

The Webcor Musicale/Ravinia is equipped with a General Electric reluctance-type cartridge using replaceable tandem mounted sapphire needles. The record changer tone arm is adjusted to exert 8-gram needle pressure on the record. At this pressure, which is the one recommended by the manufacturer, an average listener should be able to play approximately—

100 12-inch LP sides, and 1000 12-inch 78 RPM sides

A critical listener may notice distortion due to the stylus wear when as few as 50 LP sides and 250 78 RPM sides have been played. In any event, noticeable distorted or fuzzy reproduction or discoloration of the record (the black turning to gray) are indications that the needles are worn and require replacement.

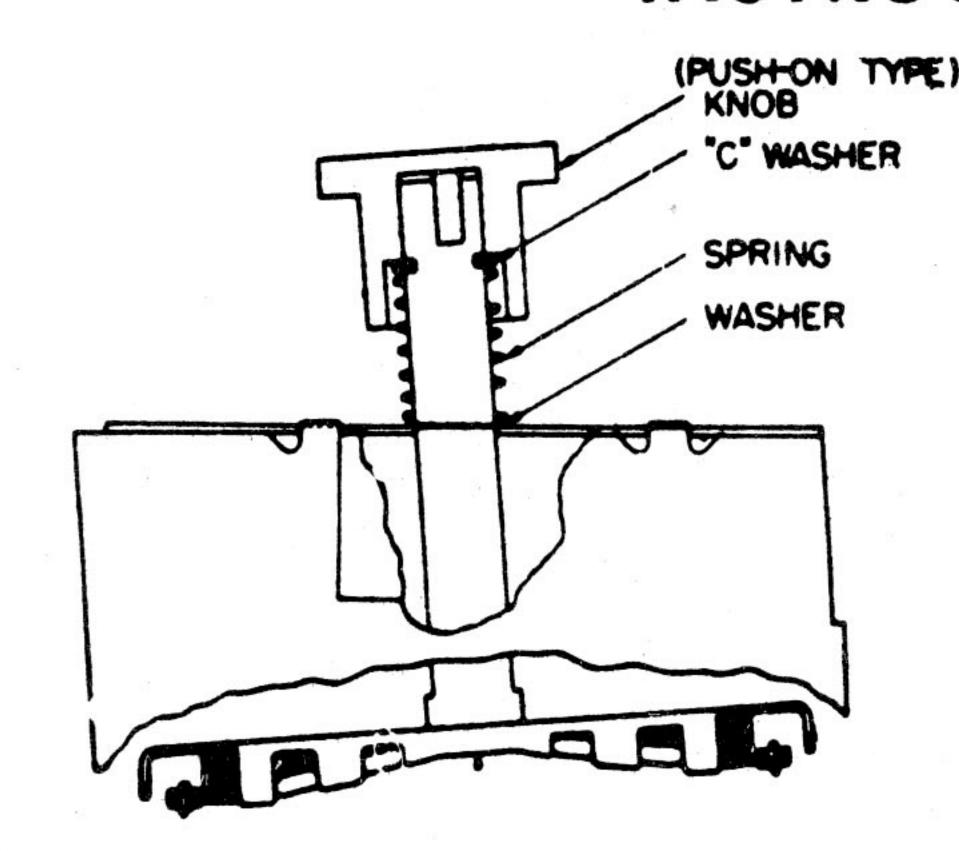
The correct replacement needle is:

General	Electric	Part	No.	RI	J-	01	0	•	•	•	•	•	•	\$5.95
	Part No.	The second secon												
	ne Part 1		The same of the sa											

available from your dealer, music stores, or record shops.

In the interest of maintaining distortion-free reproduction, any accumulation of record dust should be carefully removed from the air gap at the stylus, using a soft brush. This should be done often, especially when playing LP records. Also, check the centering of the stylus in the air gap of the cartridge, as explained on the reverse side hereof.

INSTRUCTIONS FOR REPLACING NEEDLE



- (PUSH-ON TYPE) 1. Removal: Lift off the knob from the top of cartridge shaft.
 - 2. Remove cartridge from T. A. (See Fig. 4 on back of page.)
 - 3. Compress the spring slightly, remove the "C" washer, pick off the spring and flat washer, and remove the needle assembly from the cartridge.
 - 4. <u>Installation</u>: Insert needle assembly into cartridge with a rotating motion. Place flat washer, then spring, over the needle assembly shaft. Compress spring slightly and insert "C" washer into groove on shaft to hold spring in place. Replace the knob with arrowhead pointing toward the red needle tip, apply thumb pressure at bottom of shaft so knob can be firmly seated.
 - 5. Replace cartridge in Tone Arm.

When new and in good condition, osmium, sapphire, or diamond needles will provide the same quality of reproduction.

For long life, diamond needles rendering up to 1000 playing hours are also available as a replacement:

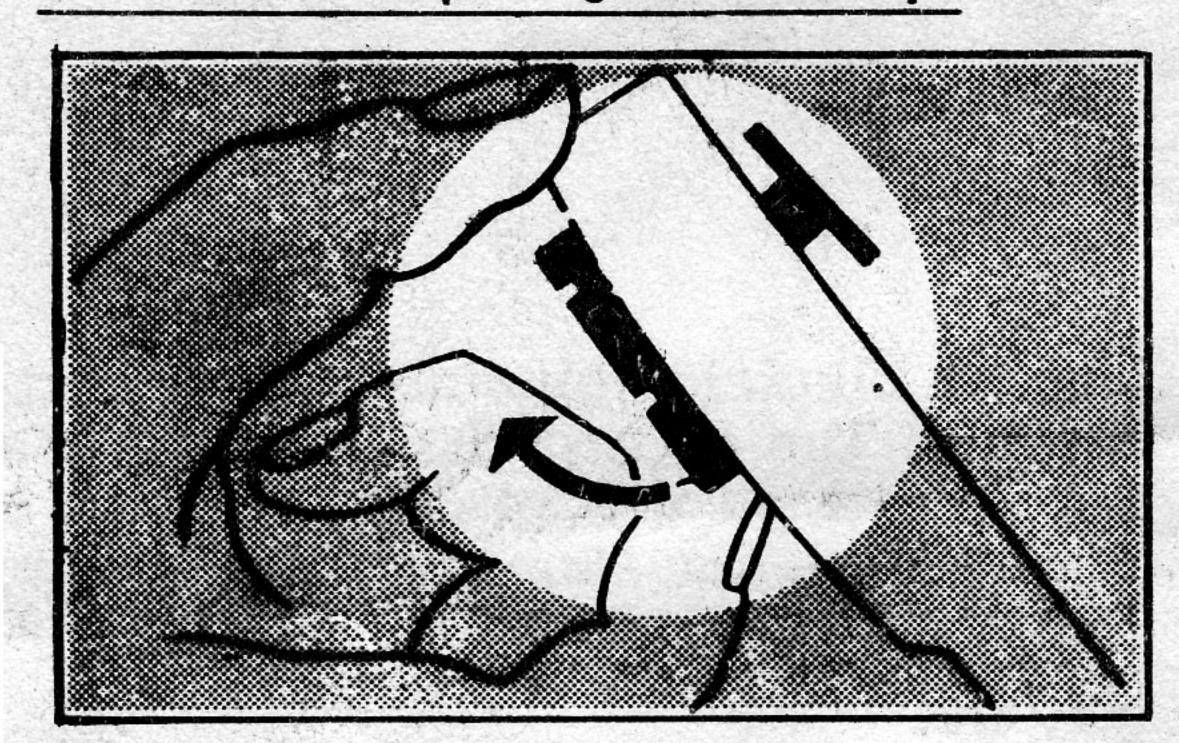
General Electric Part No. RPJ-013	\$30.00 list price
Fidelitone Part No. AC-120	30.00 list price
Jensen Part No. G-11SD	30.00 list price

However, the contour and the polish on a diamond needle must be in absolutely perfect condition because any irregularities in a diamond needle will immediately cut into the grooves of a record.

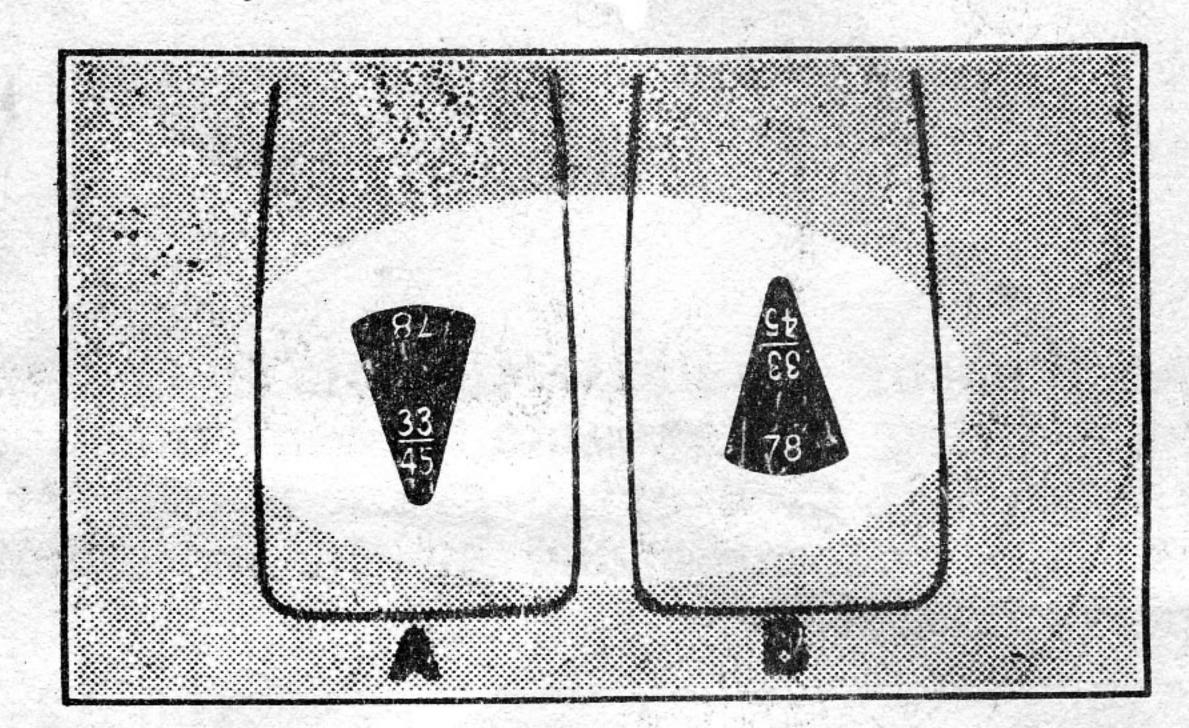
TO PREVENT DAMAGE

TO THE HIGH FIDELITY NEEDLES IN YOUR MUSICALE/RAVINIA TONE ARM, THOROUGHLY READ AND FOLLOW THESE INSTRUCTIONS.

1. Remove cardboard packing and cotton tape from around tone arm, spindle and speed selector.



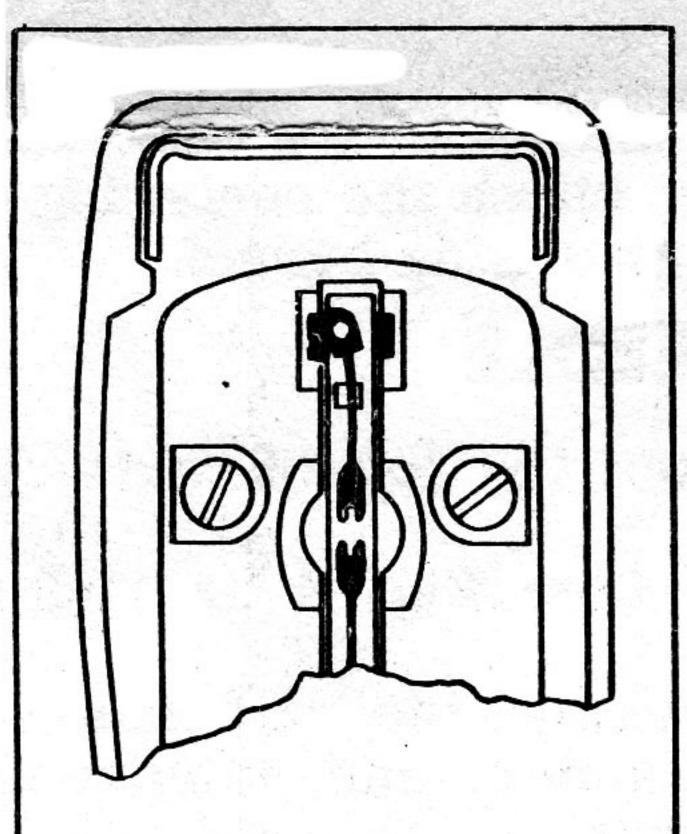
2. Then carefully remove needle guard as shown here. DO NOT ATTEMPT TO OPERATE FONO-GRAF UNTIL GUARD IS REMOVED.



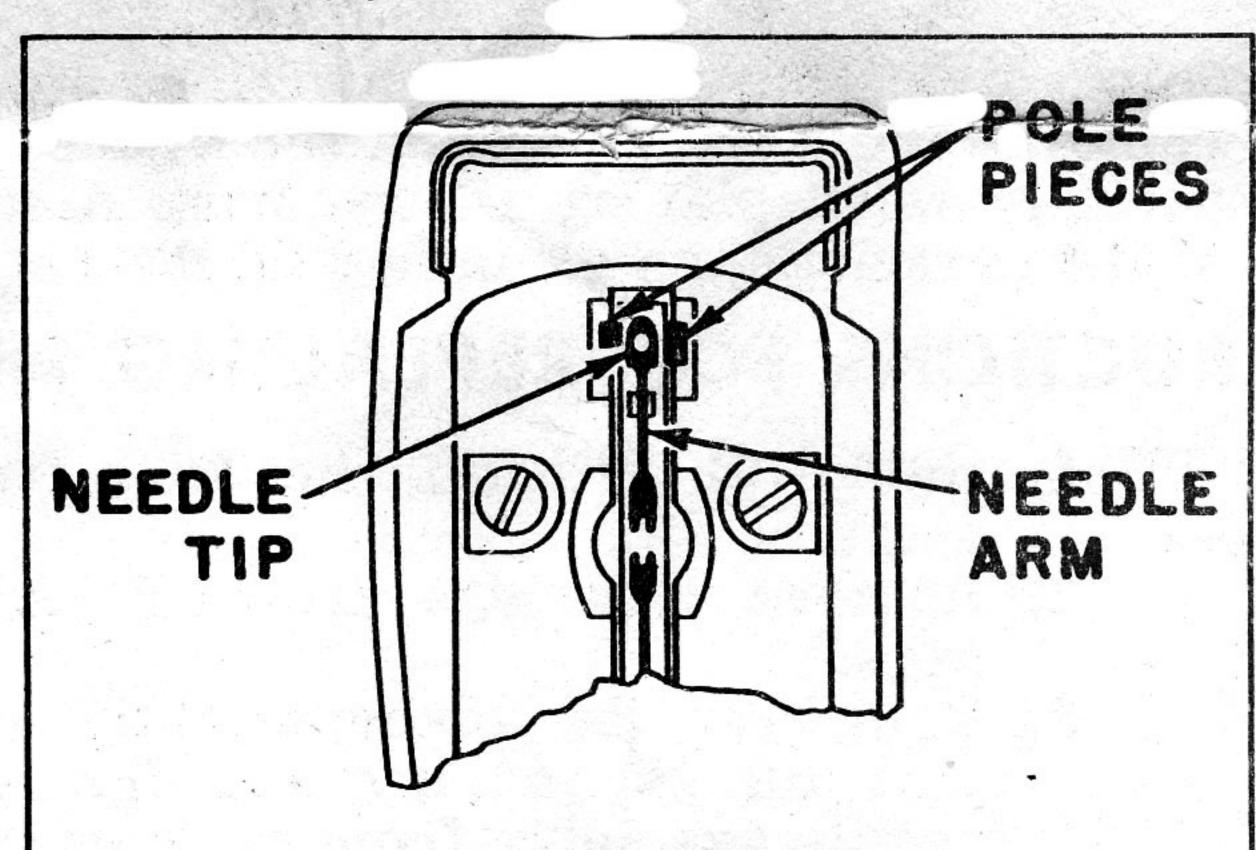
3. To select proper needle, push red knob down all the way, then turn arrowhead as shown in "A" for "33 and 45" rpm records or as in "B" for 78 rpm records. For further, detailed instructions see pages 8-9 of operating manual.

SERVICE

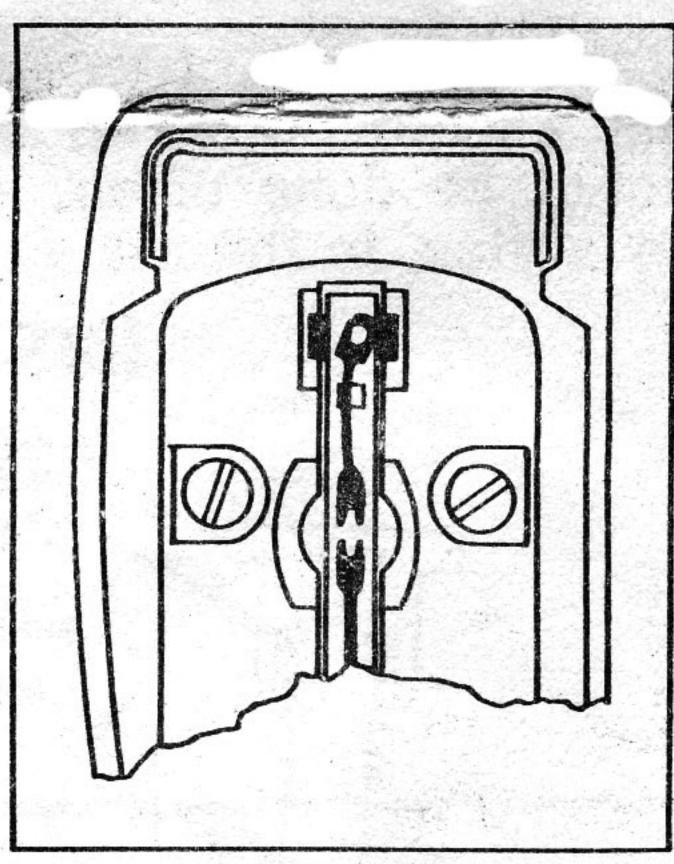
1. The needle has been centered between the pole pieces of the cartridge. Be careful and do not disturb this adjustment. If the needle is not centered between the two pole pieces or is touching either pole piece, the music will sound distorted. (See illustrations below.) The adjustment can be restored by carefully straightening the needle arm using a pair of ordinary tweezers. The needle arm can be reached more readily by pushing and holding down the red cartridge knob.



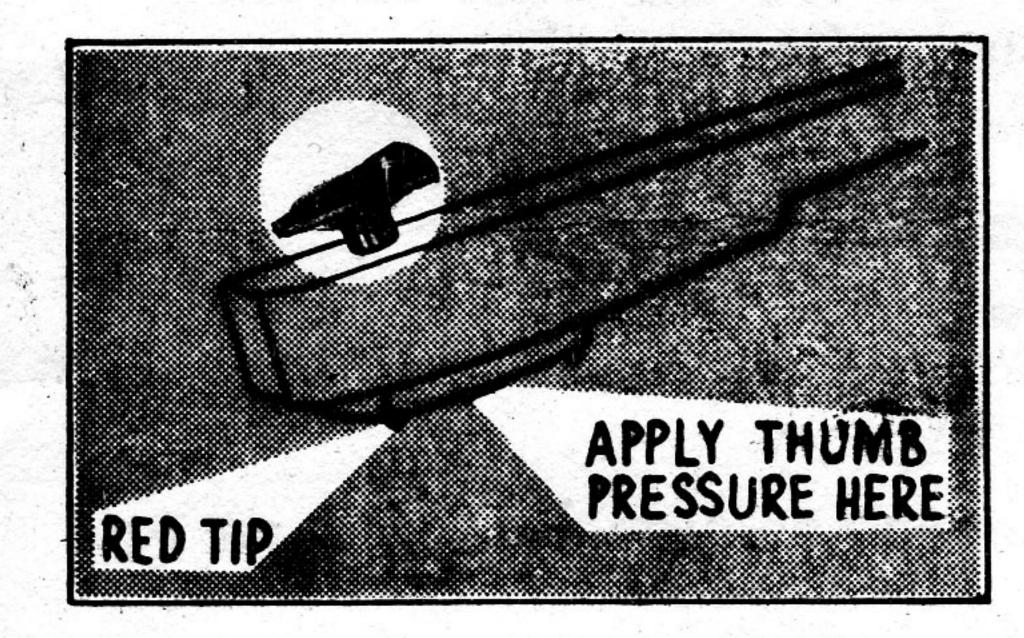
-INCORRECT-NEEDLE IS TOUCHING LEFT POLE PIECE



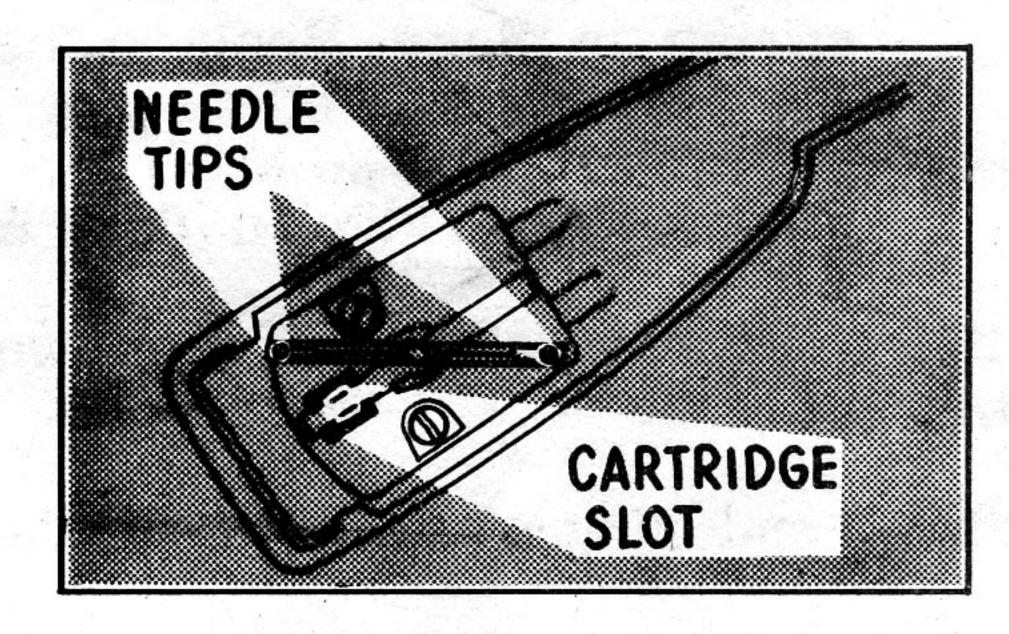
-CORRECT-NEEDLE IS CENTERED BETWEEN POLE PIECES



-INCORRECT-NEEDLE IS TOUCHING RIGHT POLE PIECE

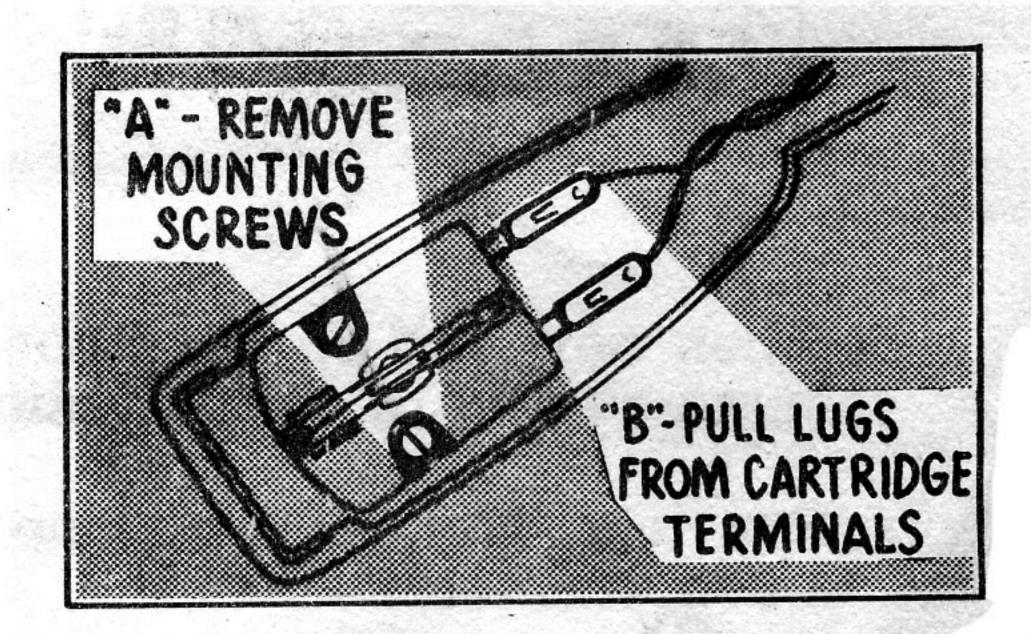


2. In the event it is necessary to replace the red cartridge knob, it should be placed on the needle shaft with the arrowhead pointing toward the red needle tip. When installing knob on shaft apply thumb pressure at bottom of shaft so knob can be firmly seated.



3. To insure optimum performance from the cartridge, clean the needles and cartridge slot periodically of foreign particles accumulated from the record surface. Use a soft bristle brush.

These parts are more readily accessible for cleaning if the red control knob is depressed and rotated to expose the needles and slot as illustrated.



4. The cartridge can be removed from the tone arm when replacing worn needles. Follow, closely, instructions that come with replacement needle. Steps "A" and "B" of illustration shows removal procedure. (First pull red knob from its shaft.)