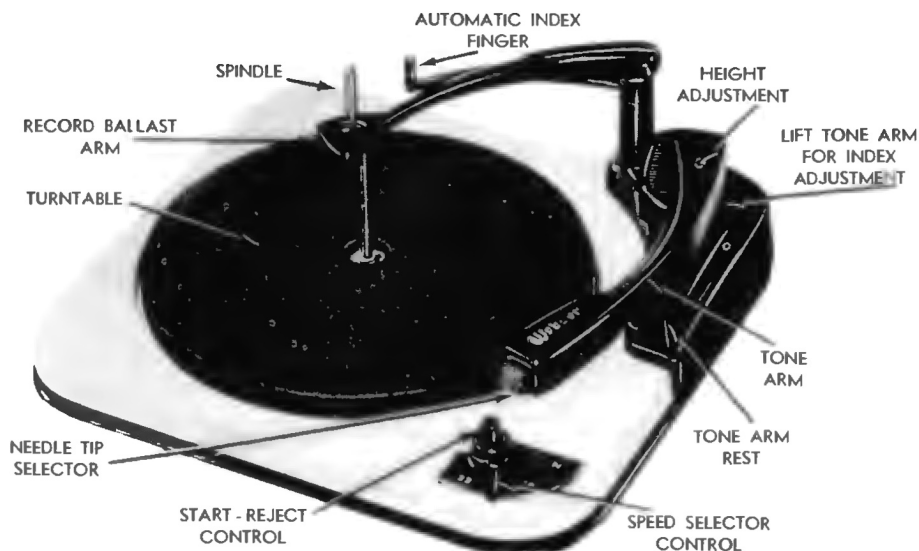


**WEBSTER-CHICAGO**



# WEBCOR DISKCHANGERS

## Models 121, 122, 123, 124, 125



### BASIC MODEL 121 DISKCHANGER

#### DESCRIPTION

Model 121 is a three speed Automatic record changer. Simple in design and operation, it provides automatic playing of up to a 1" stack of 7-inch, 10-inch and 12-inch records at speeds of 33 $\frac{1}{3}$ , 45 or 78 rpm.

Model 121 returns the Pickup Arm to the Rest position and automatically shuts off after playing the last record.

The motor switch is a function of the Tone Arm position and the power is off when the Tone Arm is on the Tone Arm Rest. Placing the arm on the record or depressing the reject button starts the motor.

#### FOR "MANUAL" RECORD PLAY

Lift the Record Ballast Arm and swing it and the Automatic Index Finger away from the spindle. When both arms are in full "open" position use a slight downward pressure to firmly seat them in place. Move the Speed Control Lever and Cartridge Knob to the correct speed and needle for the record being played and then place the needle gently on the record. To stop the mechanism at any time place the tone arm on its rest.

#### OPERATION

##### FOR "AUTOMATIC" RECORD CHANGE

1. Lift the Record Ballast Arm and swing it away from the spindle and exert a slight downward pressure until it "latches."
2. Place up to a 1-inch stack of any one size of records on the Spindle and swing the Record Ballast Arm back to the spindle allowing it to drop in position with the spindle in the hole. The Automatic Index Finger will remain away from the record until the change cycle starts. It will then move in to feel the diameter of the record and automatically index the pickup needle to the proper playing position.
3. Then turn Needle Tip Selector to correct position for records being played. Move the Speed Selector Lever to the correct speed for the records being played and depress the START - REJECT control. (Hold down until Tone Arm moves.)



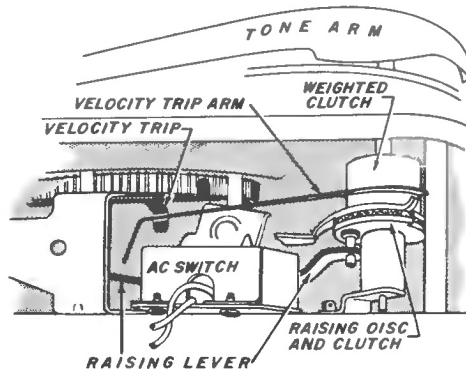
## THE CHANGE CYCLE

A 4 pole shaded pole motor is used to drive the changer mechanism. The power is transmitted to the turntable by a rubber rim idler wheel. Turntable speed is determined by the positioning of the wheel on one of the three "steps" of the drive sleeve on the rotor shaft. When the speed selector is turned to "33" the idler wheels is positioned on the "33 step" or contacts the smallest diameter portion of the sleeve. Turning the speed selector to "78" positions the wheel on a larger diameter of the sleeve (3rd step down).

It is recommended that the change cycle operation be observed by rotating the turntable by hand. The action described below can then be readily followed and the function of each part more easily understood. To observe the setdown action a single record should be placed on the spindle to correctly position the index arm for proper setdown of tone arm.

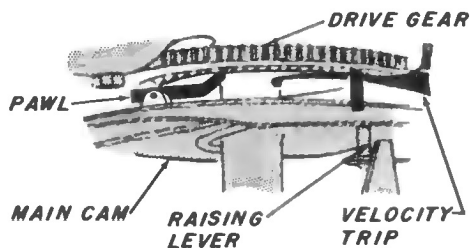
1

As the tone arm tracks on the record toward the spindle the velocity trip arm is moved inward by the action of the weighted friction clutch on the tone arm shaft. When the tone arm follows the eccentric groove at the finish of record the velocity trip arm is also moved suddenly inward and "trips" velocity trip.



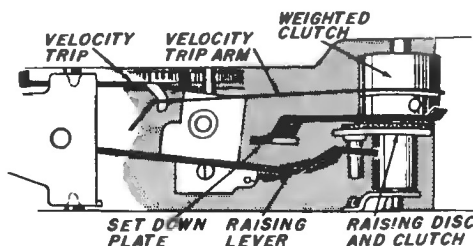
2

In this tripping action the actuating pawl on the main cam is released from the velocity trip and is able to engage the cam drive gear which is continuously rotating with the motor driven turntable. The drive gear now locked with the main cam drives the changer through the change cycle. The main cam is the heart of the change mechanism.



3

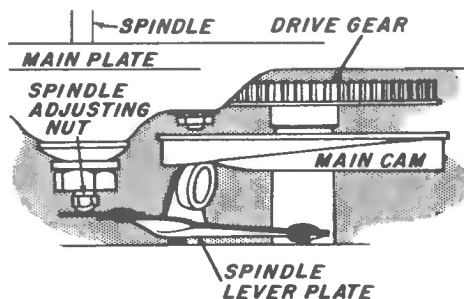
The main cam actuates the raising lever causing it to raise and pivot outward. The motion is transmitted to the tone arm by a clutch action between the raising disc and the set down plate which is attached to the tone arm shaft. The tone arm is then raised and carried on its outward excursion.





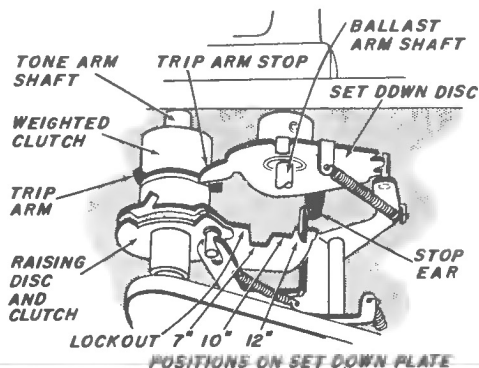
4

When the tone arm has reached its farthest outward excursion the main cam, by reason of its contour, causes the spindle lever plate to move upward at point of contact with spindle actuating rod. This upward movement forces the actuating rod up into spindle moving the push-off finger forward, resulting in the lowering of the records.



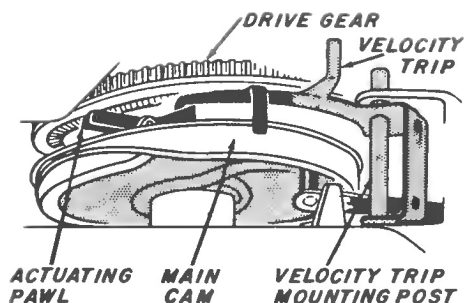
5

After the record has dropped the raising lever (following the recessed contour of the main cam) carries the set down plate, and consequently the tone arm, inward. This travel is stopped when the 7", 10" or 12" extension of the plate contacts the stop ear on the set down disc assembly. The position of this ear was predetermined when the record (now on the turntable) rested on the spindle step and influenced the position of the index arm. The stop ear, being a function of the index arm, stops the set down plate at the proper point so when the raising lever returns and lowers to its normal position the tone arm lowers and correctly sets down on the lead in groove of the record. (The slipping clutch allows the Raising Disc and Lever to continue its inward travel when the Set Down Plate and Tone Arm is stopped.)



6

The velocity trip is also returned to its normal position by the reset points on the drive gear. The hooked end on the trip disengages the actuating pawl from the drive gear thus unlocking main cam and drive gear. The changer has now completed its change cycle.



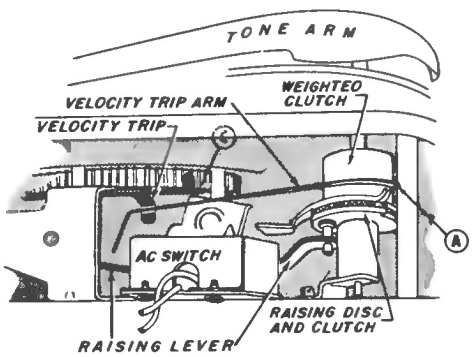
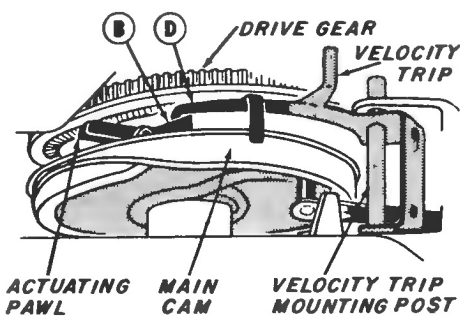
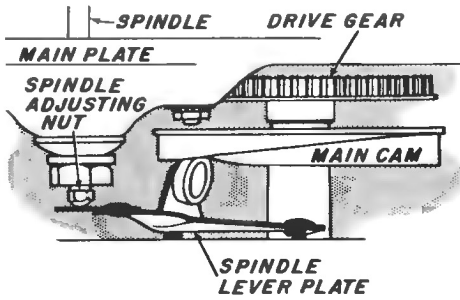
# MANUAL OF 1953 MOST-OFTEN-NEEDED RADIO DIAGRAMS

SERVICE INSTRUCTIONS

Model 121, continued.

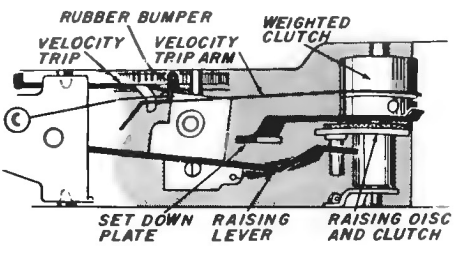
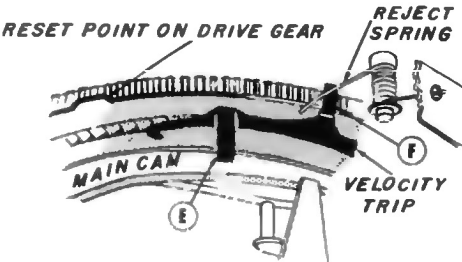
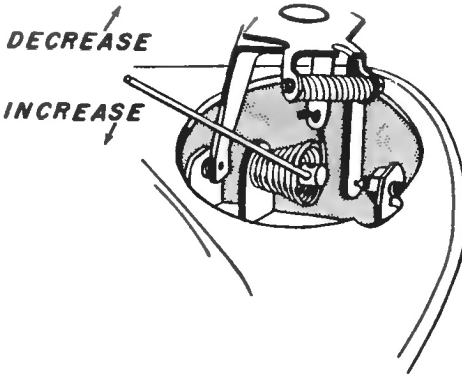
WEBSTER-CHICAGO



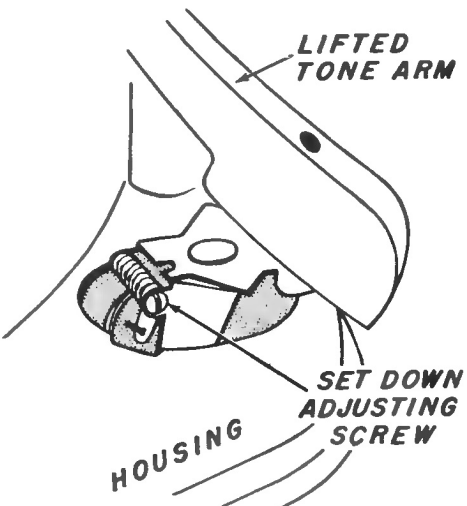
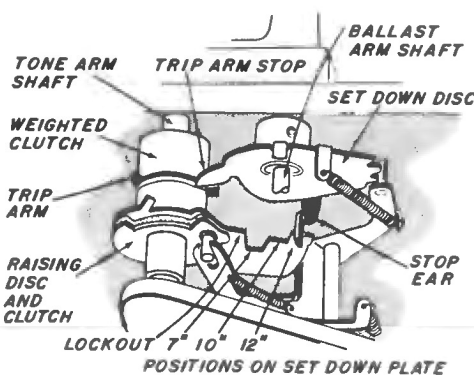
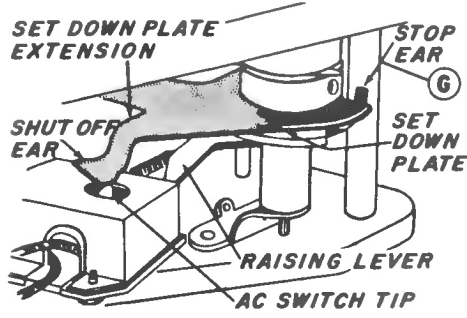
TROUBLE — SOURCE — ADJUSTMENTS	PARTS CONCERNED
<p><b>FAILS TO CHANGE RECORDS AUTOMATICALLY</b></p> <p>Check for:</p> <ol style="list-style-type: none"> <li>1. Dirt or grease on the weighted Friction clutch. Cleanse with alcohol so the trip arm may move freely. See (A).</li> <li>2. Velocity Trip binding on its mounting post.</li> <li>3. Burr on the end of the actuating pawl or on the underside of the hooked end of the Velocity Trip. See (B).</li> <li>4. Velocity Trip Arm bent and not hitting the ear of the Velocity Trip.</li> <li>5. The Velocity Trip Arm catching on the AC Switch Cover.</li> <li>6. Trip arm has become positioned on the wrong side of the Velocity Trip ear. Illustration shows correct position.</li> <li>7. Rubber bumper on the Velocity Trip damaged — needs replacing.</li> <li>8. See spindle adjustment (Does not Push off records).</li> <li>9. The end of the Velocity Trip catching on the top of the Raising Lever Bracket. See (C).</li> <li>10. The Velocity Trip rubbing on the underside of the Drive Gear. There should be approximately <math>\frac{1}{16}</math>" clearance between the Trip and Drive Gear. Bend end of Trip to adjust for this clearance. See (D). This condition can also produce a <u>chatter</u> during operation.</li> <li>11. Sticking Actuating Pawl.</li> <li>12. Defective Record.</li> <li>13. Badly bent or worn needle.</li> </ol>	 
<p><b>DOES NOT PUSH OFF RECORDS</b></p> <ol style="list-style-type: none"> <li>1. If bottom record of stack is not lowered to the turntable, turn the adjusting nut on Spindle Assembly counter-clockwise a little at a time until record is pushed off. Do not turn too far or changer will stall in cycle.</li> <li>2. Check for foreign matter in the spindle openings.</li> <li>3. Defective Spindle — needs replacing.</li> </ol>	





PARTS CONCERNED	TROUBLE—SOURCE—ADJUSTMENTS
	<p><b>CHANGES RECORDS PREMATURELY OR CYCLES CONTINUOUSLY</b></p> <p>Check for:</p> <ol style="list-style-type: none"> <li>1. Vertical clearance between the lip of the Velocity Trip and the edge of the Main Cam. This may be too small and is preventing the Velocity Trip from properly engaging the Actuating Pawl. Clearance between lip and cam at <b>(E)</b> should be <math>\frac{1}{64}</math>" to <math>\frac{1}{32}</math>" when the rubber bumper is contacting a reset point on the Drive Gear.</li> <li>2. See Par. 10, "Fails to change automatically".</li> <li>3. Reject Trip Spring binding.</li> <li>4. Worn Rubber Bumper on the Trip. Replace if required.</li> <li>5. Velocity Trip scraping on Raising Lever Bracket. See <b>(C)</b>.</li> </ol>
	<p><b>CANNOT "REJECT" RECORDS</b></p> <p>Check for:</p> <ol style="list-style-type: none"> <li>1. Bent ear on Velocity Trip. Cannot contact reject spring. See <b>(F)</b>.</li> <li>2. Bent Reject Spring. Cannot contact ear on Velocity Trip. See <b>(F)</b>.</li> <li>3. Reject Spring may not be threaded through hole in the Reject Lever. See illustration.</li> <li>4. Bottom of Velocity Trip scraping on Raising Lever Bracket. See <b>(C)</b>.</li> <li>5. See Page 154 - Does not turn on" for Reject Lever adjustment.</li> <li>6. Reject spring may be positioned on the wrong side of Velocity Trip Ear.</li> </ol>
	<p><b>NEEDLE FORCE INCORRECT</b></p> <ol style="list-style-type: none"> <li>1. Lift the tone arm to a vertical position.</li> <li>2. Insert a small steel rod in the hole of the mounting stud. (The rod may be bent to more conveniently reach the hole.)</li> <li>3. To increase the needle pressure, turn in a downward direction. An upward turning will decrease the pressure.</li> <li>4. <b>CAUTION:</b> A slight movement of the stud will have great effect. An accurate gauge is necessary to insure correct needle pressure. Most cartridges require 9 to 11 grams for proper tracking and best reproduction.</li> </ol>

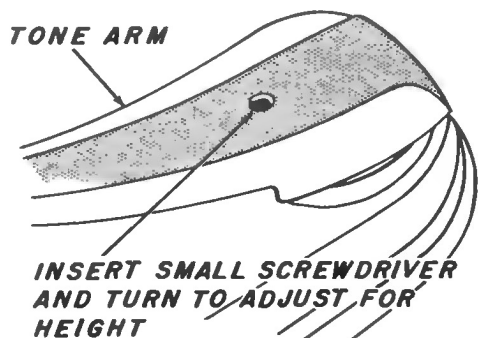


TROUBLE — SOURCE — ADJUSTMENTS	PARTS CONCERNED
<p><b>NEEDLE SET-DOWN POINT IS INCORRECT</b></p> <p><i>To Adjust:</i></p> <ol style="list-style-type: none"> <li>1. Place a 7" record on spindle and permit index finger to rest against edge of the record.</li> <li>2. With Speed Selector in "N" position, press the reject button and revolve turntable by hand, thereby putting changer through change cycle. When record has fallen to turntable and tone arm is at its farthest inward position, it will begin its downward travel to set on record. Stop rotation of turntable when needle is approximately <math>\frac{1}{4}</math>" above record.</li> <li>3. Check to see if needle is directly above lead-in groove of record. If not adjust by turning screw beneath tone arm as indicated. (Clockwise turning of screw will move tone arm away from spindle.)</li> <li>4. If adjustment on 7" is correct, 10" and 12" set down will also be correct.</li> </ol>	
<p><b>ERRATIC INDEXING — NO LOCKOUT</b></p> <ol style="list-style-type: none"> <li>1. If the Tone Arm swings into the center of a record and cycles or erratic indexing occurs, the stop ear on the Set Down Disc Assembly is bent and is not stopping the Set Down Plate. The ear should be bent back into position so that it stops the Plate at the correct set down point.</li> <li>2. If the arm does not come to rest after the last record has been played: Check to see if the stop ear on the set down disc is stopping the set down plate at the lockout position. If not, bend the ear slightly so it contacts the plate at lockout position. Recheck set down.</li> <li>3. See "Tone arm swing" adjustment below.</li> </ol>	
<p><b>TONE ARM WILL NOT SWING FAR ENOUGH OUTWARD TO SET ON THE TONE ARM REST PROPERLY</b></p> <ol style="list-style-type: none"> <li>1. Bend the stop ear on the Set Down Plate so that the Tone Arm swings out no further than <math>\frac{1}{2}</math>" beyond the Tone Arm Rest before starting its inward travel. (Bending the ear up will increase the swing — bending down will restrict it.) ④.</li> <li>2. If the set down is affected by this adjustment, readjust set down.</li> </ol>	



## PARTS CONCERNED

## TROUBLE — SOURCE — ADJUSTMENTS



## TONE ARM WILL NOT CLEAR REST DURING CHANGE CYCLE

## To Adjust:

1. The tone arm height is a function of the contour of the RAISING LEVER. This lever is properly formed at the factory during production of the record changer.
2. For vernier adjustment of tone arm height, a set screw is accessible through a hole on the top and at the rear of the tone arm.
3. The tone arm should clear the tip of the tone arm rest by  $\frac{1}{16}$ " to  $\frac{1}{8}$ " during the change cycle. Clockwise turning of the adjusting screw will raise the arm — counter-clockwise turning will lower it. (Caution: Do not turn excessively.)
4. Lift the tone arm and place a dab of Purple Glyptal (or plastic cement) on the base of the screw after making this adjustment so it will not move, once accurately adjusted. (Do not use a permanent type of cement and be sure it is not placed on the shoulder or end of the screw.)

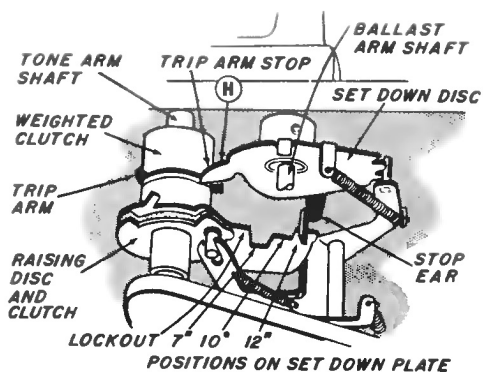
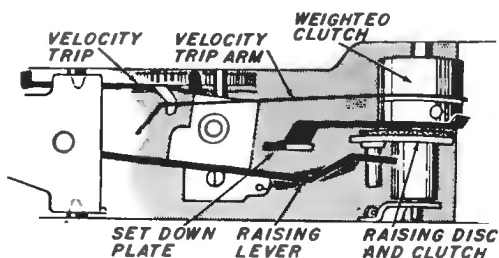
## TONE ARM WILL NOT SET DOWN ON SINGLE RECORD ON TURNTABLE

1. Adjust by tone arm method. If this fails follow 2.
2. Although the raising lever has in most cases been properly formed at the factory it may be necessary to very slightly bend the raising lever to allow the needle to properly set down on a single record on the turntable.

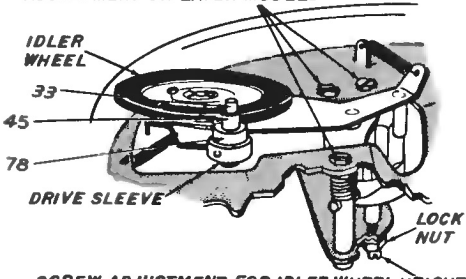
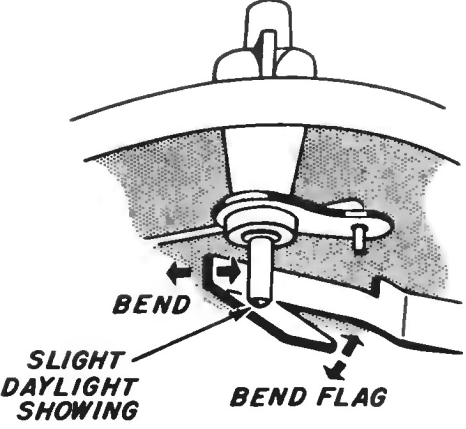
This is very seldom necessary and most height adjustments can be made by the tone arm adjustment.

## WILL NOT PLAY RECORDS MANUALLY

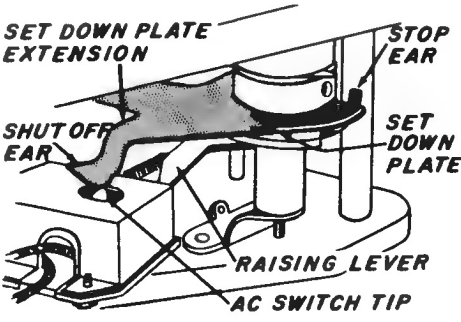
1. If the Changer trips and cycles at the end of a record the Trip Arm stop ear on the Set Down Disc Assembly is not restricting the movement of the Arm toward the Velocity Trip. The stop on the Disc Assembly or the finger on the Trip Arm should be bent so that the Arm cannot travel inward when the changer is in a Manual position. (H).
2. The Velocity Trip does not have proper clearance from Main Cam or Drive Gear. See "Changes Records Prematurely", and "Fails to Change Records Automatically".





TROUBLE — SOURCE — ADJUSTMENTS	PARTS CONCERNED
<p><b>INCORRECT TURNTABLE SPEED</b></p> <ol style="list-style-type: none"> <li>1. Defective Idler Wheel or Wheel is cocked at an angle.</li> <li>2. The Idler Wheel does not rest on the steps of the Drive Sleeve correctly. To adjust place the Speed Selector in 45 rpm position, loosen nut as indicated, then turn screw to raise or lower Idler Wheel so that its edge is vertically centered on the 45 step of the Sleeve. (Second Step from top.) Tighten Nut.</li> </ol>	<p><b>PARTS CONCERNED</b></p> <p>THESE SCREWS LOOSENED FOR SLIDE PLATE ADJUSTMENT ON LATER MODELS</p>  <p>SCREW ADJUSTMENT FOR IDLER WHEEL HEIGHT</p>
<p><b>ERRATIC SPEED</b></p> <ol style="list-style-type: none"> <li>1. Defective Idler Wheel. (Flat spots.)</li> <li>2. Dirt or grease on rubber rim of the Idler Wheel, Drive Sleeve or on the rim of the Turntable. Cleanse with alcohol.</li> <li>3. If the rubber composition of the Idler Wheel is slick and shiny replace with new wheel.</li> </ol>	
<p><b>STALLS DURING CHANGE CYCLE</b></p> <ol style="list-style-type: none"> <li>1. See Erratic Speed (Par. 2 and 3).</li> <li>2. Check position of Idler Wheel on Drive Wheel Sleeve as in "Incorrect Speed" (Par. 2) above.</li> <li>3. See "Does not push off records", Spindle adjustment may be required.</li> <li>4. Check for low line voltage.</li> <li>5. In later models the Idler Wheel Slide Plate Assembly can be re-positioned by loosening screws holding it to mainplate. The idler Wheel can be placed in firmer contact with the Drive Sleeve by moving the slide plate assembly accordingly. (Caution: Do not move assembly excessively so that the Idler presses too tightly against Sleeve thus affecting correct speed.)</li> </ol>	
<p><b>DOES NOT TURN ON OR TURNTABLE DOES NOT ROTATE WHEN TONE ARM IS PLACED ON RECORD OR WHEN REJECT BUTTON IS DEPRESSED</b></p> <ol style="list-style-type: none"> <li>1. Be sure Speed Selector is on a speed setting.</li> <li>2. Reject Lever stroke is insufficient. Lever can be bent slightly at points indicated by arrows to increase the Lever stroke so that the AC switch tip clears the extension of the Set Down Plate when reject button is depressed. Slight daylight should show between flag end of Lever and shaft of Reject Button.</li> <li>3. Defective AC Switch or defective Motor.</li> <li>4. Binding or frozen motor.</li> <li>5. Check idler wheel adjustment. See "Incorrect turntable speed" above.</li> </ol>	 <p>BEND</p> <p>SLIGHT DAYLIGHT SHOWING</p> <p>BEND FLAG</p>



PARTS CONCERNED	TROUBLE — SOURCE — ADJUSTMENTS
 <p>Diagram labels: SET DOWN PLATE EXTENSION, STOP EAR, SHUT OFF EAR, SET DOWN PLATE, RAISING LEVER, AC SWITCH TIP.</p>	<p><b>DOES NOT SHUT OFF AUTOMATICALLY OR WHEN THE TONE ARM IS PLACED ON ITS REST</b></p> <ol style="list-style-type: none"> <li>1. The ear on the Stop Plate extension is bent and does not strike switch tip properly in its downward travel or when tone arm is placed on its rest.</li> <li>2. Defective AC Switch.</li> <li>3. There may be a burr on the plastic switch tip which restricts the movement of tone arm when the arm is manually placed on its rest. Do not force arm but rather smooth off tip for easy shut off operation.</li> <li>4. See "Tone arm swing".</li> <li>5. See "No lockout".</li> </ol>

## MISCELLANEOUS TROUBLES

### GLIDE-IN ON 12" RECORDS

The term "glide-in" is used to describe the action of the tone arm and needle when the needle glides over the first two or three grooves of the record before seating itself properly. If glide-in occurs:

The pickup cord may be dressed too tight or in such a manner that it interferes with the free movement of the pickup arm. Make certain there is sufficient play in the pickup cord.

To correct slide-in, check for:

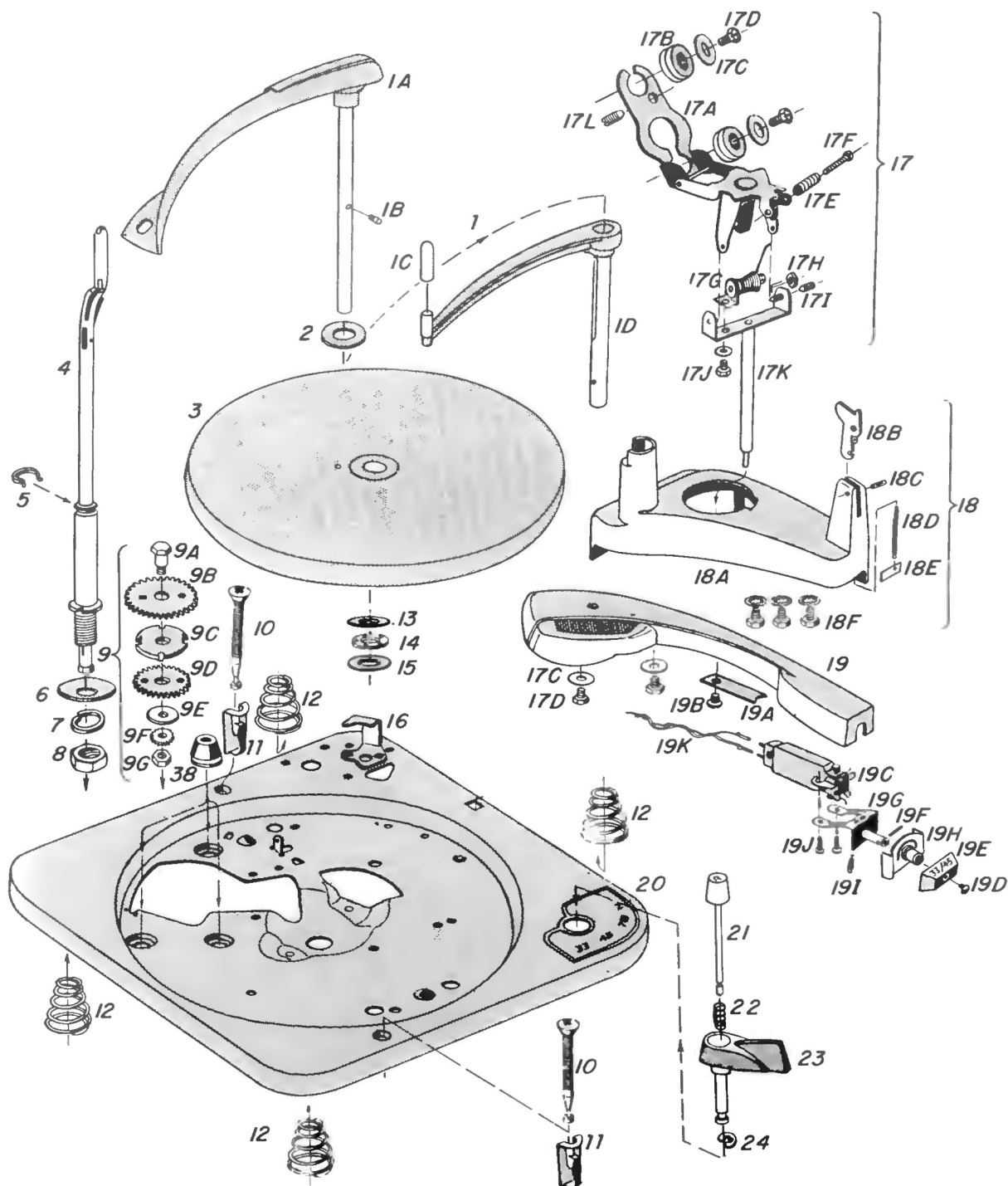
1. Incorrect needle tip. The standard "78" tip will be especially likely to jump grooves of a microgroove record. Be certain the "micro" or "35-45" tip is used for either the 33 $\frac{1}{3}$  or 45 rpm microgroove records.
2. Chipped or damaged needle.
3. Tight pickup cord.
4. Needle pressure too light.

### SLIDE-IN OR NEEDLE JUMPS GROOVES

Slide-in describes the condition where the needle will touch the first groove of the record properly but will jump the grooves forward or back as though the needle pressure was too light.

### MORE THAN ONE RECORD IS DROPPED DURING A CHANGE CYCLE

1. Foreign matter in spindle recess causing the latch to stick.
2. Exceptionally thin records.
3. Bent spindle.



Exploded View — Above Mainplate

# PARTS LIST—ABOVE MAINPLATE

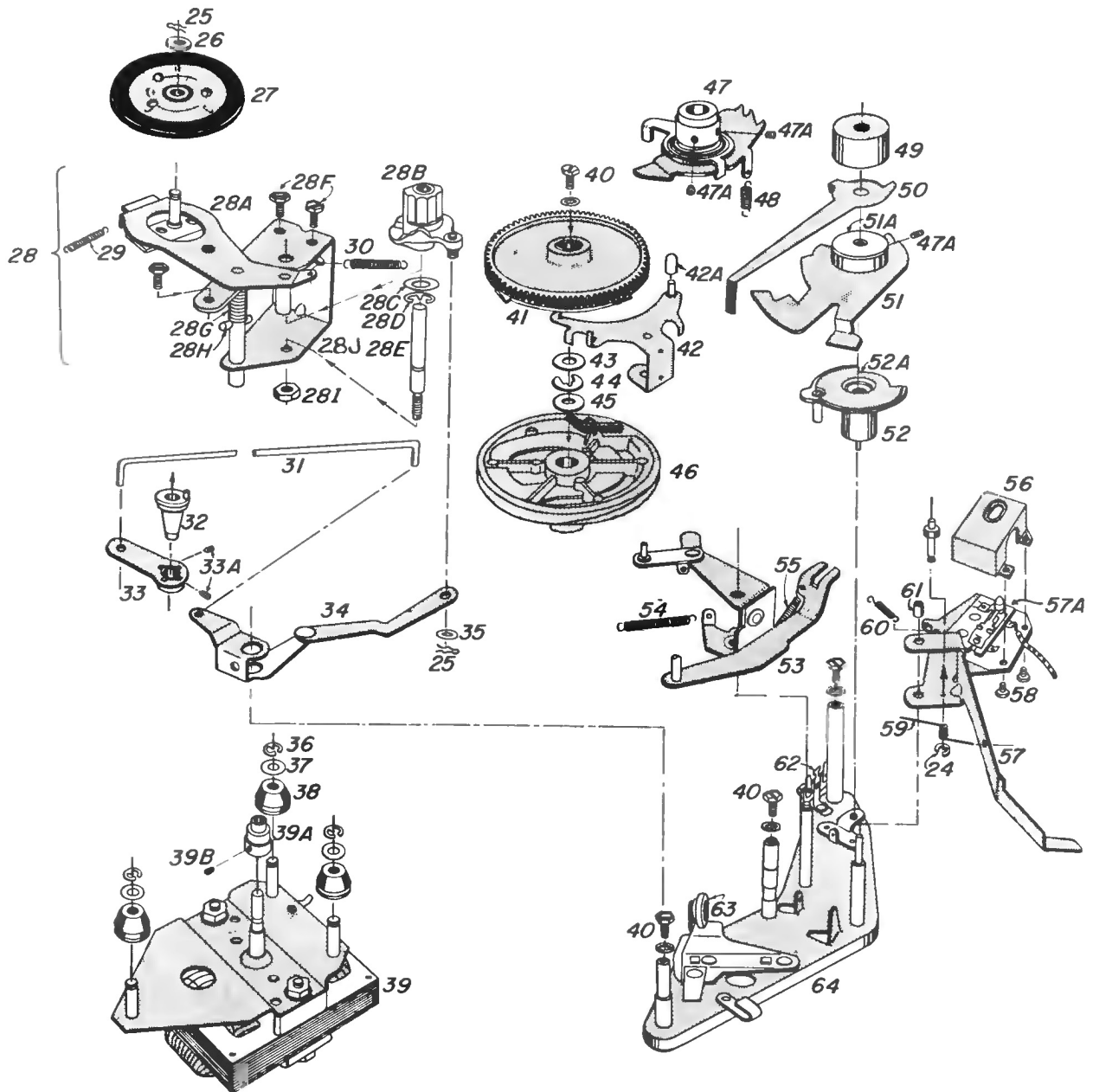
(NUMBERS REFER TO EXPLODED VIEW)

Fig. No.	Part No.	Description
1	— 11X956-E	Model B121
	11X956-LY	Model F121
1A	— 11X925-E	Model B121
	11X925-LY	Model F121
1B	— 41P1146	Knurled Pin for 11X956
1C	— 24P048	Rubber Cushion for Index Finger
1D	— 42X299-E	Model B121
	42X299-LY	Model F121
2	— 25P454	Rubber Washer (Early models only)
3	— 11X878-E	Model B121
	11X878-DJ	Model F121
4	— 11X976	Spindle
5	— 50P221	Retainer for Turntable
6	— 25P289	Cup Washer — Spindle Mounting
7	— 25P403	Lock Washer — Spindle Mounting
8	— 26P687	Nut — Spindle Mounting
9	— 11X132	Idler Gear Assembly
9A	— 41P333	Shoulder Screw
9B	— 47P024	Idler Gear — Large
9C	— 45P342	Coupler for 11X132
9D	— 47P023	Idler Gear — Small
9E	— 25P284	Washer for 11X132
9F	— 25P222	Lock Washer for 11X132
9G	— 26P046	Nut for 11X132
10	— 26P1045-1	Mounting Screw
11	— 50P252	Mounting Clip
12	— 46P307	Mounting Spring
13	— 25P269	Washer for Bearing Race
14	— 11X058	Turntable Bearing Race
15	— 25P269	Washer for Bearing Race
16	— 45P191	Stop Bracket for Tone Arm
17	— 21X344	Tone Arm Hinge and Shaft Assembly
*17A	— 21X331	Tone Arm Hinge (See footnote)
17B	— 25P558	Grommet
17C	— 25P257	Washer
17D	— 26P965	Mounting Screw — Tone Arm
17E	— 46P299	Compression Spring
17F	— 26P1246	Adjusting Screw — Set Down
17G	— 21X335	Tone Arm Counter Balance
17H	— 26P1247	Hex Nut
17I	— 26P1267	Pivot Screw
17J	— 26P1253	Screw
*17K	— 21X343	Tone Arm Shaft (See footnote)
17L	— 26P1285	Adjusting Screw — Height
†18	— 11X981E	Model B121
	11X981-LY	Model F121
†18A	— 42P296-E	Model B121
	42P296-LY	Model F121
18B	— 49P178	Latch Lever
18C	— 27P278	Pin
18D	— 46P303	Tension Spring
18E	— 45P1511	Spring Anchor Plate
18F	— 26P747	Mounting Screws — Housing
19	— 42P300-1E	Model B121
	42P300-1LY	Model F121
19A	— 45P1509	Tone Arm Latch Plate
19B	— 26P1191	Self Tapping Screw
19C		Cartridge (Order from Distributor by Mfgs. name and number)
19D	— 191 — 11X915 —	Complete Turnover Mechanism Assembly
	19D-26P1250	Screw — Cartridge Knob
	19E-49P176-E	Model B121
	49P176M	Model F121
	19F-27P276	Groove Pin
	19G-11X912	Mounting Bracket
	19H-11X907	Hub and Mounting Plate
	19I-46P296	Spring
19J	— 26P474	Screws — Cartridge Mounting
19K	— 20P1769	Pickup Cord and Lug Assembly
20	— 78P593-1	Model B121
	78P593-2	Model F121
21	— 49X171-E	Model B121
	49X171-LY	Model F121
22	— 46P297	Compression Spring
23	— 42X290-E	Model B121
	42X290-LY	Model F121
24	— 25P447	"C" Washer

\* On changers bearing numbers (located on tag on underside of mainplate) 375-245 or earlier: Do not order these parts. Replace entire hinge and shaft assembly — order improved part No. 21X344.

† 18 — 11X981-E and 11X981-LY for B123 and F123 respectively.

† 18A — 42P314-E and 42P314-LY for B123 and F123 respectively.



Exploded View — Below Mainplate





## PARTS LIST—BELOW MAINPLATE

(NUMBERS REFER TO EXPLODED VIEW)

Fig. No.	Part No.	Description
25	— 50P125	Retainer Clip .....
26	— 25P430	Washer .....
27	— 11X935	Idler Wheel .....
28	— 11X950	Idler Wheel Slide Plate Assembly .....
28A	— 11X946	Pivot and Slide Plate Assembly .....
28B	— 11X949	Cam and Stud Assembly .....
28C	— 25P578	Washer .....
28D	— 25P574	"C" Washer .....
28E	— 41P1159	Cam Shaft .....
28F	— 26P251	Mounting Screws for 11X950 .....
28G	— 46P305	Compression Spring .....
28H	— 27P282	Groove Pin .....
28I	— 26P077	Hex Nut .....
28J	— 45P1565	Idler Bracket .....
29	— 46P314	Tension Spring — Slide Plate .....
30	— 46P315	Tension Spring — Slide Plate .....
31	— 45P1549	Speed Change Rod .....
32	— 42P289	Bushing for Mounting 11X954 .....
33	— 11X954	Selector Link and Hub Assembly .....
34	— 11X936	Link Assembly (Speed Selector) .....
35	— 25P549	Washer .....
36	— 25P535	"C" Washer .....
37	— 25P394	Washer .....
38	— 24P078	Rubber Grommet .....
39	— 15X152	Motor and Top Bridge Assembly (Incl. Drive Sleeve) .....
*39A	— 41P1248	Drive Sleeve .....
39B	— 26P1292	Set Screw — Drive Sleeve .....
40	— 26P748	Screw .....
41	— 11X032	Main Actuating Gear .....
42	— 11X320	Velocity Trip .....
42A	— 24P023	Rubber Bumper for Trip .....
43	— 25P343	Washer for 11X545 .....
44	— 25P342	"C" Washer for 11X545 .....
45	— 25P083	Washer for 11X545 .....
46	— 11X545	Main Cam .....
47	— 11X953	Set Down Disc Assembly .....
47A	— 26P629	Set Screw for 11X953 and 11X938 .....
48	— 46P319	Tension Spring — 11X953 .....
49	— 41P1152	Clutch Weight .....
50	— 45P1552	Velocity Trip Arm .....
51	— 11X938	Set Down Plate .....
51A	— 23P009	Washer for Weighted Clutch (Felt) .....
52	— 11X939	Raising Disc .....
52A	— 28P010	Clutch .....
53	— 11X942	Raising Lever Assembly .....
54	— 46P323	Spring for 11X942 .....
55	— 46P022	Spring for 11X942 .....
56	— 11X876	AC Switch Cover Assembly .....
57	— 11X875	Reject Lever Assembly .....
57A	— 32P089	AC Switch .....
	61P359	Spacer Plate for Switch .....
	61P360	Insulator for Switch .....
58	— 26P779	Screws for AC Cover .....
59	— 46P288	Torsion Spring — Reject .....
60	— 46P318	Tension Spring — Reject Lever .....
61	— 41P1097	Spacer .....
62	— 70P045	Standoff Lug Assembly .....
63	— 11X941	Spindle Actuating Lever .....
64	— 27P217	Rivets for Mounting 11X941 .....

\* 39A — 41P1165 For 15X142 motor on earlier production. (Number is stamped on motor.)



## REPLACEMENT OF PARTS

### CARTRIDGE REPLACEMENT

1. To remove cartridge raise the Tone Arm to a vertical position.
2. Remove the pickup lead lugs from the terminals of the cartridge.
3. Unscrew the mounting screws so that the cartridge can be removed from the Arm.
4. Replace with like Cartridge ordering through your distributor. Specify the Manufacturer of the Cartridge and his number.
5. Be sure cartridge is aligned correctly on bracket so that needle setdown is correct for both needles. If setdown is not correct for both needles after installation realign cartridge on bracket. (For turnover cartridges.)

### REPLACEMENT OF THE MOTOR ASSEMBLY

1. The Four pole Motor is mounted suspended from the Mainplate. Remove the "C" Washers from the mounting posts on the Motor Assembly.
2. Support Motor Assembly with one hand while removing washers and lower it from the Mainplate.
3. Replace the new Assembly reversing above procedure.

### REPLACEMENT OF TONE ARM BRACKET AND SHAFT ASSEMBLY

1. Unsolder Cartridge leads from terminal strip beneath Mainplate.
2. Loosen the Bristol Screw in the hub of the Set Down Plate.
3. Remove the Weighted Clutch, Trip Arm, Set Down Plate and Raising Disk by sliding them off the bottom of the Tone Arm Shaft and pull the shaft out of the Changer.
4. Replace by reversing procedure.

### REPLACEMENT OF THE IDLER WHEEL SLIDE PLATE ASSEMBLY

1. Remove the Motor Assembly as instructed above.
2. Remove the Idler Wheel.
3. Remove the Retainer Clip (or "C" Washer) at the bottom of the Slide Plate Assembly where the Cam and Stud Assembly fastens to the Speed Selector Linkage Assembly.
4. Drop the Slide Plate Assembly from the Mainplate by removing the Mounting Screws holding the Assembly to the Mainplate.
5. Replace using reverse procedure.

## LUBRICATION

Model 121 Record Changers leave the factory completely oiled and lubricated. Under normal conditions this should be sufficient for approximately one year or 1,000 hours of operation.

Do not permit oil or grease to get on the rubber Idler Drive Wheel, the Motor Sleeve, Turntable Drive Rim, the Automatic Trip Arm clutch or Raising Disc clutch. Any oil or grease on these points should be removed using alcohol. The recommended lubricants and points of lubrication are as follows:

#### A — No. 10 OIL (Apply With Small Oil Can or Medicine Dropper)

1. Motor Bearings — (1 drop).
2. Pickup Arm Shaft.
3. Ball Bearing Assembly.

#### B — A NON FLUID LUBRICANT (Apply With Small Brush)

1. Idler Wheel Link.
2. Turntable Shaft Stud.
3. Pickup Arm Hinge Pins.
4. Cam and Follower — Slide Plate Assembly.
5. Teeth of Main Cam Actuating Gear.
6. Track of Main Cam Gear.
7. Teeth of Large and Small idler gears.
8. Raising lever Bracket bearing surface.
9. Spindle adjusting nut at bottom.