 \div 2$ OR 8 WATTS PER CHANNEL
 B (WITH "VCI" TO "GND" JUMPER) SET AT 8 WATTS WHICH IS $8 \div 2$ OR 4 WATTS PER CHANNEL
 C (WITH "VCI" TO "GND" JUMPER) SET AT 8 WATTS WHICH IS $8 \div 2$ OR 4 WATTS PER CHANNEL

PHONOGRAPH SPEAKER TAP SETTING OF -----	TOTAL 16 WATTS
	----- B WATTS
	TOTAL 24 WATTS PER CHANNEL

WHICH IS SATISFACTORY AMPLIFIER LOADING

RECORD AND STYLUS CARE

Record Care

To avoid accumulation of dust and dirt, keep oil off the records. Wipe hands with a clean cloth before handling records, and always handle records by the edge. Records that show signs of surface dust or dirt should be wiped with a slightly dampened cloth, using a circular motion. Use only water to dampen the cloth - solvents will damage the records. Records not in use should be stored on edge in a cool place. Avoid exposing the records to excessive heat. Records become overheated in a very short time if exposed to direct sunlight or if stored in a closed automobile or truck. Temperature above 120 degrees F. should be avoided. See instructions on "PLACING THE SELECT-O-MATIC".

Stylus Replacement

In the presence of friction, wear of the Stylus starts with the first play and continues until the Stylus is replaced. The tone quality is good and distortion remains at a low figure for the first few thousand plays but gradually distortion increases until a disagreeable amount is noticed.

When only good vinylite 45 r.p.m. or 33-1/3 r.p.m. records are used, armature assemblies with diamond styluses should be inserted every four or five thousand plays to maintain good reproduction. If, because of the presence of oil on the records, dust or dirt is permitted to accumulate and remain on the surface, the wear will be more rapid; economical operation will require more frequent armature assembly cleaning or replacement.

Your Seeburg Distributor has equipment for microscopic examination of styluses to determine whether cleaning or replacement is necessary. If cleaning is all that is required, the Seeburg Ultrasonic Stylus Cleaner will scientifically and rapidly rehabilitate the stylus.

CAUTION: If the armature assemblies are not cleaned or replaced before objectionable distortion sets in, the records may be permanently damaged, and cleaning or replacing the styluses will not restore the original tone quality.

To Replace Armature Assemblies

1. Make a selection to the right of magazine center and left side of a record to position carriage and pickup arm cradle for easiest access to styluses.

2. To remove armature closest to carriage cover encircle pickup arm and grasp armature assembly T-ends with thumb and forefinger and push down. See Figure 19.



Figure 19. Rightside Armature.

3. Remove second armature by gripping the top portion of the "T" using the thumb and forefinger. Light pressure in the direction away from the Stylus Point will slide the Armature out of the cartridge slot.



Figure 20. Leftside Armature.

4. Install new Armature Assembly by laying it flat in open end of cartridge slot, and sliding forward in slot until it bottoms.

In order to retain good quality reproduction, it is necessary to keep the pickup and Styluses clean and in good condition.

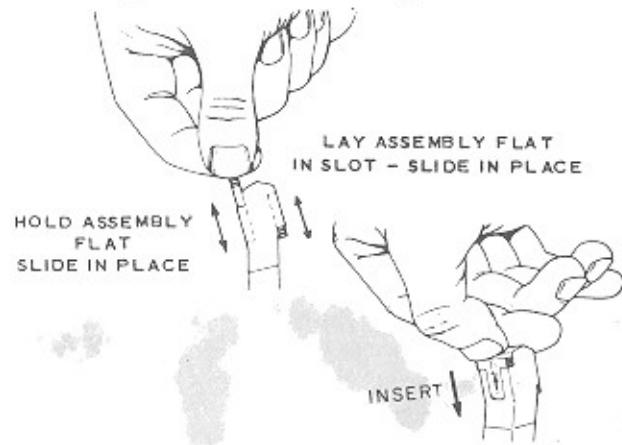


Figure 21. Installing Armature.

CAUTION: The pickup and styluses must be handled carefully or the delicate armature suspension may be damaged.

ADJUSTMENT OF 45 R.P.M. TRANSISTORIZED AUTO-SPEED UNIT

If a listening test indicates off-speed (not 45 r.p.m.) turntable operation, adjust the auto-speed unit as follows:

1. Replace a record with the Seeburg 45 r.p.m. Auto-Speed Strobe Disc, Part No. 487388 for 60 cycle phonographs or Part No. 487389 for 50 cycle phonographs. Light source frequency must conform to frequency indicated on Strobe Disc.
2. Select Strobe Disc on to the mechanism turntable and carefully prop pickup arm out of the way.
3. Allow unit to run approximately 3 minutes.
4. Set the motor speed to 45 r.p.m. by adjusting the Motor Speed Control so that the outer and inner bands on the Strobe Disc move in opposite directions.
5. Remove the Strobe Disc.

MAINTENANCE AND SHIPPING

LUBRICATION

Follow the complete lubrication instructions given on the lubrication chart in the envelope on the inside wall of the phonograph.

The recommended lubricants are Seeburg Select-O-Matic Oil, Part No. 53014, and Aero Lubriplate, Part No. 53006.

LIGHT REPLACEMENT

Upper Cabinet Light

The upper Cabinet Light illuminates the upper Program Holders. It is a 30-watt, 36-inch cool white fluorescent tube which is accessible for replacement when the cabinet lid is latched in the raised position.

Lower Cabinet Light

This is a 30-watt, 36-inch cool white fluorescent light with associated starter. It illuminates the lower cabinet lid section, pricing window, instruction windows, electrical selector buttons as well as the front of the cabinet.

To gain access to the lamp for replacement purpose, open cabinet lid and doors. Turn clamps 90 degrees and swing diffuser outward, see Figure 22.

Credit Lamps

The Credit Lamp Socket Assembly uses two (2) No. 55 bulbs and is cabled on the right side of the Tormat Electrical Selector.

Record Playing Indicator Lamp

This is a No. 15 miniature lamp which is plugged into a socket above the popularity meter solenoid in the mechanism.

PREPARING INSTRUMENT FOR MOVING

1. Put the shims under the base, at the mechanism hold-down bolts.
2. Tighten four mechanism hold-down nuts.
3. Remove all records from magazine.

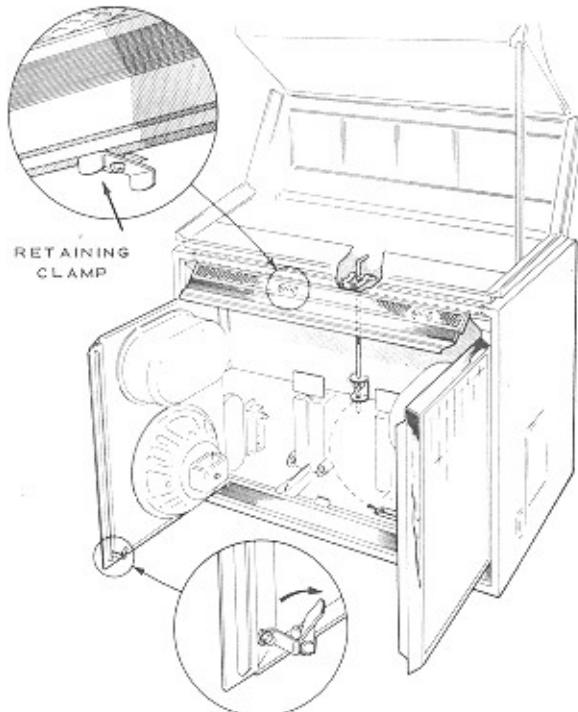


Figure 22. Lower Lamp Removal.

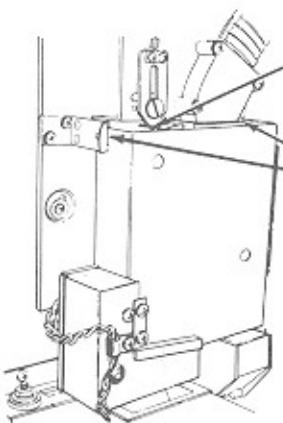
4. With the pickup arm in left hand side playing position, scan mechanism to a point at selection A1.
5. Place protective tube over pickup cartridge and install pickup arm shipping support.
6. Put two fibre pads (a long pad in the rear and a short pad in the front) under the carriage wheels and bolt the carriage to the base by means of two 4½ inch long thumb screws, which are to be inserted through mechanism base.

TO SHIP

If the instrument is to be shipped by way of a transportation company, it should be blocked and crated in the same manner in which it was received from the factory.

SLUG REJECTOR

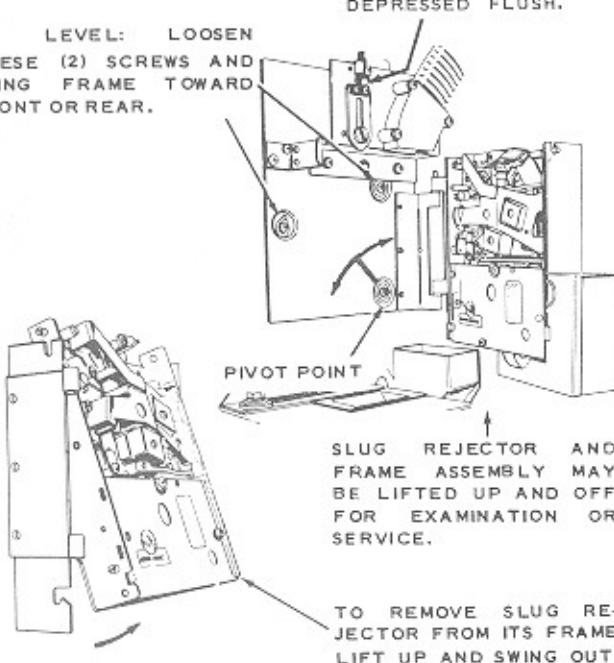
5¢, 10¢, 25¢



CLEARANCE APPROX. .016

TO OPEN: RELEASE THIS CATCH AND SWING OUT

TO LEVEL: LOOSEN THESE (2) SCREWS AND SWING FRAME TOWARD FRONT OR REAR.



HOUSING AND WIRE TO BE POSITIONED SO THAT A FULL STROKE OF SCAVENGER IS OBTAINED, WHEN SCAVENGER BUTTON IS DEPRESSED FLUSH.

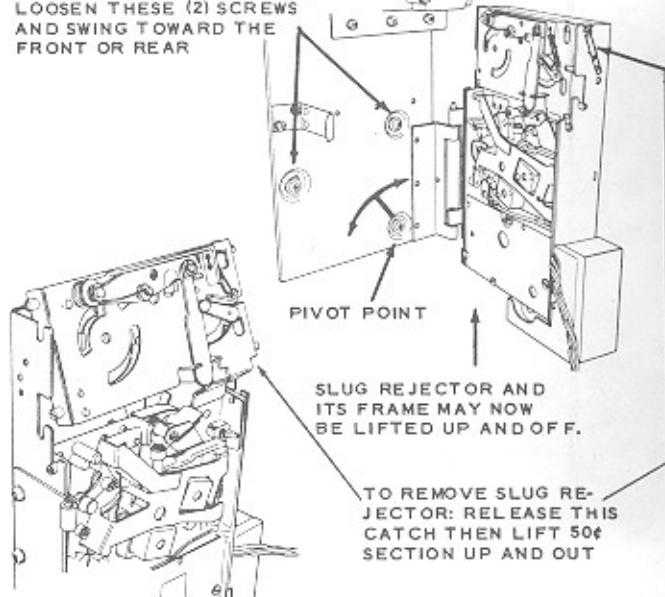
5¢, 10¢, 25¢, 50¢

HOUSING AND WIRE TO BE POSITIONED SO THAT A FULL STROKE OF SCAVENGER IS OBTAINED, WHEN SCAVENGER BUTTON IS DEPRESSED FLUSH.

APPROX. .016 CLEARANCE



TO LEVEL SLUG REJECTOR: LOOSEN THESE (2) SCREWS AND SWING TOWARD THE FRONT OR REAR



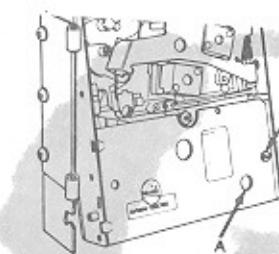
PIVOT POINT
SLUG REJECTOR AND ITS FRAME MAY NOW BE LIFTED UP AND OFF.

TO REMOVE SLUG REJECTOR: RELEASE THIS CATCH THEN LIFT 50¢ SECTION UP AND OUT

SLUG REJECTORS EQUIPPED WITH NICKEL FLIPPERS CAN BE SET UP FOR SINGLE NICKEL OR TWO NICKEL OPERATION. FIRST REMOVE SLUG REJECTOR FROM ITS FRAME.

NEXT, LIFT 5¢, 10¢ & 25¢ SECTION UP AND SWING OUTWARD

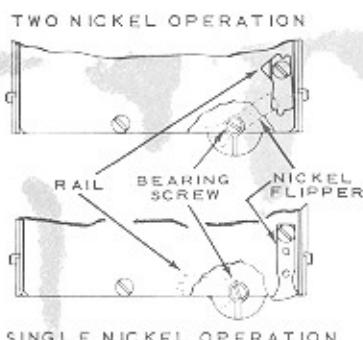
NATIONAL REJECTORS - SLUG REJECTOR



TWO NICKEL OPERATION:
FLIPPER NORMAL
SHORT SCREW AT "A", LONG SCREW AT "B".

SINGLE NICKEL OPERATION:
FLIPPER LOCKED OUT
SHORT SCREW INSTALLED AT "B", LONG SCREW AT "A" WITH FLIPPER IN MAXIMUM COUNTER-CLOCKWISE POSITION.

ACCEPTORS, INC. - SLUG REJECTOR



SEEBURG COIN OPERATED PHONOGRAPHS

— NOTICE —

THE SEEBURG CORPORATION reserves the right to make any changes or improvements in its products without notice and without obligation, and without being required to make corresponding changes or improvements in products theretofore manufactured or sold.

— WARRANTY —

Except as hereinafter stated, THE SEEBURG CORPORATION warrants this product, manufactured by it, to be free from defects in material or workmanship under normal use. Our obligation under this warranty is limited to making good at our factory any part or parts thereof which shall, within one year after delivery of such product to the original purchaser, be returned to us through our authorized distributor from whom purchased, and which our examination shall disclose to our satisfaction to have been thus defective. Any part found by us to be defective will be exchanged by our distributor without charge to the owner; however, labor and transportation costs incidental to the replacement or exchange of such parts shall be borne by the owner.

In addition to the warranty set forth above, the Tormat Memory Unit and the Pickering Magnetic Pickup (excepting the armature assemblies) are warranted for an additional four years. The warranty covering the Tormat Memory Unit is void in case its seals are broken.

This warranty does not extend (1) to any of our products which have been subject to misuse, neglect, accident, incorrect wiring not our own, improper installation, or to use in violation of instructions furnished by us, (2) to units which have been repaired or altered by anyone other than our distributor, (3) to cases where the manufacturer's date code or the serial number of the product has been removed, defaced or changed, (4) to tubes, lamps, lamp starters, glass, and fuses, or (5) to accessories not of our own manufacture used with our products.

This warranty applies only to our products which are used within the continental limits of the United States of America and is in lieu of all warranties expressed or implied, and no representative or person is authorized to assume for us any other liability in connection with the sale of our products.

THE SEEBURG CORPORATION

Chicago 22, Illinois, U. S. A.