Automatic record changer Part No. 35-1169 plays eight 10" records automatically or eight 12" records manually. The last record remains on the turntable and repeats as long as the record changer is in operation either in the manual or automatic position.

OPERATION

AUTOMATIC POSITION:

To load the mechanism lift the record removing arm at (A) Fig. 1 to the upright position. To adjust the pickup to play 10" records, automatically, push the pickup stop at (K) Fig. 1 back away from the pickup. To play 12" records manually, pull the stop forward toward the needle as far as it will go. Place records on turntable. Throw switch at (N) Fig. 1 to the "On" position. Mechanism will now operate and reject each record after it has been played through. To reject a record and play the next record below it, pull the latch lever at (L) Fig. 1 forward.

MANUAL POSITION:

To operate the mechanism in the manual position, lift the record removing arm at (A) Fig. 1 to the upright position. 10 or 12" records can then be played by the position of the pickup stop at (K) Fig. 1. To play 10" records manually, push the pickup stop at (K) Fig. 1 back away from the pickup needle. For 12" records, pull the stop forward toward the needle as far as it will go.

MOTOR LUBRICATION

The motor installed in this Record Changer is governor controlled, with all gearing enclosed and leaves the factory lubricated for proper operation. For best results, lubricate the motor at regular intervals with a pure mineral oil as light as obtainable. Under no circumstances use any oil heavier than an SAE #10 nor any oil containing mixtures of animal or vegetable oils.

The governor disc engages with a felt brake. This felt is impregnated with a lubricating solution sufficient for proper operation for approximately six months under normal conditions. An oil hole is provided in the top of the governor housing for relubricating the brake felt.

MOTOR SPEED

The motor speed is adjusted by means of a slotted post (C) 3 Fig. 1 which is located under the turntable. To change motor speed rotate this post slightly by means of a screw driver.

TRIP MECHANISM

The trip mechanism is the trigger that sets the Record Changer in motion. This is done by allowing the latch bar at (O) Fig. 1 to drop in front of, and be actuated by the cam at (P) Fig. 1. This cam is driven by the motor and is in motion as long as the motor is running. If this mechanism does not operate smoothly, the precautions outlined in succeeding paragraphs should be observed.

First of all, make sure that the square pin in the latch lever at (U) Fig. 1 latches properly in the notch in the lift lever at (1) Fig. 1. When latched, the notch should be engaged approximately one-half of its depth. The depth of engagement is adjusted by means of the eccentric washer and locking screw at (J) Fig. 1. Now run the record changer through its cycle. If the square pin fails to engage the notch in the lift lever, first check the tension of the latch spring at (H) Fig. 1 to insure that the notch can engage the pin. Next check the tension of the reset spring at (E) Fig. 1. This reset spring should not be under tension when the latch bar is latched but should have enough tension when the latch bar drops back off of the cam to cause the square pin to over travel the notch in the lift lever.

IMPORTANT --- Before attempting to change the tension of any spring, be sure that the parts involved work freely without any tendency to bind, as of course any binding condition would preclude proper operation.

The Record Changer is adjusted at the factory to trip on a spiral trip groove record when the phonograph needle is 1-3/4" from the edge of the hole in the center of the record.

When eccentric or oscillating trip groove records are used, tripping is effected by means of the hardened steel pin in the end of tone arm lift crank at (S) Fig. 2 engaging the serrated block on the trip lever at (T) Fig. 2. There must be a minimum of 1/32" play between the end of the pin and the block, when, with a short needle, (5/8" Minimum Length) the pickup is resting on one record on the turntable. If the pressure of the pin on the block is not sufficient to insure operation, then check the pressure spring which is located up under the pickup.

The oval head pivot screw at (R) Fig. 1 serves as a pivot for the lift lever at (1) Fig. 1. This screw should allow the lift lever to be raised by the latch bar to its maximum height without binding but also without any additional play.

If the Record Changer fails to trip, see if the phonograph needle is jumping out of a worn record trip groove. Next make certain that all parts of the mechanism work freely and smoothly. If it is found that the latch bar at (O) Fig. 1 is not dropping in far enough to engage the cam at (P) Fig. 1 then check the tension of the trip spring at (B) Fig. 1.

RECORD REMOVING MECHANISM

The record Changer is adjusted so that it will always leave one record on the turntable. This is done to prevent the phonograph needle from damaging the covering on the turntable.

In case the Record Removing Mechanism fails to operate smoothly, proceed as follows: First make certain that all parts work freely with no binding in pivots or bearings, and that the record removing arm assembly rests on the stop screw at (Q) Fig. 3. Next stop the motor in such a position that the latch bar at (O) Fig. 1 can swing by and clear the cam at (P) Fig. 1. Place just one record on the turntable and measure from the top of this record down to the base plate. This distance should be one inch. Now by pulling the reject lever at (L) Fig. 1 first, it will be found possible to swing the record removing finger at (Y) Fig. 3 over to where it just touches the edge of the record. If the adjustment is correct, the record removing finger should just barely rise over the edge of the first record. If adjustment is required it can be made by means of the stop screw at (Q) Fig. 3. In the event the record removing arm raises the record from the turntable and drops it back in place without removing it, check the lift adjustment at (V) Fig. 1. This adjustment consists of an eccentric stud which is provided with a lock nut, and is made by loosening the lock nut and turning the eccentric stud. The lift adjustment should be set so that the hole in the center of the record just clears turntable spindle when the Record Changer is in operation.

PICKUP LOWERING MECHANISM

The pickup lowering mechanism has two functions. First, it lowers the phonograph needle gently to the surface of the record. Second, it feeds the needle toward the center of the record so that it will enter the playing groove.

IF the pickup descends too fast or too slow, adjust the speed of descent by turning the knurled thumb nut on the dashpot sleeve at (W) Fig. 2.

The unit is adjusted at the factory so that the needle will be set down approximately 3/32" in from the edge of the record. An adjusting screw is provided on the side of the pickup at (M) Fig. 2. If the needle is being lowered onto the playing surface of the record, and the adjusting screw at (M) Fig. 2 fails to correct the condition proceed as follows: First stop the record changer, with the pickup in the maximum raised position and check the clearance between the underside of the pickup shelf at (Z) Fig. 2 and the tip of the dashpot. This clearance should be very small as otherwise the pickup will tend to bounce as it is lowered. There must be sufficient clearance however to prevent the pickup shelf from rubbing on the tip of the dash pot, or the pickup will not swing out far enough to allow the adjustable stop at (K) Fig. 2 to come to rest against the dashpot. Check this clearance in both 10" and 12" record positions. If adjustment is required, the height of the dashpot may be regulated by loosening the nuts on the bottom of the lift lever stud at (X) Fig. 4 and changing their position on the stud. To raise the dashpot turn the nuts clockwise, to lower the dashpot turn the nuts counter-clockwise. Be sure to lock the nuts tightly together after the adjustment is made.

REPLACEMENT PARTS

Diagram Letter	*Description*	*Part No.*
A.	Record Removing Mechanism Assy. Complete	
	Parts of Above Assembly	
	Record Removing Arm Assembly	
	Record Removing Sleeve & Link Assy.	
	Record Removing Sleeve Link Mtg. Stud	
	Record Removing Sleeve Screw	
	Record Removing Link Screw	
	Record Removing Link Spring	
	Record Removing Finger Pin	
	Record Removing Finger	
	Record Removing Finger Spring	
	Record Removing Arm Adjusting Nut	
	Record Removing Arm Adjusting Screw	
	Record Removing Arm Pin (Arm to Sleeve & Link Assy.)	
B.	Trip Spring	
C.	Motor Speed Adjusting Post	
E.	Record Removing Link Spring	
H.	Latch Spring	
I.	Lift Lever Assembly	
	Lift Spring	
	Lift Crank Washer	
	Lift Lever Screw	
J.	Eccentric Washer & Locking Screw	
K.	Adjustable Stop	
L.	Reject Lever	
M.	Pickup Positioning Adjusting Screw	
N.	Power Switch	
O.	Latch Bar Assembly Complete	
	Screw (Latch Bar Mtg.)	
	Stud Nut (Latch Bar & Bumper)	
	Stop (Latch Bar)	
	Washer (Latch Bar Mtg. Screw)	
	Mounting Screw (Latch Bar Stop)	
	Screw (Latch Bar & Pickup Lift Stop)	
P.	Cam (Latch Bar Stop)	
Q.	Record Removing Arm Adjusting Screw Nut (Record Removing Arm)	
R.	Lift Lever Pivot Screw	
S.	Tone Arm Lift Crank	
T.	Trip Lever Serrated Block (Part of L)	
U.	Pin (Part of Latch Bar (O)	
V.	Record Removing Arm Adjusting Stud	
W.	Dash Pot Complete	
	Dash Pot	
	Nut (Dash Pot)	
	Adjusting Cap (Dash Pot)	
	Gland (Dash Pot)	
	Plunger Assembly (Dash Pot)	
	Lever Spring (Dash Pot)	
	Weight (Dash Pot)	
	Lever Spacer (Dash Pot)	
	Felt Washer (Dash Pot)	
	Leather (Dash Pot)	
	Washer Large (Dash Pot)	
	Washer Small (Dash Pot)	
X.	Dash Pot Lift Lever	
Y.	Record Removing Finger	
Z.	Pickup Lift Shelf	

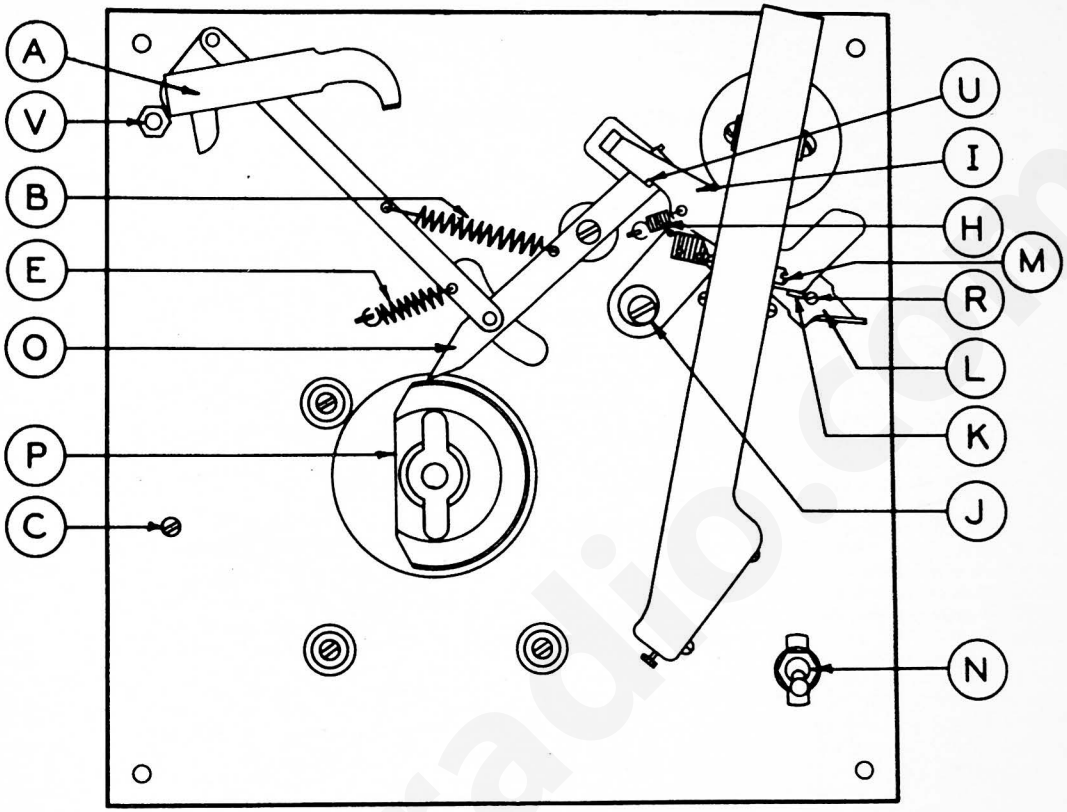

FIGURE 1

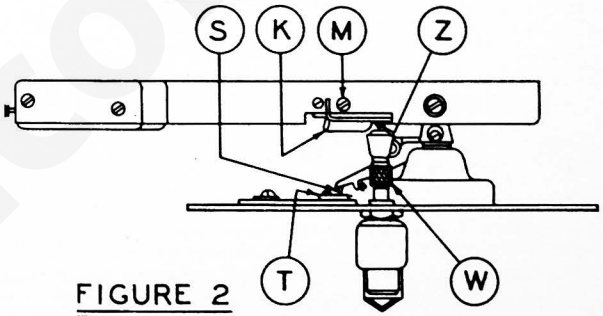

FIGURE 2

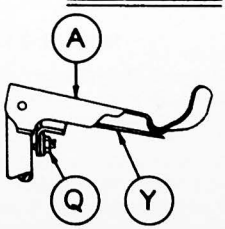

FIGURE 3

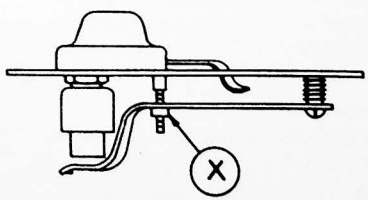

FIGURE 4