RCA VICTOR SPECIAL MODELS K & M Amplifier Removal for Service

In order to service the amplifier, it is necessary to remove the amplifier, the wiring harness, the volume control, and the brake switch.

Step 1. Disconnect the wiring harness at the speaker

The wiring harness connects below the speaker and output transformer. The small black plug pulls straight out. It is not easy as there is not much room to get a grip, but using a tiny screw driver blade between the plug and socket and gently prying may help.



Step 2. Remove the volume control knob

Remove the red knob from the outside of the cabinet. It just pulls off. However, it may be very hard to remove if it has never been previously removed. A plastic auto upholstery pry tool may help. If necessary, wrap the jaws of a pair of pliers with masking tape and pull. Work gently, rocking the knob a bit to loosen it from the shaft. Be careful not to mar the knob or cabinet.



Step 3. Remove the on/off volume control switch

Back off the nut on the inside volume control shaft from the retaining bracket. You will need the thinnest 1/2" open end wrench you can find. I use a thin stamped metal 1/2" wrench like those that used to come with bicycle tool kits. But you can even buy a cheap wrench and grind it down until it fits. There should be a lock washer with the nut. Keep those in a safe place, or screw both back on the volume control shaft and send along with the amplifier.



Step 4. Remove the brake switch assembly

The brake switch is held on with four machine screws with nuts and tiny washers. Make sure to note how it is mounted so you get it back on right. Keep the screws and nuts and the cable clamp in a safe place.



It is necessary to remove the turntable platter in order to access the screws that hold the brake switch in place. To remove the platter, unscrew the spindle nut and remove the washer if present. Gently rock and pull the platter off the motor shaft. The bushing in the platter is very fragile, and avoid damaging it to prevent excessive turntable wobble.



Step 5. Disconnect wiring harness from tone arm

The lead from the tone arm to the amplifier input has a twistlock connector that you just twist and pull apart like an inline fuse holder.



Step 6. Removing the amplifier

Remove the four screws holding the amplifier in place. The slotted hex head screws can be removed with a 1/4" nut driver or flat bladed screwdriver. Carefully lift out the amplifier and wiring harness.



PACKING & SHIPPING

Leave tubes in the amplifier. Wrap the amplifier well in bubble wrap, and wrap the tone control and brake switch assembly in bubble wrap and pack well in a good shipping box, along with any other parts requested. Ship insured with tracking to:

Edward Morris Edsantiqueradios.com 1515 Winters Hill Circle North Chesterfield, VA 23236

TONE ARM REMOVAL

It is necessary to remove the tone arm to replace the worn out bushings and it is also easier to remove the cartridge for service with the tone arm removed from the motor board.

Step 1. Disconnect tone arm wiring

Disconnect the twist-lock connector between the tone arm and the amplifier on the wiring harness.



Step 2. Remove nut and washers

From under the motor board, remove the large nut and washers retaining the tone arm pedestal to the motor board. Avoid damaging the bushing if possible.



The entire tone arm assembly can now be pulled up and away from the motor board. Remove the needle from the cartridge. Leave the cartridge in the tone arm. Wrap the tone arm in bubble wrap for shipping.



CARTRIDGE REMOVAL

The RCA Victor Special Model K & M record players are equipped with a John Vassos designed tone arm. The original Astatic crystal cartridge will almost certainly be dead unless it has been recently rebuilt.

The original cartridge had a 3 volt audio output, and the amplifier requires a much higher audio input than any modern cartridge can produce, as most modern replacements for vintage cartridges only provide about 0.5 volts.

Using a modern replacement cartridge would require adapting a preamp between the cartridge output and the amplifier input. It may also be possible to modify the amplifier to work with a low voltage cartridge, but I do not provide such a modification. Additionally, the John Vassos tone arm may be too heavy to use a modern replacement cartridge. If sending your amplifier and tone arm to me for repair, do not remove the cartridge unless requested. If you plan to send your cartridge off for rebuilding yourself, then follow these steps to remove it.

Step 1. Remove cartridge from tone arm

Remove the two retaining screws and lift the cartridge from the tone arm.



Step 2. Detach audio leads from the cartridge

Make note of the polarity of the leads before removing. The original leads are in a shielded metal housing. Unsolder the leads using a soldering pencil of no more than 30 watts. If no soldering pencil is available, clip the leads.



When re-installing a rebuilt cartridge, always solder with a soldering pencil of 25 - 30 watts, and avoid excessively heating the cartridge as this can damage the internal components.

Do not remove the cartridge from the tone arm or ship the cartridge to me unless I specifically ask you to.