Form 13079

OVER THE SOLDERING IRON

RCA VICTOR

PREPARED FOR THE INFORMATION OF RCA VICTOR DISTRIBUTORS' SERVICE MANAGERS

SERVICE DIVISION - RCA MANUFACTURING COMPANY, INC. - CAMDEN, N. J. - MARCH 25, 1938.

CHANGE OF I-F PEAK TO 455 KC

Notice should be taken of the fact that recent production instruments, such as Models 8M, 94BT, 94BK, 95T, HF-1, 87K2, and some 87K1, are being aligned to the new I-F standard of 455 KC. This frequency will be used consistently on all of the newer Superheterodyne receivers. The change to 455 KC is brought about by a movement on the part of RMA through cooperation with the FCC, to standardize a receiver I-F channel, and to eventually clear this channel of the major interferring code stations. The use of 455 KC offers immediate advantages in some localities in that the second harmonic stations (910 KC) are limited in number, and also because I-F beats resulting from combinations of local stations will be minimized.

MODEL U-106 - LOW FREQUENCY BOOM

Some instruments are compensated to give an abundance of low frequencies. Later production, however, has a modified circuit which lessens the response below 100 cycles. Should there be customer reaction to the preponderant low frequency response, the following circuit components should be checked and revised to the latest specifications per the following:

(1) Replace the 820,000 ohm resistor R-24 with one of 1.2 megohms.
(2) Replace the .01 Mfd. capacitor C-54 with a 3600 Mmfd.
(3) Replace the 150 Mmfd. capacitor C-45 with a 470 Mmfd.

Stock #30208, #12811, and #30433 are the respective parts required.

MODEL 8M3 - INOPERATIVE OR INTERMITTENT

The plating on the adjustment screws of the antenna trimmer C-3 may become chipped, and will cause the trimmer to be short-circuited. In order to correct this condition, remove the screw entirely, see that the metallic chips are cleaned from the trimmer plates, and clean the burrs from the threads of the screw. Replace the screw and re-adjust the trimmer at 1400 KC as directed in the 8M3 Service Nots.

MODEL HF-1 - FAILURE OF OSCILLATOR STAGE

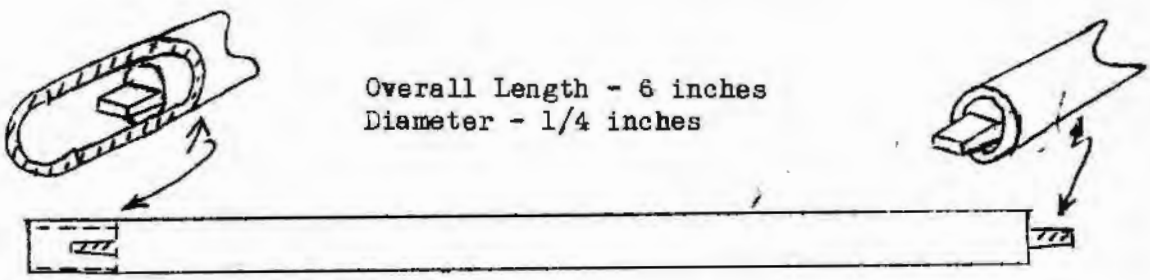
A few instruments contained a 33,000 ohm resistor in position R-2, serving as grid leak for the 6A8 oacillator section. It has been found that a 100,000 ohm, 1/4 watt resistor will give better performance over a greater range of tube characteristic and voltage variations. The 100,000 ohm resistor should be installed if required.

MODEL 95T - FIDELITY CHANGE

Capacitor C-15, connected across the output transformer primary circuit, may be increased from .015 mfd. to .025 mfd. if accentuation of the lower audio frequency range is desired. Some production instruments will have this change already applied, therefore, circuit-note diagrams should be revised accordingly. The .025 mfd. capacitor is available as stock #4870.

MAGNETITE TRIMMER ALIGNING TOOL - STOCK #31031

A new aligning tool, designed particularly for use in adjusting the trimmer screws of the standard RCA magnetite core coils, is now available. This tool is made of durable bone fiber tubing with a regular screw driver blade on one end for the ordinary compression type trimmers, and a recessed blade on the other end for the magnetite core trimmers.



Overall Length - 6 inches
Diameter - 1/4 inches

Stock #31031 Net Price $1.00

The recessed blade permits easy engagement of the tool with the trimmer screw, particularly where the screw is difficult to reach, prevents the tool from slipping during adjustment, and obviates likelihood of breaking the screw. This tool is especially handy for adjusting push-button receivers, where both compression and magnetite trimmers are employed.

REPLACEMENT DRIVER TRANSFORMER - STOCK #7832

New shipments of the replacement audio driver transformer for Models 262 and 263 will be found to have a revised coil design, in that the primary d-c resistance equals 1350 ohms and the secondary total d-c resistance is 2000 ohms. In addition to the coil revision, these transformers have been manufactured and tested by the latest methods to withstand the stringent conditions of humid climate and high temperature. An extra connection has also been provided on the unit for equalizing the primary and core potentials so that electrolysis between these parts will be reduced. This additional lead is colored RED-GREEN; and it should be connected to plus "B" (green lead) of the primary circuit.

MODELS 8M3 AND 8M4 - NOISE FILTER CHANGE

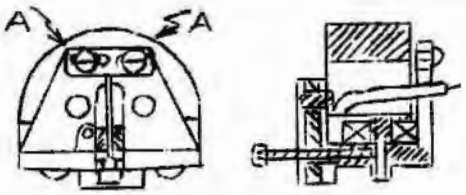
It is occasionally advantageous on the automotive receivers 8M3 and 8M4 to have the 22 mmfd. antenna shunt capacitor C-1 connected between the output end of the antenna filter coil L-1, instead of between the antenna end and chassis as shown in the Service Note schematic. Later production sets will incorporate this change. It is to be noted also on these same instruments, that secure electrical contact is required between the vibrator transformer and the chassis in order to minimize internal noise induction.

REPLACEMENT PICKUP MECHANISM - STOCK #31100

A service replacement pickup mechanism for the "midget" type tone arm can now be obtained by ordering Stock #31100 - Pickup Unit, less Tone Arm. This new unit is usable in the following instruments:

R-93	D7-7
R-93A	7-U
R-93-2	7U2
R-94	U-101
R-96	U-102E
	U-103

Stock #31100
List Price
$4.95



Details Of Pickup

Latest design features, including a simple and substantial centering adjustment, are incorporated in this unit. The cobalt magnet employed assures sufficient output (0.6 volts average) and correct impedance (1400 ohms) for all of the specified applications. To adjust, loosen the screws "A-A", move the needle so that the armature is centrally aligned between the pole pieces, and then re-tighten the screws. Check to see that the armature blade is not striking the coil form and that the centering spring is securely attached to the armature.

MODEL 8M1 - CONTROL HEAD NUT AND WASHER

It has been pointed out that on a number of instruments, the palnut and special washer for mounting the control head to the instrument panel is not included in the outfit package. The two parts may be promptly obtained, if found missing, by requesting same from our Service Parts Division.

VERTICAL MAST FOR MAGIC WAVE ANTENNA

The Premax Products, Division Chisholm - Ryder Company, Niagara Falls, N. Y., U.S.A. have available a telescoping tubular steel mast which adapts readily to Stock #9812 Magic Wave Antenna. This mast is similar to the vertical type illustrated in Figures 2 and 3 of the "Installation Instructions" for the RCA #9812 Antenna. The advantages of a vertical antenna pertain to space requirements, signal efficiency, limited length of ground lead, and unrestricted choice of location. A pamphlet describing the Premax VA-24 Vertical Antenna mast is attached hereto.

SERVICE NOTE CORRECTIONS

Model 95T - Resistor #13998 is specified in error as replacement for R-4 and R-6. Stock #12679 - Resistor of 2.2 megohms, 1/4 watt, List Price $0.20, is the correct part.

Models U-107 and U-109- Connector Stock #4577 listed under "Motor-Board Assemblies" should be changed to Stock #14211.

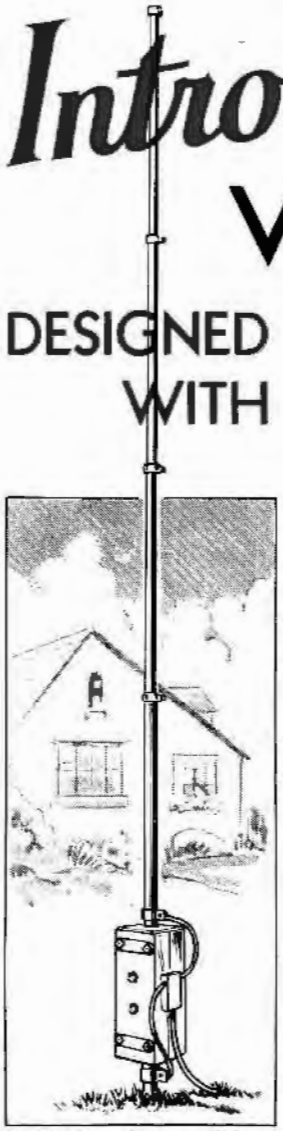
Model HF-1 - Stock #31434 "On-Off" Power Switch (S-3) should be added to the replacement parts list.

Service Division
RCA MANUFACTURING COMPANY, INC.

CAMDEN, N. J. U.S.A.

Introducing the PREMAX ALL STEEL VERTICAL ANTENNA

DESIGNED ESPECIALLY BY PREMAX FOR USE WITH RCA MAGIC WAVE ANTENNA



Sketch shows Premax All-Steel Vertical in position, 24 feet high

Easy to Erect in Small Space! No Overhead Wires! No Guy Wires! Stronger Signals! Less Noise! 6 Feet Collapsed—24 Feet Ready for Use!

The new Premax Tubular Steel Antenna represents the latest development in modern aerial design. Neat in appearance—no unsightly overhead, lead-in or guy wires—saving in space—easy to erect—efficient and long lived, it appeals at once to every radio owner to whom the antenna problem has been difficult and annoying.

Requiring only sufficient space in which to drive a single tubular post, it can be located practically anywhere, thus permitting the selection of a spot farthest removed from local noise sources and without in any way detracting from the appearance of house or grounds. When installed with underground lead-in, the only visible indication of the complete antenna is the tall, straight tubular steel mast, neatly finished and heavily cadmium plated for indefinite durability and efficiency.

The mast consists of four sections of smooth steel tubing, telescoping one within the other into a single six-foot unit for handling and shipping. When extended for use, the mast is 24 feet high, each section being locked in position by the unique Premax locking clamp.

The 24-foot mast which acts as the antenna is insulated from the ground by a heavy wood insulator unit, attractively finished, and which also serves to mount the mast securely on the five-foot steel ground post. The RCA Antenna Coupling Unit may be readily mounted on the side of the wood insulator unit, connections being made to mast and ground post, and the RCA lead-in cable carried under-ground (or overhead if desired) to the receiving set.

Complete set, as illustrated, consists of mast, ground post, insulator unit, ground clamp and full instructions for erecting, packed in individual shipping carton.

No. VA-24. PREMAX VERTICAL ANTENNA, weight each 20 lbs., List **$10.00**

FIVE SIMPLE OPERATIONS TO ERECT ANTENNA

1. Drive Ground Post, using block of wood to protect top.
2. Assemble wood insulator unit and place over top of post.
3. Set telescope mast in top socket of insulator unit and tighten all bolts.
4. Raise and lock one section at a time until the mast is fully extended.
5. Detail of Premax Positive Locking Device.
6. Mount RCA Antenna Coupling Unit on side of insulator unit and make all connections as shown in instructions accompanying Magic Wave Antenna.

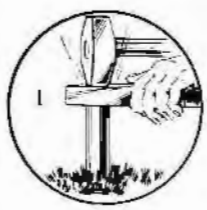


Fig. 1

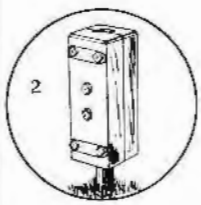


Fig. 2

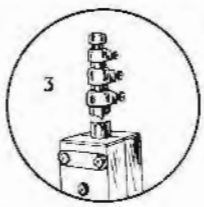


Fig. 3

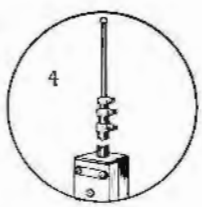


Fig. 4

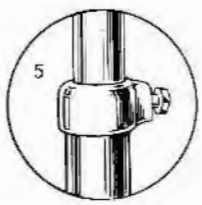


Fig. 5

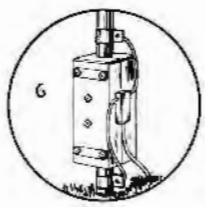


Fig. 6

PREMAX PRODUCTS, DIVISION CHISHOLM-RYDER CO., INC., Niagara Falls, N. Y.