MODEL TRK-5, CHASSIS KC-3A

RADIO CORP. OF AMERICA

MODEL TT-5, CHASSIS KC-3

Operation Model TRK-5

The power-volume control on the broadcast radio receiver The power-volume control on the broadcast radio receiver turns on the power for the complete receiver. Pushing the button marked "Television" on the push button panel turns on the Television receiver, if the above power control is "On." The volume control of the broadcast receiver also controls the Television sound volume level.

Station Selector and Fine Tuning.—The outer ring "O" section of the central dual control knob on the Television panel selects the station from which it is desired to receive television transmission.

television transmission.

Five television channels are covered as follows:

- (1) 84 to 90 M.C.
- (2) 78 to 84 M.C. (3) 66 to 72 M.C.

- (4) 50 to 56 M.C. (5) 44 to 50 M.C.

Set the station selector to the number corresponding to the frequency of the station from which it is desired to receive Television Broadcasts.

The inner section "I" of this knob is used for fine tuning and may eliminate moving ripples or distortion if due to interfering radio signals. A slight inward pressure must be exerted on the knob while turning.

Before the Television portion of the receiver is turned "ON" it is advisable to turn the Brightness and Contrast

controls completely counter-clockwise to reduce the illumination of the spot which appears on the Kinescope before the

contrast and Brightness Controls.—The inner "I" section of the "Contrast" Brightness" controls is the "Contrast" control and varies the black and white tones of the picture being received. Too little contrast makes the picture all half-tones or grays. Turning clockwise increases contrast from grays, to black and white.

The outer ring "O" is the Brightness Control and affects the average illumination of the picture. Turning clockwise increases the brightness.

Hold Controls.—The dual knobs on the Television panel marked "Horizontal" and "Vertical" Hold, control the picture stability. The inner section designated by a "I" is the Horizontal Hold Control and when being set should be turned slowly to the point at which the picture "locks in"

The outer ring section designated by "O" is the Vertical Hold Control and when being set should be surned to the point where the picture "locks in" vertically.

These two controls on this dual knob should not ordinarily require readjustment after good picture reception has once been obtained. An accasional resetting may be necessary due to changing to a different station, and to the gradual

ageing of the tubes.

Focus Control.—This control is located on the rear of the Video chassis, and controls the electron beam focus of the Kinescope. Ordinarily, after once being focused the Kinescope should not require re-focusing for a considerable length of time.

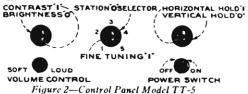




Figure 1-Control Panel Model TRK-5

Operation Model TT-5

The operation of Model TT-5 is the same as that for the Model TRK-5 except that there is a separate "ON-OFF" switch, and a separate sound volume control because the broadcast radio receiver is not included in this model. When Model TT-5 is connected to a broadcast receiver for the Television sound reproduction, the broadcast receiver volume control should be turned to maximum and the Television sound volume control with the transfer of the tr sound volume controlled with the control on the Television Receiver.



SERVICE DATA

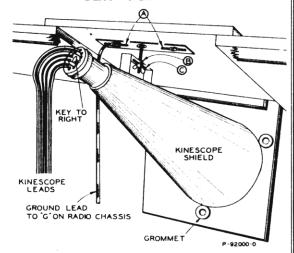


Figure 3-Kinescope Installation

Kinescope Installation Models TRK-5, TT-5: Refer to figure 3.

1. Remove back cover from cabinet.

2. Remove Kinescope mounting shield from shipping carton.

Using gloves and goggles remove Kinescope from shipping carton and place in the cone-shaped mount-

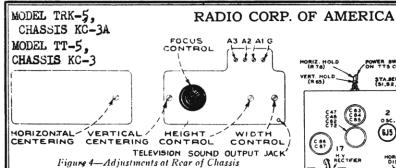
ing shield. ing shield. Guide the Kinescope and mounting shield carefully into the cabinet, placing the Kinescope firmly up against the mask and viewing window. Fasten the mounting shield firmly in place with the thumb screw provided, so that it holds the Kinescope firmly against the mask. If the Kinescope does not line up properly with the mask, loosen the screws "A" and nut "B" and adjust in the direction desired. After the receiver is operating, the Kinescope may be rotated to properly square up the picture with the mask.

mask.

CAUTION: When rotating tube the power should be turned "OFF."

Adjustments.—There are a series of screwdriver slot adjustments at the rear of the Video chassis used to obtain the proper picture size and centering. These adjustments are explained fully in the receiver operating instructions.

When the receiver is moved from one location to another, some readjustment of these controls may be necessary.



Video Chassis KC-3 (TT-5) KC-3A (TRK-5)

No attempt should ever be made to measure the high (2,000 volts) voltage, because of the dangers and difficulties involved. If at any time it becomes necessary to service the high voltage circuit, the suspected parts should be replaced by parts known to be in good operating condition. Always replace the red can over the 879 high voltage

The most dangerous portion of the receiver is the plate (top cap) lead for the 879 high voltage rectifier. Always be very careful when working near or with this lead.

When working on the high voltage supply portion of this

chassis, the following precautions should be observed:

1. Remove power supply cord from the power supply

socket.

Use only one hand at a time. Connect a shorting lead between ground (firstly) and

to the high voltage side.

Whenever working with the oil-filled high voltage filter capacitors, keep a constant short across the capacitor, as these capacitors do not completely lose their charge after being discharged a single or several subsequent times.

Only one person at a time should work on the unit to prevent any misunderstanding which may result in an accident.

When any changes are made on the Video portion of the chassis, the locations of leads and parts should be returned as closely as possible to their original positions.

Service Hints: ·

1. In some cases the horizontal sweep oscillator circuit will radiate energy to nearby broadcast receiving antennas and lead-ins, causing interference with standard broadcast receivers. It has been found that this trouble has been cleared up in some cases by use of an RCA "Magic Wave" antenna

up in some cases by use of an RUA "Magic Wave" antenna for the broadcast receiver receiving the interference.

2. If the picture "tears out" when the receiver is jarred it may be due to microphonic 1852, 1853, or 6J5 tubes.

3. The 6J5 oscillator tube should be removed without rocking it in its socket to loosen it, as the motion may cause the 80.5 mmf capacitor Cl6 to break off.

4. The coils or straps in the h f oscillator circuits should

4. The coils or straps in the h.f. oscillator circuits should not be touched or moved or the alignment of the receiver will be disturbed.

5. The two Video coupling capacitors C44, 45, should be

kept clear of chassis.

6. In some cases the metal Kinescope mounting shield may become magnetized by the earth's or some nearby magnetic field, and thus distort the picture on the screen towards the magnetized portion of the shield. The shield can be demagnetized by passing it slowly through a solenoid which is energized by an a-c current. Antenna

The finest television receiver built may be said to be only as good-as the antenna design and installation. It is therefore important to use a correctly designed antenna, and use care in its installation.

The RCA Double Dipole Antenna, Stock No. 9871, is recommended for use with these receivers. Both this antenna and the "V" antenna described below are especially designed for a sufficient broad frequency response to cover the contemplated television spectrum with good efficiency and are therefore superior to a single Dipole type antenna.

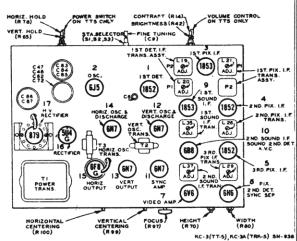


Figure 5-Top View Television Chassis

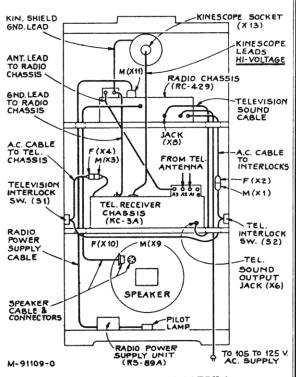
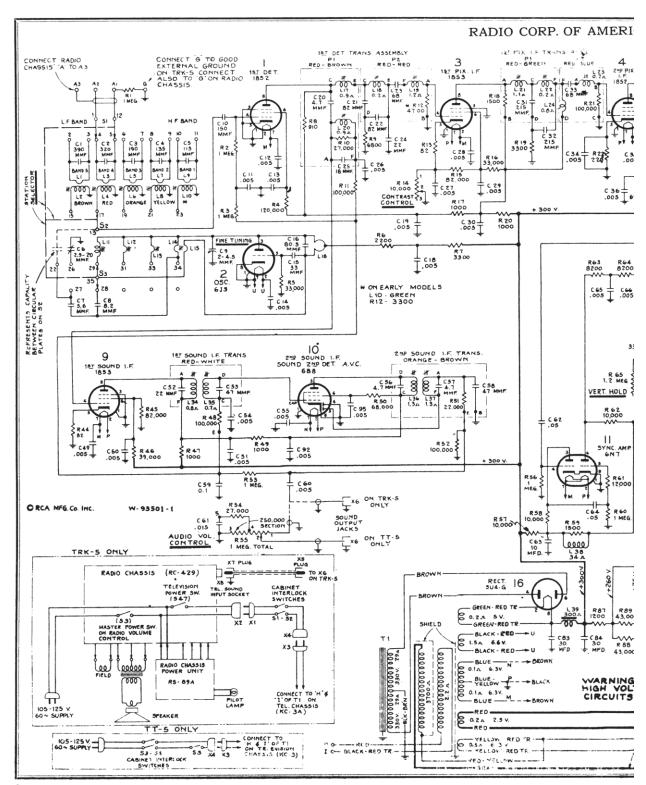


Figure 6—Rear l'iew Model TRK-5

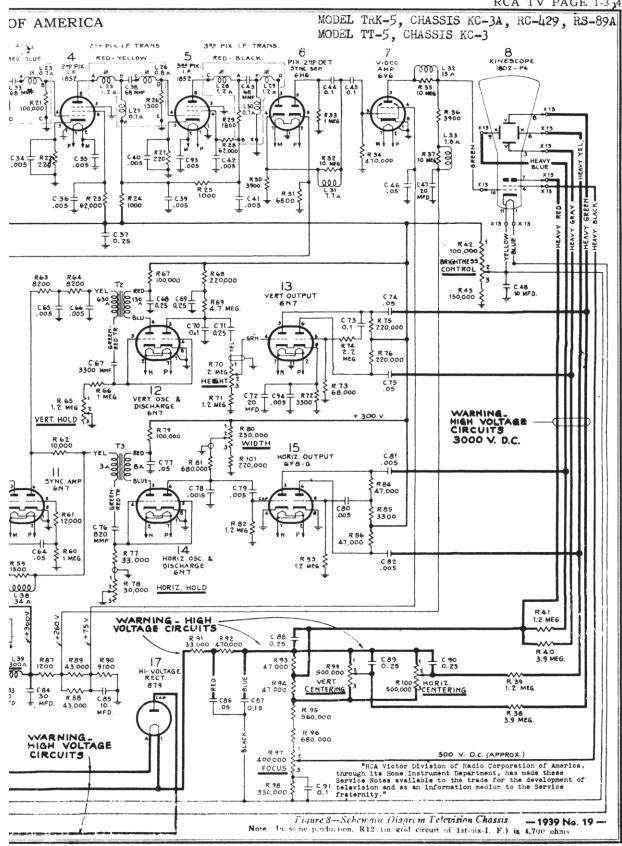
When greater signal pickup, or where a shielding effect from noise pickup or image reflections are desired, a reflector assembly Stock No. 9872 may be added to the Stock No.

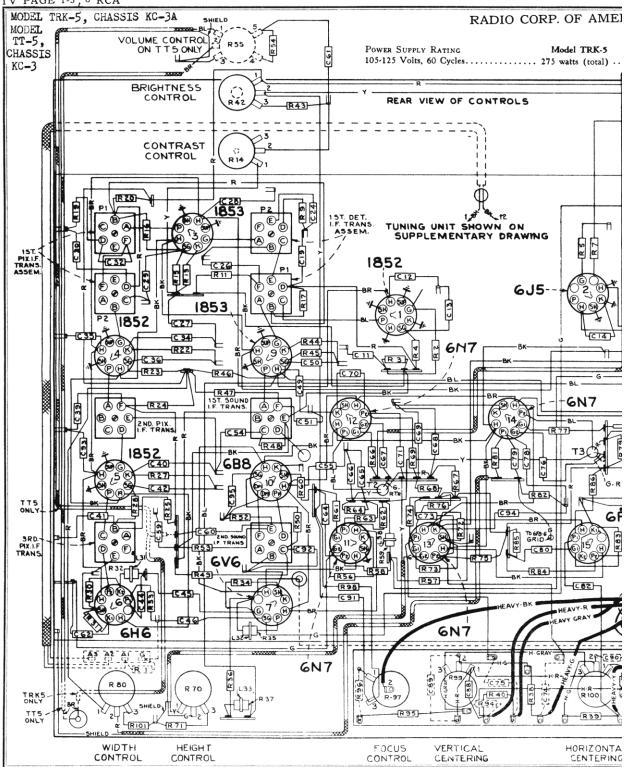
assembly Stock No. 9872 may be added to the Stock No. 9871 Antenna to obtain an improved signal-to-noise ratio.

The RCA Double "V" Wire type Television Antenna is alternative type of antenna designed for television sight and sound reception. Two points of support are necessary. It serves adequately in suburban areas but may not be sufficiently flexible and efficient for congested city areas where bad reflections and interference are encountered.

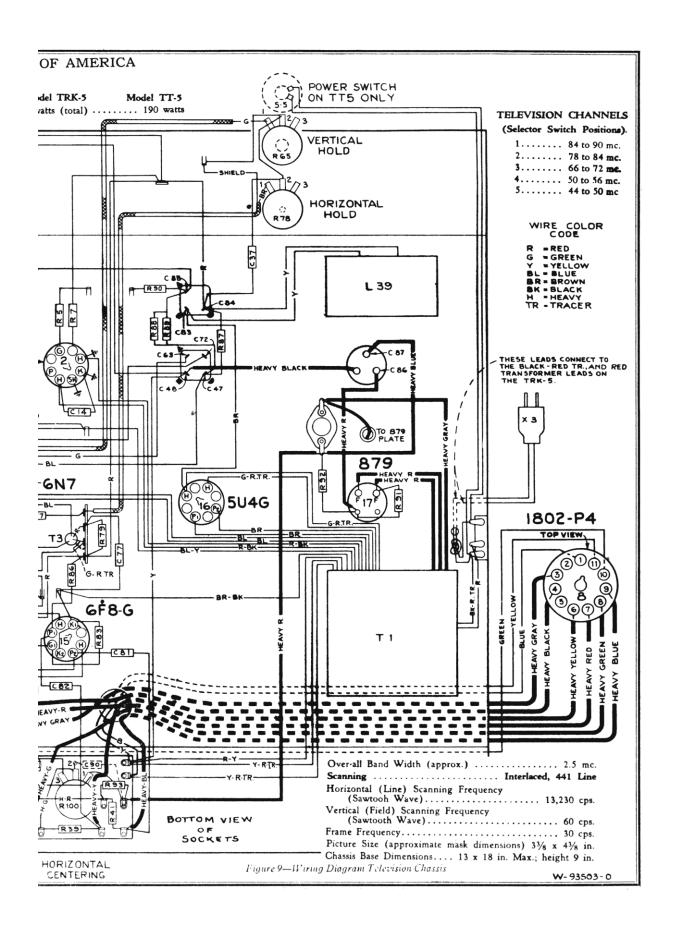


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RADIO CORP. OF AMERICA

Antenna Installation:

MODEL TRK-5, CHASSIS KC-3A MODEL TT-5, CHASSIS KC-3

In most cases, the antenna should not be installed permanently on the apartment or residence roof until the quality of the picture reception has been observed on a Television Receiver. A temporary transmission line can be run between receiver and the antenna allowing sufficient slack to permit moving the antenna. Then, with a telephone system connecting an observer at the receiver and an assistant on the roof to find an antenna location, the antenna can be positioned to give the most satisfactory results on the received signal. A shift of only a few feet in antenna position or direction may effect a tremendous difference in picture reception. Whenever possible, the antenna location should be chosen or erected so the antenna is not only proadside to the transmitter but removed as far as possible from highways, hospitals and doctors' offices, and similar sources of interference. Auto ignition and diathermy apparatus may cause noise interference which spoils the picture.

In mounting any antenna, care must be taken to keep the antenna rods or pickup wires proper at least 1/4 wave length (at least 6 feet) away from other antennas, metal roofs and gutters or metal objects.

Under certain extremely unusual conditions, it may be possible to rotate or position the antenna so it receives the

cleanest picture over a reflected path. If such is the case, the antenna should be so positioned. However, such a position may give variable results as the nature of reflecting surfaces may vary with weather conditions, as a wet surface has been known to have different reflecting characteristics than a dry surface.

In short, a television receiving antenna and its installation must conform to much higher standards than an antenna for reception of International Short Wave and Standard Broadcast signals because:

(1) Intervening obstacles have a pronounced shielding effect on the ultra-high frequency waves producing low intensity signals. Severe trouble with multi-path transmissions may be experienced, especially in congested city areas.

(2) The picture signal is comprised of a very wide band or range of frequencies, all of which must be received with good efficiency.

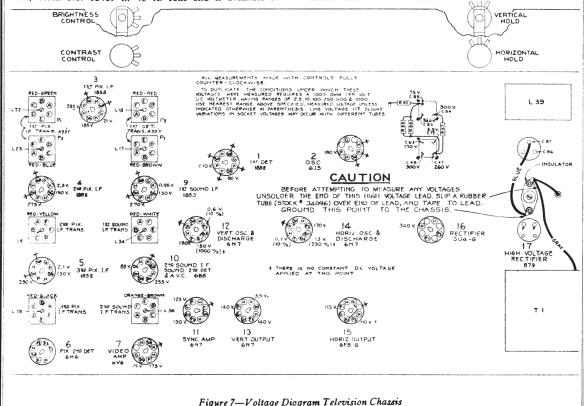
(3) It must be continually remembered that the discernment of the eye is much more critical than that of the ear.

The Transmission Line

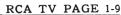
RCA Victor has made available two types of exterior transmission lines. One is a special low loss weather-proofed line having the correct surge impedance to match the RCA Victor Television antennas and the RCA Victor Television receivers. It is carried as Stock No. 9882 in 1,000 foot rolls. The second type is a standard weather-proofed line also having the correct surge impedance for proper antenna and receiver matching. It is carried as Stock No. 12430 in 90 ft. rolls, Stock No. 12429 in 40 ft. rolls and is available in

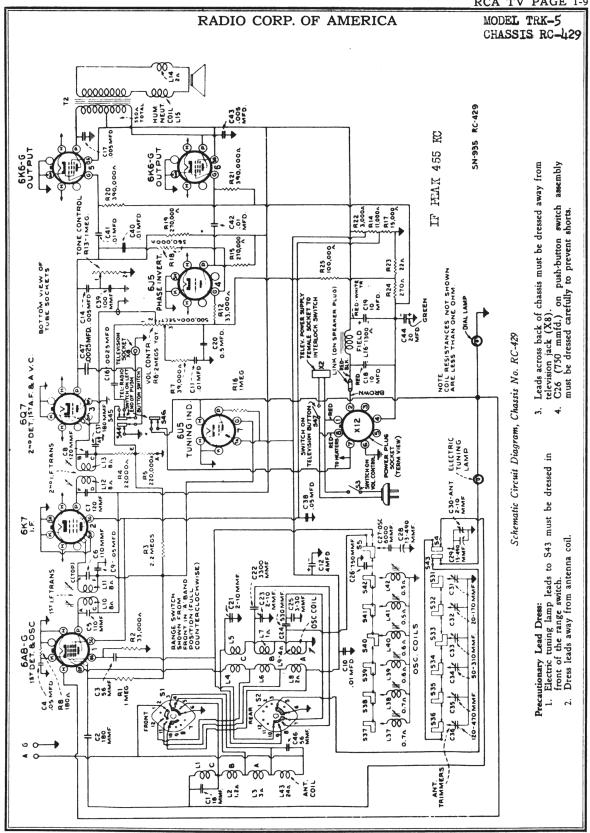
1,000 ft. spools as Stock No. 9881. Use of improper lines may result in excessive loss or may lead to line reflections, resulting in multiple images or "ghosts," thus marring the reception.

For transmission line runs up to 200 feet, and where the signal strength on the antenna is relatively high, the Stock No. 12430, or Stock No. 12429 transmission line may be used. For all other applications the Stock No. 9882 transmission line is recommended.



TV PAGE 1-8 RCA														
MODEL TRK-5, RADIO CORP. C	OF AMERICA													
Electrical Sp	ecifications													
FREQUENCY RANGES Standard Broadcast ("A" band)540-1720 kc	Medium Wave ("B" band)													
Intermediate Frequency														
TUBE COMPLEMENT														
(1) RCA-6A8-G. 1st-Det., and Osc. (2) RCA-6K7 I-F Amplifier (3) RCA-6Q7 2nd-Det., A.V.C., 1st Audio (4) RCA-6J5 Phase Inverter	(5) RCA-6K6-G Power Output (6) RCA-6K6-G Power Output (7) RCA-6U5 "Magic Eye" (8) RCA-5Y3-G (in SPU RS-89A) Full-Wave Rectifier													
Dial Lamps														
Power Supply Rating														
Power Output	LOUDSPEAKER (RL-70H-5)													
Undistorted	Type													
ELECTRIC TUNING RANGES Two stations between approximately 550-950 kc	Two stations between approximately 690-1,225 kc Two stations between approximately 890-1,500 kc													
Mechanical S	pecifications													
RC-429 CHASSIS BASE DIMENSIONS:	Depth 6-1/2 inches													
Height 2-1/2 inches Width 13 inches	Over-all Chassis Height 6-1/2 inches Tuning Drive Ratio 12 to 1													
General D	escription													
Radio receiver chassis No. RC-429 is used in RCA Victor Television console Model TRK-5.	MAGIC COLLECTRIC													
The audio output of the television chassis is connected to	EYE													
the audio input of the RC-429 chassis by means of jack X-8	POWER- TUNING'O'													
and the left hand push button switch (S44, S45, S46). A separate plug-in power supply unit, RS-89A, is used to	TONE I DESCRIPTION													
supply heater and plate voltage to the RC-427 chassis.	VOLUME 0 1 2 3 4 5 6 - RANGE I													
Service data and diagrams for the power unit are contained in the following pages.	Location of Controls (Radio)													
	(Addition by Company)													
180 170 160 150 140 130 120 110 100 90	80 70 60 50 40 30 20 10 0													
ետեսվունականականականականականականականակ														
27663														
	TOKYO - PITTSURGH LONDON - SCHEN'T BERLIN - LONDON MELIN - PITTS'OH													
WAVE 40M NO - BRILIN - MAD 31 M HUZEM	N - ROME - PARIS BERUN - PITTSFOR N YORK - PARIS LONDON - N YORK 25M PRAGUL AMITR 19M PARIS 16M HUZEN 13M SOMENY													
7 8 9 10	12 14 16 18 20 22 MC													
	BROADCAST													
A 550 600 700 800	1000 1200 1400 1700 xc A													
2.0 2.2 2.5 3.0	4.0 5.0 6.0 Mc													
MEDIUM 120M AIRCRAFT 100 HODE HODE MODAL	M AM'TE HARA- AOM AIRCRAFT ASM CINCINNATI - TORONTO													
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180 170 160 150 140 130 120 110 100 90	0 80 70 60 50 40 30 20 10 0													
Reduced Reproduction of Receiver Dial, and	_													
The corresponding position of the dial indicator for any sett line from this point on the bottom calibration scale to the same	ing of the calibration scale can be determined by drawing a spoint on the top calibration scale. For example, 28° on the													
calibration scale corresponds to 1,500 kc on "A" band. Read														





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MODEL TRK-5. CHASSIS RC-429

RADIO CORP. OF AMERICA

Alignment Procedure (RADIO CHASSIS)

Cathode-Ray Alignment is the preferable method. Connections for the oscillograph are shown in the chassis drawing.

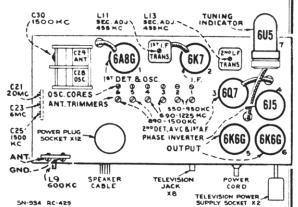
Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator .- For all alignment operations, connect the low side of the test-oscillator to the receiver ground terminal (G), and keep the output as low as possible to avoid a v-c

Calibration Scale on Indicator-Drive-Cord Drum.—The tuning dial if fastened in the cabinet and cannot be used for reference during alignment; therefore, a calibration scale is attached to the rear of the drum which is mounted on the front shaft of the gang condenser. The setting of the gang condenser is read on this scale, which is calibrated in degrees. The correct setting of the gang in degrees, for each alignment frequency, is given in the alignment table.

As the first step in ref alignment, check the position of the drum. The 180° mark on the drum scale must be vertical, and directly over the center of the gang-condenser shaft when the plates are fully meshed. The distance from the front of the chassis to the drum must not exceed \(\frac{3}{8} \) inch. The drum is held to the shaft by means of two set screws, which must be tightened securely when the drum is in the correct position

Pointer for Calibration Scale .- Improvise a pointer for the calibration scale by fastening a piece of wire to the gang-



condenser frame, and bend the wire so that it points to the "180°" mark on the calibration scale when the plates are fully meshed.

Dial-Indicator Adjustment.—After fastening the chassis in the cabinet, attach the dial indicator to the drive cable with indicator at the 530 kc mark, and gang condenser fully meshed. The indicator has a spring clip for attachment to

the cable.

For additional details, refer to booklet "RCA Victor Receiver Alignment."

Step	Connect the high side of test-osc. to-	Tune test- osc. to—	Turn radio dial to—	Adjust the following for max. peak output—				
1	6K7 I-F grid cap, in series with .01 mfd.	455 kc	"A" band, Quiet Point	L12 and L13 (2nd I-F Trans.)				
2	6A8-G 1st-Det. grid cap, in series with .01 mfd.	456 KC	between 550-750 kc	L10 and L11 (1st I-F Trans.)				
3	Antenna terminal, in series with	600 kc	600 kc 150.5°	L9 (osc.)				
4	200 mmfd.	1,500 kc	1,500 kc 28°	C25 (osc.) C30 (ant.)				
5	Repeat steps 3 and 4.							
6	Antenna terminal, in series with	6 mc	6 mc 26.5°	C23 (osc.)*				
7	300 ohms	20 mc	20 mc 20 mc 22°					
8	Follow "Adjustments for E	lectric Tuning."						

* Use minimum capacity peak if two peaks can be obtained, and check for image by tuning radio approximately 910 kc lower. Note: The oscillator tracks above the signal on all bands.

Adjustments for Electric Tuning

These models have eight push buttons. The left-hand button is a Television switch. The right-hand button connects the gang condenser for manual tuning. The other six buttons are for electric tuning of six different stations in the standard-broadcast range. The station buttons connect to separate magnetite-core oscillator coils and separate antenna trimmers which must be adjusted for the desired stations. Use an invalidation of the standard stations. Use an invalidation of the standard stations. insulated screwdriver or alignment tool such as RCA Stock No. 31031. Allow at least five minutes warm-up period before making adjustments.

The procedure is as follows:

1. Make a list of the desired six stations, arranged in order from low to high frequencies.

2. Push in the dial-tuning button, and manually tune in

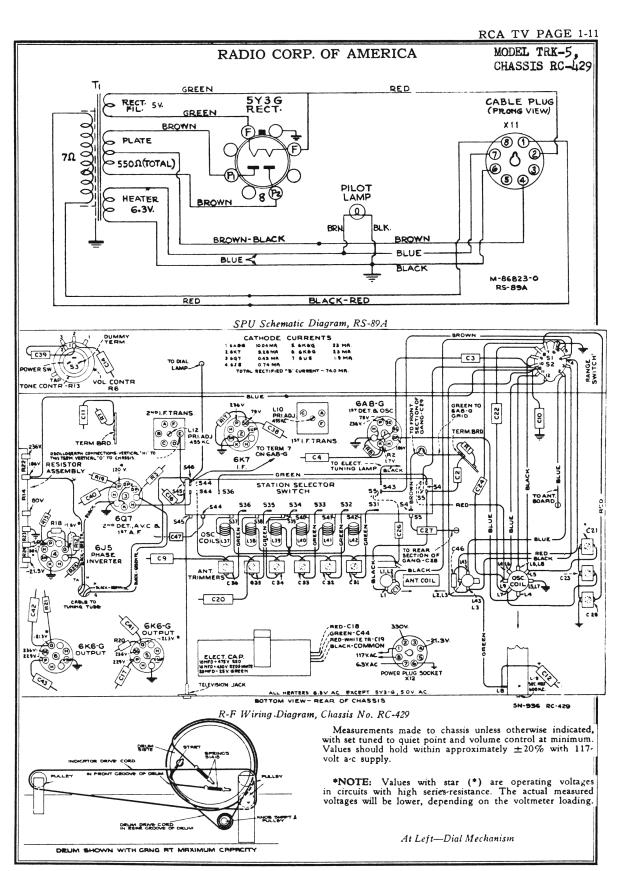
the first station on the list.

3. Push in station button No. 1 (second from left) and adjust No. 1 oscillator core (L37) to receive this station. Screw the core all the way in, to lowest frequency, and then unscrew slowly until station is received.

Adjust No. 1 antenna trimmer (C36) for maximum output on this station.

Clockwise adjustment of cores and trimmers tunes the circuits to lower frequencies.

- Adjust for each of the remaining five stations in the same manner.
- Make a final careful adjustment of the oscillator cores and antenna trimmers. Use the "Magic Eye" to ensure sharp peaking.



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DESCRIPTION		Socket—Dial samp socket, one wire issuance. Socket—Dial lamp socket, two wire insulated. Socket—Magic eye socket	Socket—Octal type tube socket Spring—Indicates or drive cond tenselen apring. Switch—Wanne number (\$1.82)	Switch—Station selector pumb beatton switch (S31, S32, S32, S34, S36, S36, S36, S36,	when med, well, welk, well, we, we, we, we, we, we, we, we, we, we	(B47) Transformer—1st I. F. transformer complete	Transformer—Red I. F. transformer complete	POWER SUPPLY UNIT	USED WITH RC-429	Plug-8 proag plug for power supply cable	Socket—Octal base tube socket Transformer—Power transformer (T1)	SPEAKER ASSEMBLIES	RL-70—H-5	Cap—Speaker cone dust cap.	Cono-Speaker cone and voice cell (L14). Plug-5 prong made speaker plug with link	Speaker—Speaker complete Transformer—Output transformer (T2)	MISCELLANEOUS ASSEMBLIES	MODEL TRA-5	Button—Station selector push butten (Medel TRK.5 oaty) (Cap—Pilot lamp 'Bull's sye" (Medel TRK-6	only) Cable—38-inch shielded cable with two male plurs. Used between Radio and television	chasets (Model TRK-5 only) (X6, X7) Cable—Blanch audio connection cable with two male connectes (Model TT-X only) (X8, X7)	Connector—2 prong female plug for interlock cable (X2)	television power cable (X4) Cever-Package of eight protective push button	Dial-3-band glass dial scale Escutcheon-Dial escutcheon and scale (Model	Glass—Safety protective glass for kinescope Knob—Band switch knob (Model TRK-5 only)	Knob-Brightness, 'Vert. hold" er 'volume' knob Knob-Centragt', 'Hor hold', 'Fine tuning'	or "Tone centrol" knob. Knob'Off-on" centrol knob (Model TT-5 saly) KnobRado tuning knob (Model TREs. saly)	Knob-"Station selector" control knob (white dot)	Lamp-6.3 volt, Pilot indicator lamp (Mazda	Marker Dial tuning marker tab (Model TRK-5 only) Marker Television marker tab (Model TRK-5	only) Marker-Complete set of station call letter	markers (TRK-5 only) Nut	Flug-2 prong male connector used on television power cable (X3)	Cable (X1) Plug—5 prong female connector used on interface cable (X1) Plug—6 prong female speaker connector plug	CModel TRK-5 enly) Screwkabout in chassis mounting screw, washer and lock washer (5 red.)	Screw - 4 20 x 1 to bassis mounting screw, washer and lock washer (6 req d)	Spring.—Knob apring for stock No. 33468, 33471, 33472 and 33469 knobs	Spring Knob spring for stock No. 33470 knob Spring Knob spring for stock No. 33505 knob Switch Interlock switch and cover (S1, S2,
STOCK		31384	31251	33498	33499	14376	14883			33606	33224			111823	31275	32148			33597	33480	33479	33363	31466	32673	33518	33471	33469	33472	11881	33596	31589	33225	4577	12483	11210	4560	14276	4982
DESCRIPTION	B. 1 B. 1	Transformer—126 pix rs 1-r transformer (L23, L24, C33, R21) (red and blue) Transformer—126 Sound" I.F transformer (L34, L35, C62, C53) (red and white).	Transformer	Transformer"2nd Sound" I-P transformer (L36, L37, C56, C57, R51) (brown and	orange, Transformer—"3rd Figure" I.F transformer (L2s. L39, L30, C43, E29) (red and black)	Transfermer Horisontal escillation transformer (T3)	former (Til) former (Til) former (Til)	(72)	3 BAND RADIO RECEIVER No. RC-429 Used with Model TRK-5	Board-Antenna-Ground terminal board	Capacitor—Antenas coll trimmer capacitor bank (C31, C32, C33, C34, C36, C36)	Capacitor Triple adjustable trimmer, two sections, 2-10 mm/d., one section 3-30 mm/d.	C(CZ1, CZ3, CZ6) Capacitor—18 m.mfd (C1) Capacitor—6 m.mfd (C3, C48)	Capacitor—100 mmfd. (C39)	Capacitor—180 mmfd. (C37) Capacitor—200 mmfd. (C27)	Capaciter—530 mmfd. (C24)	Capacitor—6.000 mmid. (C27) Capacitor—6.026 mfd. 700 volt (C18, C47)	Capacitor—.005 mid., 1,000 voit (C.1., C.17, C.43) Capacitor—.01 mid., 300 voit (C.11)	Capacitor05 mid., 200 voit (C4, C9, C3E) Capacitor01 mid., 500 voit (C10, C40, C41, C42)	Capacitor—0.5 mfd., 200 volt (C20) Capacitor—4 mfd., 450 volt (C12) Capacitor—10-10-20 mfd. (C18, C19, C44)	ColPush button coil and core mounting clip. [Col Artenna coil assembly A, B, and C band [71] 12 12 14 143)	Col.—Push button oscillater coil, "A" band (Ls7, Ls8) (650-950KC)	(L39, L40) (690-1225 KC) Coll—Purb button oscillator coll, "A" band	Coil-Oscillator coil assembly for A, B, and C bands (L4, L5, L6, L7, L8, L9)	(C28, C29, C30) Control—Dual volume and tone control and	switch (R6, R13, S3) Cord—Drive cord with clamping clips Core—Adjustable core and stud for oscillator coil	Drum—Variable condenser drive cord drum and calibration dial Lamp (Marda No. 44)	Plute—Dial plate assembly Plug—Pennals speed cable plug (X10)	Pulley-Pointer drive cord pulley Receptacle-Television sound input socket (X8)	Resistor—Vottage under comprising one 11,000 ohm, one 2,000 ohm, one 22 ohm and one 270 ohm section (R14, R22, R23, R24).	Resistor—180 ohms, j watt (R8) Resistor—15,000 ohms, 1 watt (R17)	Resistor—22,000 ohrms, 1/10 watt (R4) Resistor—33,000 ohrms, # watt (R2, R12) Resistor—39,000 ohrms, # watt (R7)	Resistor-100,000 ohms, ‡ watt (R25) Resistor-220,000 ohms, 1/10 watt (R5)	Remistor—290,000 ohrns, 4 watt (R20, R21). Resistor—560,000 ohrns, 4 watt (R18).	Resistor—I meg., 1/10 watt (R16) Resistor—I meg., ‡ watt (R1) Resistor—2.2 meg., ‡ watt (R3)	Retainer-Retainer for stock No. 33500 tuning shaft	Retainer	Shield—1. F transformer shield top Socket—8 prong socket for power supply plug
STOCK		33526	33522	33527	. 33625	32899	33330	•		30752	32486	31400	12722	14262	14712	31435	31405	14393	00 00 00 00 00 00 00 00 00 00 00 00 00	32143	31382	31385	31383	31951	33497	32634	31372	32670 12493 32552	31373	32143	30545	12454	11398	12486	13730	14343	14887	31319
STOCK DESCRIPTION STOCK DESCRIPTION	-	Control—Dual contrast and brightness control 10.049 ohm and 106,000 ohm (R16, R48) Control—Dual horizontal and vertical hodding control—30.060 ohm and 1.2 mess. (R78)		Control-500,000 ohm "Vert. cent."-"Hor. cent." cent."	Control—2 megohm 'Height' control (R70) Insulator—Stand-off porcelain insulator—less	KnobFocus centrol knob NutSpeed nut for use with high frequency	Nec 8	N See	8 8		22	Resul	N N	8 2 2	- 8 - 1	2 2 2	22	2 2 2	28	222	111	281	Resistor 100,000 ohms, 1 10 watt (R21) Resistor 100,000 ohms, \$ watt (R11, R48, R47, R79)	Resistor—120,000 ohrns, watt (R4) Resistor—150,000 ohrns, watt (R43)	R76, R101) Resistor 330,000 ohms, 1 watt (R98)	Resistor470.000 ohrs. watt (Res)	Resistor——689,000 ohms, # watt (R94) Resistor——689,000 ohms, 1 watt (R96) Resistor——1 meg. 4 watt (R1, R2, R3, R3s)	R53, R60, R56, R65) Restor—12 meg., 4 wett (R36, R82, R83,	Resistor—2.2 meg. 4 watt (R74). Resistor—3.9 meg., 4 watt (R38, R40).	Resistor 4.7 meg., j watt (R69). Roller-Rubber frittion roller for use on band	switch for adjustment of oscillator trimmer. Shield—Tube shield for "Hor, out," tube Socket—4-none rectifier tube socket.	Socket Octal base water type tube socket Socket 11-prong reagnal Kinescope socket	Socket—615 oscillator tube socket	denser and friction relier Switch—Rotary type power switch (SS) (Model	Transformer—"1st Det. P1" I.F transformer (Rg. C20, L17, L20, R10, C25) (red and		(L16, C21, C22, C23, L19, R12) (red and red)	
STOCK	Š.	33274	33278	33277	33279	33225	14278	14074	11351	33316	12195	1303	12311	33566	1886	3158	30128	14394	1245	30000 30000 30000 30000	30405	30671	1128	30180	33501	33501	33598	30208	12671	33229	3687	33001	18008	33281	33519	33520		33523
DESCRIPTION		TELEVISION CHASSIS ASSEMBLIES TRK-5KC-3A TT-5KC-3	Adjuster—Magnetite core and stud in tube for high frequency oscillaror circuit adjustment.	Adjuster—Magnetite core and stud in Tube for	(Maed with L13) Board—Antenna ground terminal board	Capacitor—Plunger type air-trimmer—21 to 20 mmid. (Model TRK-5 only) (C6)	Capacitor C. Junger 17-5 only) Capacitor C. 7 mmid. 500 volts (neg. temp.	Capaciter-6 a manid., 500 volts (neg. temp.	Capacitor—8.2 mmfd., 500 volts (neg. temp.	_18 mmfd., 500 (C25)	Capaciror—22 mmfd., 500 volts (neg. temp.	<u> </u>	Capacitor—68 mmild. 500 voits (neg. temp.	Capacitor—80.5 mmld., 500 volta (neg. temp.	Capacitor—82 mmfd, 560 volts (neg. temp. coeff.) (C21, C22)	Capacitor—135 mmid., (C4) Capacitor—150 mmid., (C10)	Capacitor—190 mm/d., (C3) Capacitor—215 mm/d., 500 volts (neg. temp. coeff.) (C31, C32)	09	Capacitor—3,300 mmfd., 400 volts (C67) Capacitor—1015 mfd., 1,500 volts (C71)	C13, C14, C18, C19, C28, C27, C28, C29, C30, C30, C34, C34, C37, C40, C41, C42, C42, C42, C42, C43, C43, C43, C43, C43, C43, C43, C43	Capacitor—005 mid. 3,000 volts (C81, C82)	Capacitor—35 mid, 400 volts (C46, C64)	Capacitor—.05 mfd., 400 volts (C82, C77) Capacitor—.05 mfd., 3.040 volts (C74, C75). Capacitor—.1 mfd., 3.00 volts (C45, C44)	Capacitor—.1 mId., 400 voits (C59, C91, C70, C73, C73, Capacitor—.15 mId., 2.500 voits (C67), .05	mid., 3,000 volts (C86) Capacitor—25 mid., 200 volts (C66, C71). Canacitor—25 mid. 350 volts (C87, C89, C88,	Capacitor—10 md., 450 volts. 10 mfd., 450 capacitor—25 md., 450 units. 20 mfd 25 volts.	(C63, C48, C47, C72) Capacitor—30 mfd, 450 volts: 30 mfd, 450	Choke.—Filter choke (L39). Coil.—High frequency oscillator coil with core	and stud (L11) Coil—13-turn antenna coil, core, stud and capacitor assembly (C5, L9, L10) (green).	Coil—2-turn antenna coil core, stud and capacitor assembly (Cd. LT. LB) (yellow)	Col-3-turn antenna con, core, srud and capacitor assembly (C3, L5, L6) (orange). Col-3-turn antenna coi, core, stud and	capacitor assembly (C2, L3, L4) (red) Coll—7‡-turn antenna cri, core, stud and	Capacitor assembly (L.3. Lt. Lt. Col.—Peaking coil and 10 meg., 4 watt resistor assembly (L.3. R.37)	Coll—Peaking coil and 10 meg resistor assembly (L31, R32)	resistor assembly (L32, R35) Coil—Peaking coil and 1.500 ohm, a watt	Condenser—Adjustable oscillator tuning con-	Connector-Insulated plate connector and lead (Use with 879 Rectifier Tube)	Control—Audio volume control—1 meg. (Model, TT-5 only) (R65)
STOCK	No.		33387	33835	31253	12884	33697	33478	33476	33100	33101	33102	33103	33477	33104	33107	33108	33109	33806		33340	32787	33341	4839	30965	33195	33190	33120	33234	33233	33231	33230	33538	33539	33541	33228	33385	33280

RADIO CORP. OF AMERICA REVISION OF SERVICE DATA

MODELS TRK-5, TRK-9, TRK-12, TRK-90, TRK-120, TT-5

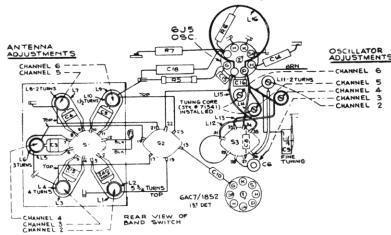
MODELS TT-5, TRK-5, 9, 12, 90 AND 120

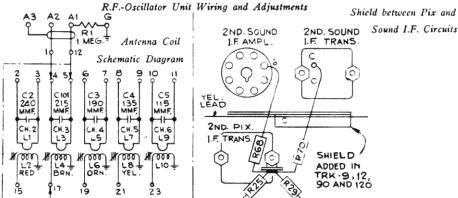
Modifications were made to subject receivers to provide operation on 1946 Television Channels #2 through #6.

1941	1941 Channel	Old Osc.	Switch	1946	1946 Channel	New Osc.
Channei	Frequency	Frequency	Position	Channel	Frequency	Frequency
#1	50-56 Mc.	64 Mc.	First	#2	54-60 Mc.	68 Mc.
#2	60-66 Mc.	74 Mc.	Second	#3	60-66 Mc.	74 Mc.
#3	66-72 Mc.	80 Mc.	Third	#4	66-72 Mc.	80 Mc.
#4	78-84 Mc.	92 Mc.	Fourth	#5	76-82 Mc.	90 Mc.
#5	84-90 Mc.	98 Mc.	Fifth	#6	82-88 Mc.	96 Mc.

A new Decalcomania was placed on the cabinet to indicate the new channels. A shield was placed between the 2nd Pix I.F. and the 2nd Sound I.F. in Models TRK-9, 12, 90 and 120.

The modified antenna and oscillator circuits are shown in the diagrams below.





SLOPE DETECTION

In all of the old RCA television receivers where the sound channel was a-m, the i-f transformers were detuned so that detection of f-m signal could be attained. Due to the detuning a new response curve resulted with a fairly linear slope on the lower frequency end of the curve. The frequency at the center of this slope was the center frequency of the produced f-m i-f signal. Consequently, the incoming f-m i-f signal would be sweeping an equal amount on either side of the center of this linear slope. The sloping characteristic of this linear section of the i-f response was such that the f-m i-f signal would not deviate or sweep into the non-linear portion of the curve. By this arrangement, detection of an f-m signal is possible. This process is known as slope detection and is discussed in greater detail in the television "How it Works"