Television
Service Tips

Volume XIX
Issue 1
March 15, 1968

Important Information for your Service Department

Prepared and Distributed by **RCA Sales Corporation, Product Performance**
600 N. Sherman Drive, Indianapolis, Indiana 46201

"Safety"-Back Retaining Nut
Models—AJ 095, 153, 157—Chassis KCS 158

SERVICE DATA
1967 NO. T14

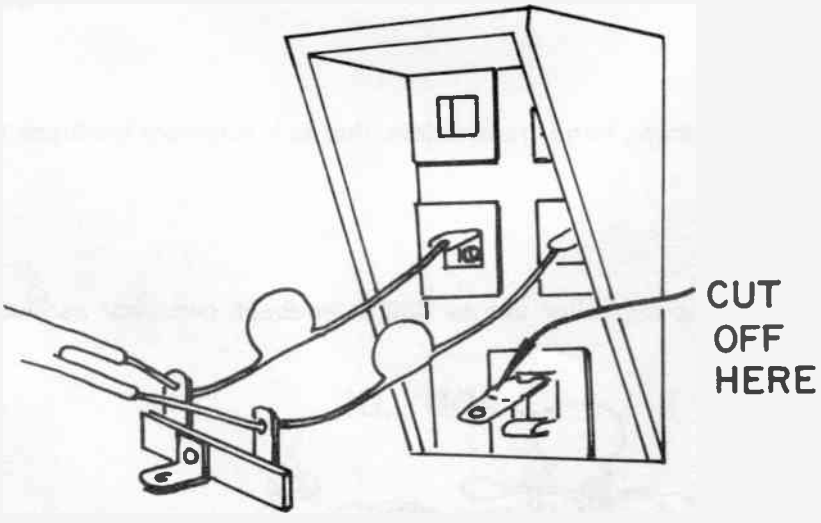
In instruments using the KCS 158 chassis, a metal screw is attached to a "tinnerman" nut on the antenna terminal board—used to help secure the rear cover. This "tinnerman" clip has a spade-type extension used in some instruments for antenna connections. However, in the KCS 158 instruments, the spade is **not** used.

Inasmuch as this spade is not used, it is recommended that when this chassis is serviced the spade be cut off. This would eliminate any possibility of a service man redressing the antenna capristor lead, and in doing so bring the lead in contact with the spade which would cause the rear mounting screw to become hot and create a possible shock hazard.

Manufacturing specification regarding the physical orientation of the capristor leads, with respect to the spade clip, provide sufficient clearance to avoid contact between the leads and the lug. However, a technician could exert some "extra" bending force to actually mis-dress and "short" the leads to the lug.

Current and future production instruments include a clip without this spade lug.

Please instruct service technicians in your area to CUT OFF THE EXCESS LUG ANYTIME THE KCS 158 CHASSIS SERIES is serviced, as illustrated below. The lead dress of the capristors should also be checked.



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Low or Intermittent Sound Output.
CTC 21, 25, 30

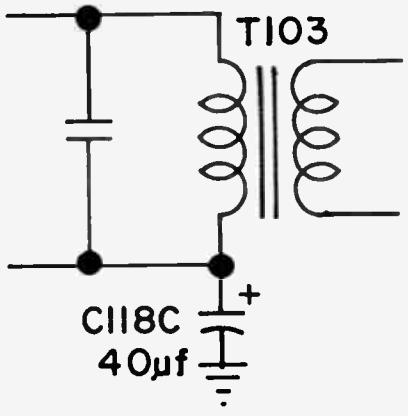
SERVICE DATA
1966 NO. T17
1966 NO. T20
1967 NO. T18

Some field reports indicate low or intermittent sound output may develop in the above listed chassis. Adjusting volume control up to "high" position **may** or **may not** cause normal operation to resume.

This condition may be caused by an intermittent open C206 (500 mfd. 15V) capacitor in the emitter circuit of the audio output transistor.

Some capacitors used in this circuit application have lead connections to the body of the capacitor which are "riveted." The open develops at the "rivet" connection causing low or intermittent sound. This capacitor should be **replaced, not repaired** and the replacement should be of a welded connection type. By ordering stock number 119608 you will get the correct capacitor.

In addition to above capacitor C118C across B+ to output transformer T103 should be examined for leakage or open condition. Replace with RCA stock number 119591 or equivalent.



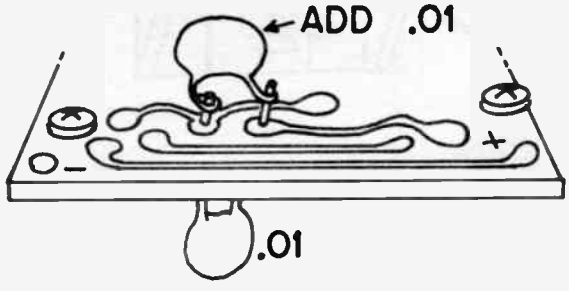
Intermittent Oscillator Operation
CRK 9, 10, 11 Hand Transmitter

SERVICE DATA
1967 NO. T3

Intermittent operation may occur in these hand transmitters, due to insufficient feedback in the base circuit of the oscillator.

To Correct:

Add an additional .01uf ceramic capacitor across C2001 feedback capacitor as illustrated.



RCA

Television Service Tips

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July 15, 1968

Important Information for your Service Department

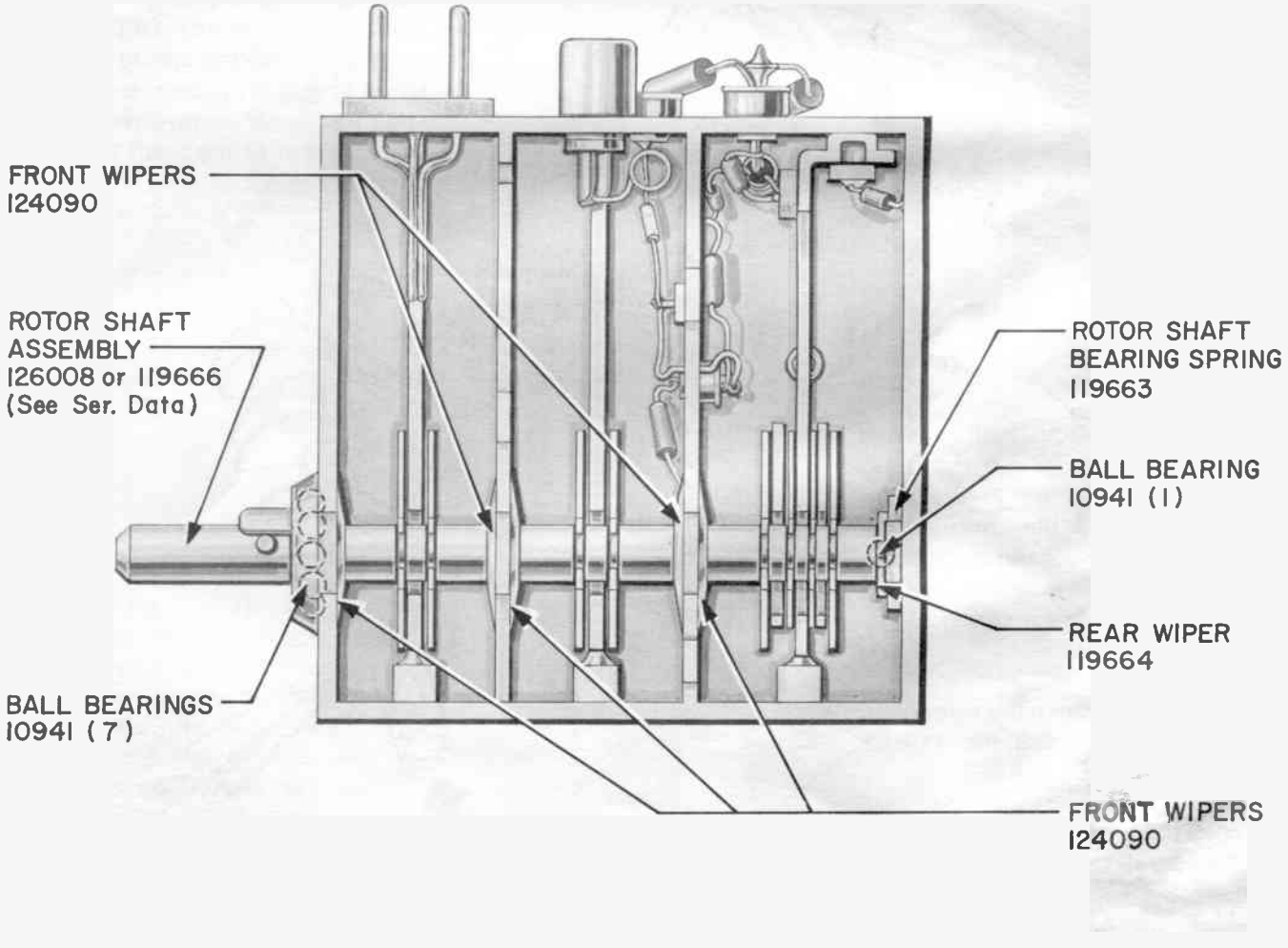
Prepared and Distributed by **RCA Sales Corporation, Product Performance**
600 N. Sherman Drive, Indianapolis, Indiana 46201

SUBJECT: UHF TUNER REPAIR

KRK 132 & KRK 138 Rotor Shaft Wiper & Rotor Bearing Spring Replacement

A noisy UHF tuner may indicate insufficient wiper tension on the rotor shaft. To correct this condition, the Rotor Bearing Spring and the Wipers should be replaced following the procedure outlined in this publication.

If the Rotor Shaft Assembly is to be replaced, the same procedure should be followed. In either case, discard and replace the wipers and the rotor bearing spring. The stock numbers for the wipers, rotor bearing spring, and associated parts are given in the illustration below.



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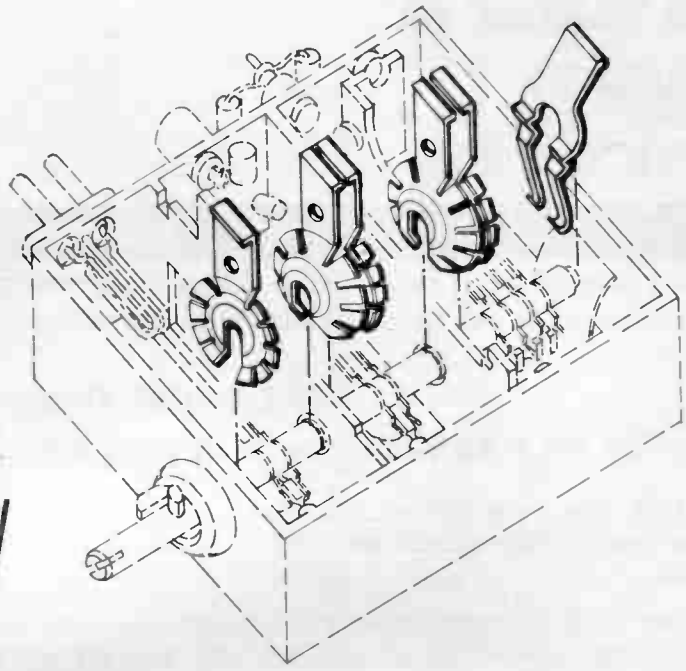
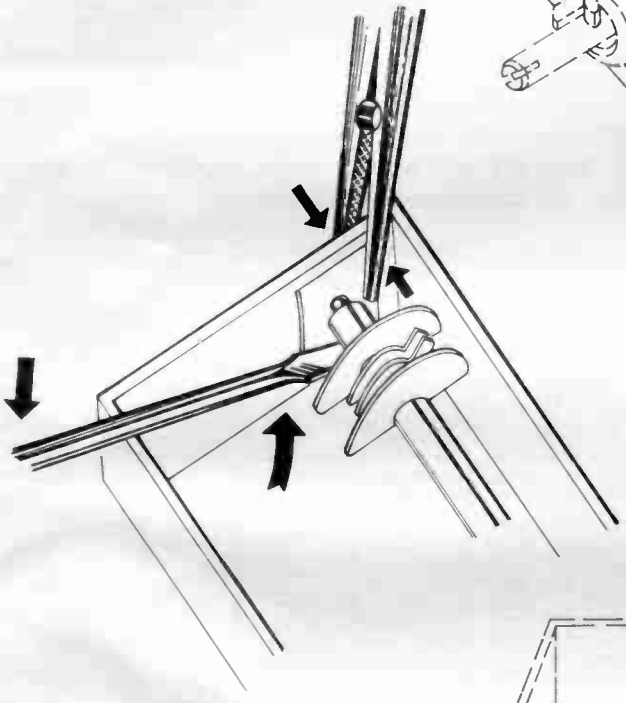
DISASSEMBLY

Step 1

After removal of the outer and inner tuner covers, clamp the tuner in a small vise (if available) to facilitate disassembly.

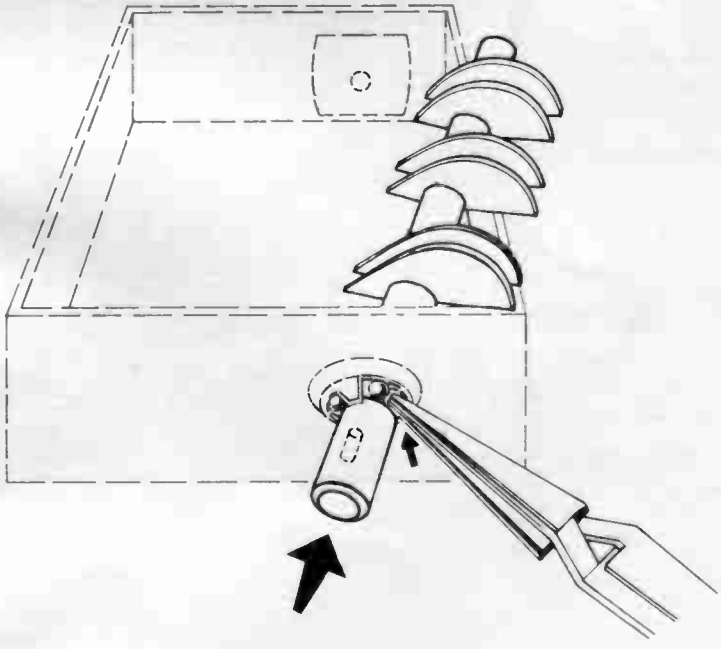
Remove and discard five wipers, stock no. 124090, and one wiper, stock no. 119664. Use a high output iron (up to 200 watts) and tweezers or needle nose pliers to unsolder and remove the wipers.





Step 2

Rotate the shaft fully clockwise (plates unmeshed). Depress the *rotor shaft bearing spring* with long pliers and apply pressure under the shaft with small screwdriver to force the rear end of the shaft out of the spring detent.



Step 3

Push the seven front ball bearings out of the ball race into the tuner case. Move the shaft to the rear, passing the stop pin through the ball race, and lift out the rotor shaft. Take care not to lose the bearing in the rear end of the shaft.

Step 4

Unsolder and remove the *rotor shaft bearing spring*, stock no. 119663.

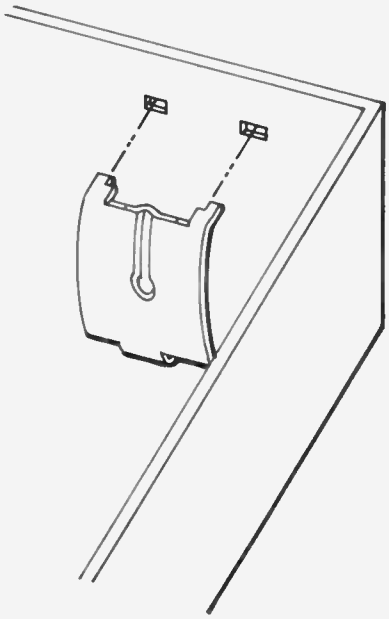
Step 5

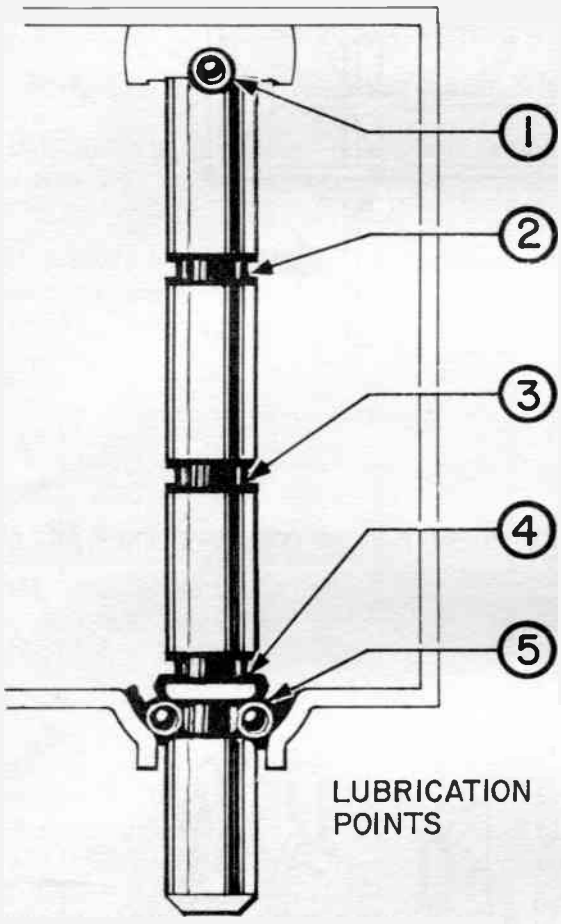
Remove old lubricant from the rotor shaft and ball race, taking care not to bend the rotor blades.

REASSEMBLY

Step 1

Install the new *rotor shaft bearing spring*. Locate the spring tab as far down in the slot as the upper locating holes will allow.





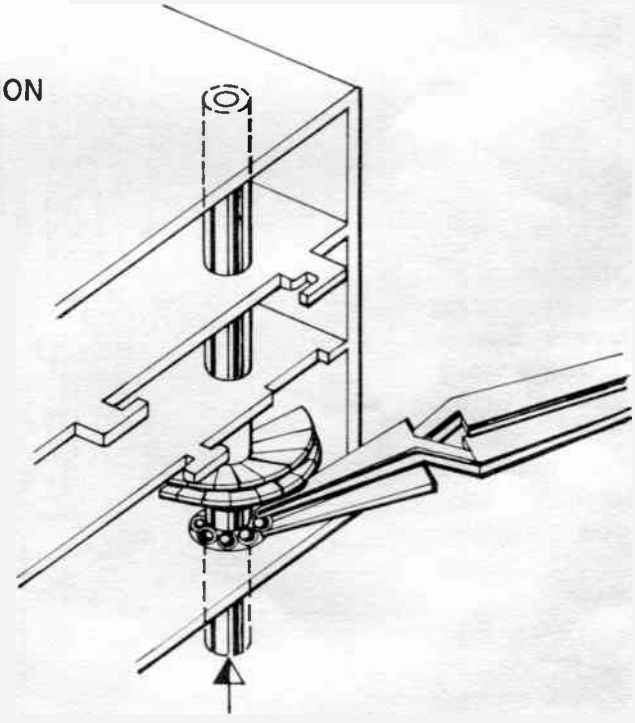
Step 2

Apply the approved lubricant liberally to the ball race.* The lubricant serves the added function of holding the ball bearings in place during reassembly.

*Use only Rykon EP2, stock No. 10R215, available at your RCA Distributor. Other lubricants are not recommended.

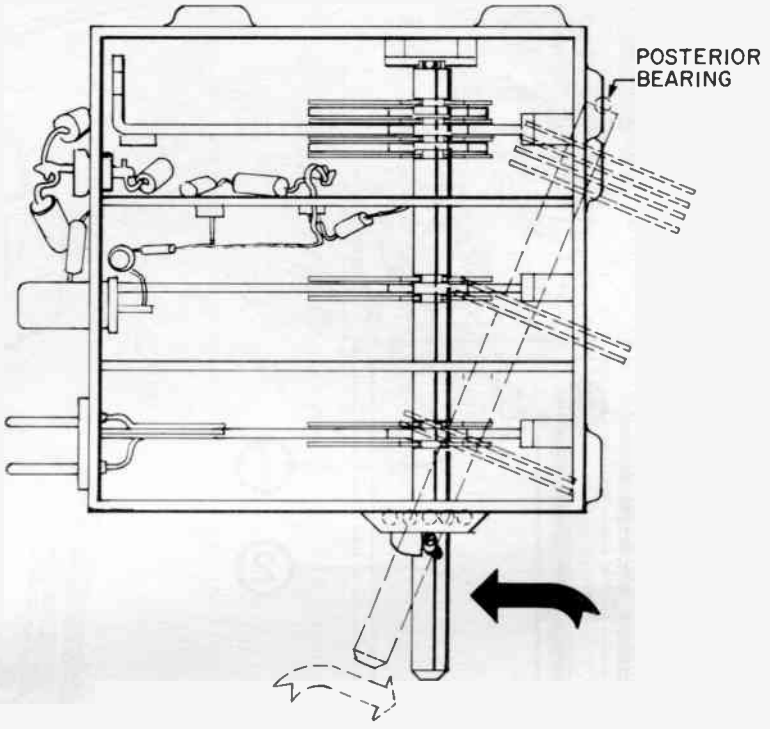
Step 3

Insert the rotor shaft, but do not replace the single bearing in the posterior end as yet. Locate the shaft to the center of the bearing spring. Hold the tuner with one hand so that the tuning shaft is down and insert the seven ball bearings in the ball race from inside the tuner.



Step 4

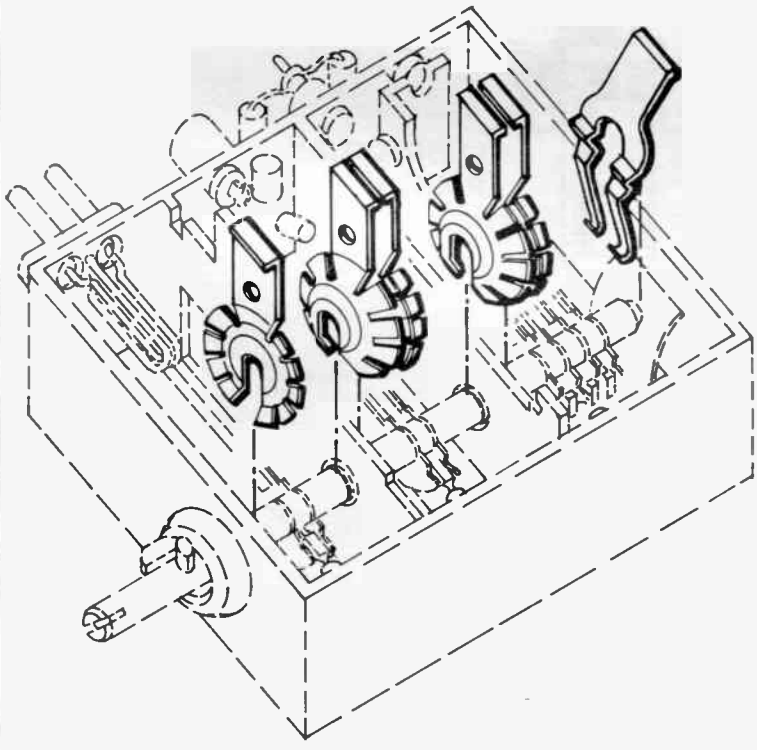
After the front bearings are seated, tilt the posterior end of the rotor shaft out and place the bearing in the lubricated well. This step must be accomplished with care so that none of the seven anterior bearings fall out of the ball race.



Step 5 Rotate the shaft fully clockwise and apply pressure at the rear, snapping it into place.

Step 6

Lubricate* the shaft at all wiper grooves and install the new wipers. Solder each into place. Rotate the shaft several times through its range to insure that all parts are properly seated. The reassembly is now complete.



RCA

Television Service Tips

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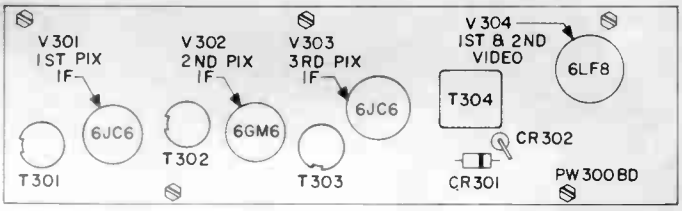
Important Information for your Service Department

Prepared and Distributed by **RCA Sales Corporation, Product Performance**
600 N. Sherman Drive, Indianapolis, Indiana 46201

CTC 28, 30
Chassis Layout

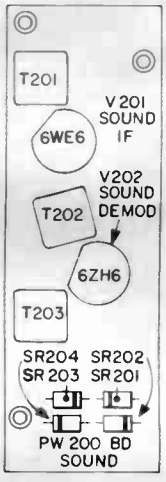
Service Data
1967 No. T16
1967 No. T18

In the chassis layout of Service Data 1967 No. T16 and 1967 No. T18, the top view illustration on top of page 8 of both data, PW 300 Pix-Video board should be as shown in the illustration at the right.



CTC 28
Chassis Layout

In 1967 No. T16 only, the PW 200 Sound Board should be as shown in the illustration to the right.



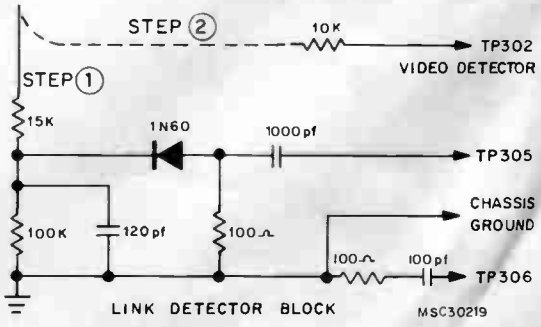
CTC 40
Sound Detector Block

Service Data
1968 No. T2
1968 No. T20

The Sound Detector Block Leads should be reversed on Page 27 in 1968 No. T2 and on Page 13 in 1968 No. T20.

CTC 40
Link Detector Block

At the bottom of Page 22 of 1968 No. T2 and Page 8 of 1968 No. T20 the Link Detector Block should have a 100 ohm resistor and a 100 pf capacitor between TP306 and ground. The Link Detector Block should be as shown to the right.



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