

Instructions for
RCA Victor Portable Victrola
Model 2-19

SETUP

Remove the Victrola from its shipping carton and place on a table or other level surface of convenient

height. Then raise the cabinet lid and withdraw all packing material used to secure parts rigidly for transit.

INITIAL OPERATION

The motor-winding key is located between the tone arm bearing and the turntable, a hole in the motorboard being provided to hold the key in place when carrying the phonograph. Remove key, insert in winding-shaft socket at rear of turntable and wind motor by turning key slowly in a clockwise direction. In order to wind the motor completely, it will be necessary to apply the turntable brake; otherwise, rotation will ensue during the winding process. The brake is operated by a lever

protruding from beneath the turntable at the front.

Always be careful not to wind the motor too tightly. Stop immediately when winding becomes appreciably difficult. After the initial winding, release the brake and permit the motor to run down; then apply the brake and rewind, repeating this process two or three times to assure free working of parts. Leave the tone-arm with its reproducer (or sound-box) in the metallic rest at the side of the turntable during this preliminary operation.

PLAYING

1. Wind the motor as outlined under "Initial Operation."

2. Insert a *new* needle in the reproducer to the full depth of the opening and tighten the needle screw. For best reproduction, use only RCA Victor needles—Chromium (green shank), Tungstone (full volume) or the ordinary *full volume* steel. Books of Chromium or Tungstone needles may be kept in the holder attached to the motor board.

NOTE—With care, a Chromium needle should play 75 to 100 and a Tungstone needle 100 to 200 recordings. Never re-insert a Chromium needle which has been used (however slightly) as damage to the record grooves would result. Thin flexible or transparent-faced (illustrated) records should not be reproduced with Tungstone needles. If steel needles are used, a new needle should be substituted after each selection.

3. Place a record on the turntable. Victor

records are noted for quality and will provide greatest satisfaction.

4. Start the motor by releasing the turntable brake. Place the reproducer gently on the record so that the needle rests on the smooth outer rim, then guide the needle into the outside groove.

5. When the selection has been played, stop the motor by applying the turntable brake, then return the reproducer to its metallic rest at the side of the turntable. The reproducer should not be allowed to remain on the record or turntable when the phonograph is not in use.

Speed—The correct speed of the turntable is 78 revolutions per minute while playing. To check this, place a piece of paper under the edge of the record on the turntable. While playing the record, count the revolutions during one minute. The speed regulator may be moved toward "F" to increase, or toward "S" to decrease the speed until the revolutions per minute are correct.

GENERAL INFORMATION

1. Facilities for carrying a number of records with the Victrola are provided. Up to twelve 10-inch diameter records may be stored in the lid pocket of the cabinet.

2. A loose needle will cause noisy reproduction. If undue noise is obtained, therefore, examine the reproducer and make certain that the needle is fastened rigidly by the needle screw.

3. To insure proper operation and long life, the Victrola must be lubricated sufficiently; periodical oiling at six-month intervals is recommended. The bear-

ings for the motor spindle and winding shaft are accessible upon removal of the turntable; all other moving parts can be reached by disassembling the motorboard from the cabinet. To remove the turntable, simply unscrew the spindle cap (using the special key furnished for this purpose). The motorboard may be disengaged upon withdrawing the four corner screws and then detaching the lid support plate. Apply machine oil of good quality on all bearings, also on the governor friction pad and associated friction disc; use light cup grease or vaseline on the motor gears.

SERVICE DATA

This instrument is a small portable type mechanical phonograph built into a cabinet resembling a small suitcase. Excellent quality, high output and good mechanical construction are features of this instrument.

LUBRICATION

Premature wear, noisy operation and failure of parts are direct results of failure to clean and lubricate the motor at necessary intervals. The various bearings and gears of the motor should be cleaned and lubricated at least once every six months. In addition to the regular lubrication, all motor parts should be covered with a light film of oil to prevent rusting. Use only Stock No. 7226 Motor Oil and Stock No. 7227 Motor Grease when lubricating this instrument.

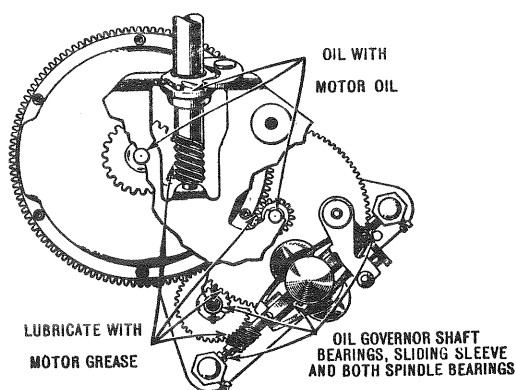


Figure A—Lubrication Diagram

Motor. Figure A shows a view of the motor with the top plate cut away. Before lubricating the parts shown in this illustration, a thorough cleaning with carbon tetrachloride (Carbona) or gasoline is necessary. If necessary disassemble the entire motor for such cleaning.

Tone Arm. The joint between the taper tube and the sound chamber must be free to swing easily without play and be sealed with grease. This bearing is accessible when the three mounting screws are removed. Failure to seal this joint will result in poor quality. Unnecessary friction will cause undue record wear.

MOTOR

The motor used is of simple design and will give excellent performance. If kept clean and properly lubricated, little service attention will be required. The following points may prove useful when it is necessary to effect repairs. *Before doing any work on the motor the machine must be allowed to run down completely.*

Removing Motor from Cabinet. To remove the motor from the cabinet proceed as follows:

- (a) Unscrew the spindle cap and remove the turntable.

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- (b) Remove the five screws that hold the motor board and lid-support to the cabinet and remove the motor-board assembly.

- (c) Remove the speed-regulator lever.

- (d) Remove the three machine screws that hold the motor in place. The motor may then be removed.

Changing Motor Springs. Should a spring break and require replacement the best method to make a repair is to replace the entire spring barrel. While the cost of the spring barrel is greater than that of the spring alone, the saving in labor will usually justify such replacement. Unless the serviceman is experienced in handling springs of this type, the following directions should be followed carefully:

- (a) Disassemble the motor and remove the spring barrel. Remove the winding gear.

- (b) Place the gear flat on a piece of metal and file off the ends of the six rivets. Remove the rivets and gear.

- (c) Place the palm of the right hand over the closed end of the barrel, making sure that the fingers do not protrude beyond the open side. Firmly hold the barrel, open side downward, over a large can or barrel. With the left hand pull the center turns of the spring out. As soon as the spring starts, pull the left hand clear of the can, holding the spring barrel firmly until the spring is entirely clear.

- (d) *A new coiled spring may prove extremely dangerous if not properly handled. Read these instructions and work very carefully, especially if not experienced in work of this kind.* The new spring is furnished coiled and with a heavy wire clamp holding the spring tightly wound. Pull out about one foot of the spring. Then with the spring flat on a table gently tap the ring until it comes to the edge. Do not push the clamp so close to the edge that it will not hold the spring.

Place the hook end of the spring over the barrel hook. Wind the exposed end into the barrel and then insert the entire spring in the barrel, allowing the clamp to be on the outer edge. Place a block over the entire spring and force the spring into the barrel, thereby releasing the clamp.

- (f) Place a tablespoonful of spring lubricant between the spring leaves and in the center of the spring.

- (g) Place the gear in position and rivet it with six rivets to the spring barrel. Use a small punch for flattening the ends of the rivets. Place the gear on a flat surface while re-riveting the barrel to it.

- (h) Reassemble the motor in the reverse manner of that used to dismantle it.

Winding Shaft Binding. A heavy jar may cause the motor to shift slightly on the motor board and produce binding of the winding shaft against the motor board. Loosening the motor mounting screws and shifting the motor to its proper position (center of slot) will correct this condition.

REPLACEMENT PARTS

Insist on genuine factory tested parts, which are readily identified and may be purchased from authorized dealers

Stock No.	DESCRIPTION	List Price	Stock No.	DESCRIPTION	List Price
2872	Governor ball and spring assembly—Comprising ball, spring mounting screws, and washers—Package of 5.....	\$0.75	7214	Governor assembly — Comprising governor spindle, disc, sleeve, collar, governor balls and springs.....	\$2.50
2937	Gear—Winding gear and sleeve.....	.75	7226	RCA Victor motor grease—1 pint can.....	.40
2947	Leather—Friction leather for brake—Package of 20.....	.50	7227	RCA Victor motor oil—1 pint can.....	.50
4107	Brake—Turntable brake and bracket.....	.55	7228	RCA Victor spring lubricant—1 pint can....	.65
4108	Lever—Speed regulator lever.....	.45	7719	Board—Motor board with horn—Less hardware and motor—Green.....	3.90
4109	Cup—Needle cup.....	.22	7720	Arm—Tone arm assembly.....	3.26
4110	Holder—Needle holder.....	.45	7721	Turntable—Green.....	1.20
4111	Cap—Turntable spindle cap.....	.65	7722	Turntable—Blue.....	1.20
4112	Plate—Speed regulator plate.....	.55	7723	Board—Motor board and horn—Less hardware and motor—Blue.....	3.90
4113	Bracket—Sound box rest bracket.....	.50	7724	Cabinet—Complete with handle and catches—Blue.....	12.40
4114	Support—Lid support.....	.25	7725	Cabinet—Complete with handle and catches—Green.....	12.70
4115	Screw and washer—Motor board mounting screw and washer—Package of 3.....	.25	7726	Pocket—Record pocket—Black.....	.98
4116	Catch—Cabinet catch complete with mounting rivets—Package of 2.....	.40	7727	Pocket—Record pocket—Green.....	.98
4117	Strap—Record pocket strap assembly.....	.16	7729	Plate—Top plate assembly.....	3.96
4118	Screw—Needle holding screw—Package of 10.....	.65	7730	Motor—Motor complete with spindle cap....	10.40
6837	Key—Winding key.....	.70	8655	Barrel—Spring barrel assembly.....	2.64
6838	Handle—Carrying handle.....	.82	8656	Spring—Mainspring.....	1.15
6839	Extension—Winding shaft extension.....	.45	8657	Gear—Intermediate gear pinion and shaft..	.70
6933	Sound box—Complete with needle screw....	1.80	8658	Shaft — Winding shaft — Comprising shaft, collar, pin, ratchet, and washer — Less winding extension.....	.96
7210	Spindle—Turntable spindle with pins and ball bearing—Less gear.....	.50	10116	Spring—Brake spring—Package of 10.....	.60
7211	Gear—Turntable spindle gear complete, with set screw.....	.50			

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