



TELEVISION SERVICE TIPS

IMPORTANT INFORMATION FOR YOUR SERVICE DEPARTMENT

PREPARED AND DISTRIBUTED BY RCA SALES CORPORATION, PRODUCT PERFORMANCE
600 N. SHERMAN DRIVE, INDIANAPOLIS, 1, INDIANA

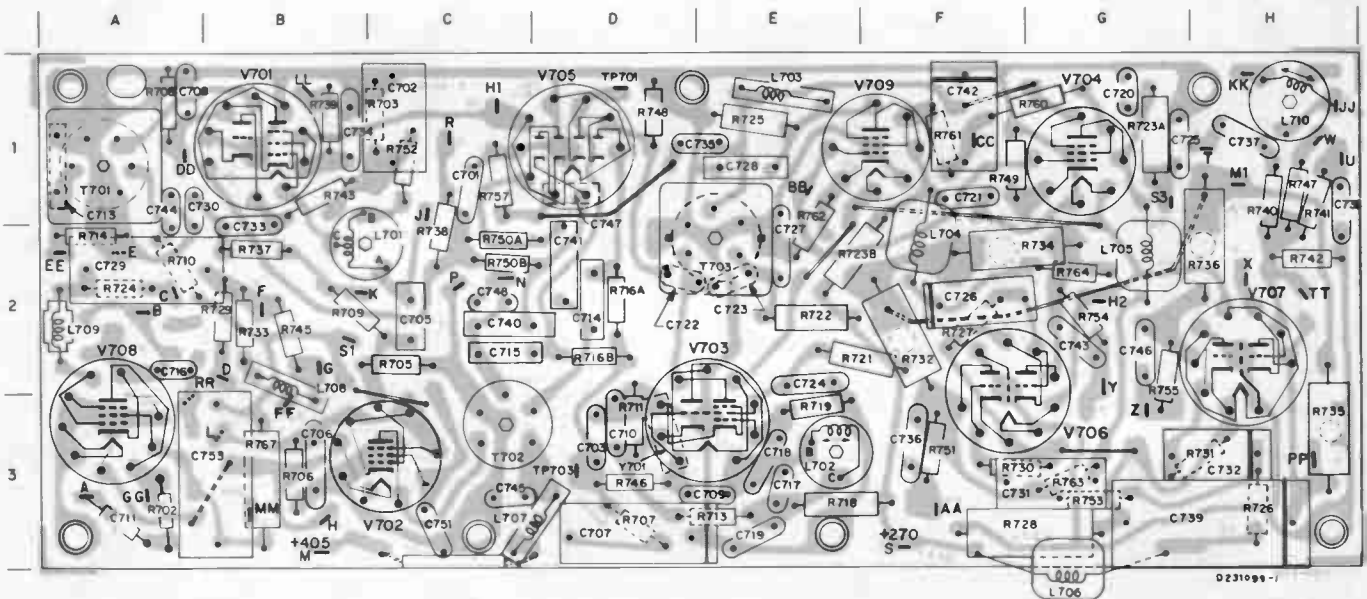
VOLUME XVI

ISSUE 1

AUGUST 27, 1965

SERVICE DATA - Chassis CTC16X 1965 No. T6

The PW700 Solid Copper Circuit Component Assembly Board on page 34, 1965 No. T6, shows a seven pin tube instead of a nine pin tube for V702. The correct phantom view of PW700 is shown below.



PW700 Solid Copper Circuit Assembly for Chassis CTC16X (Chroma)

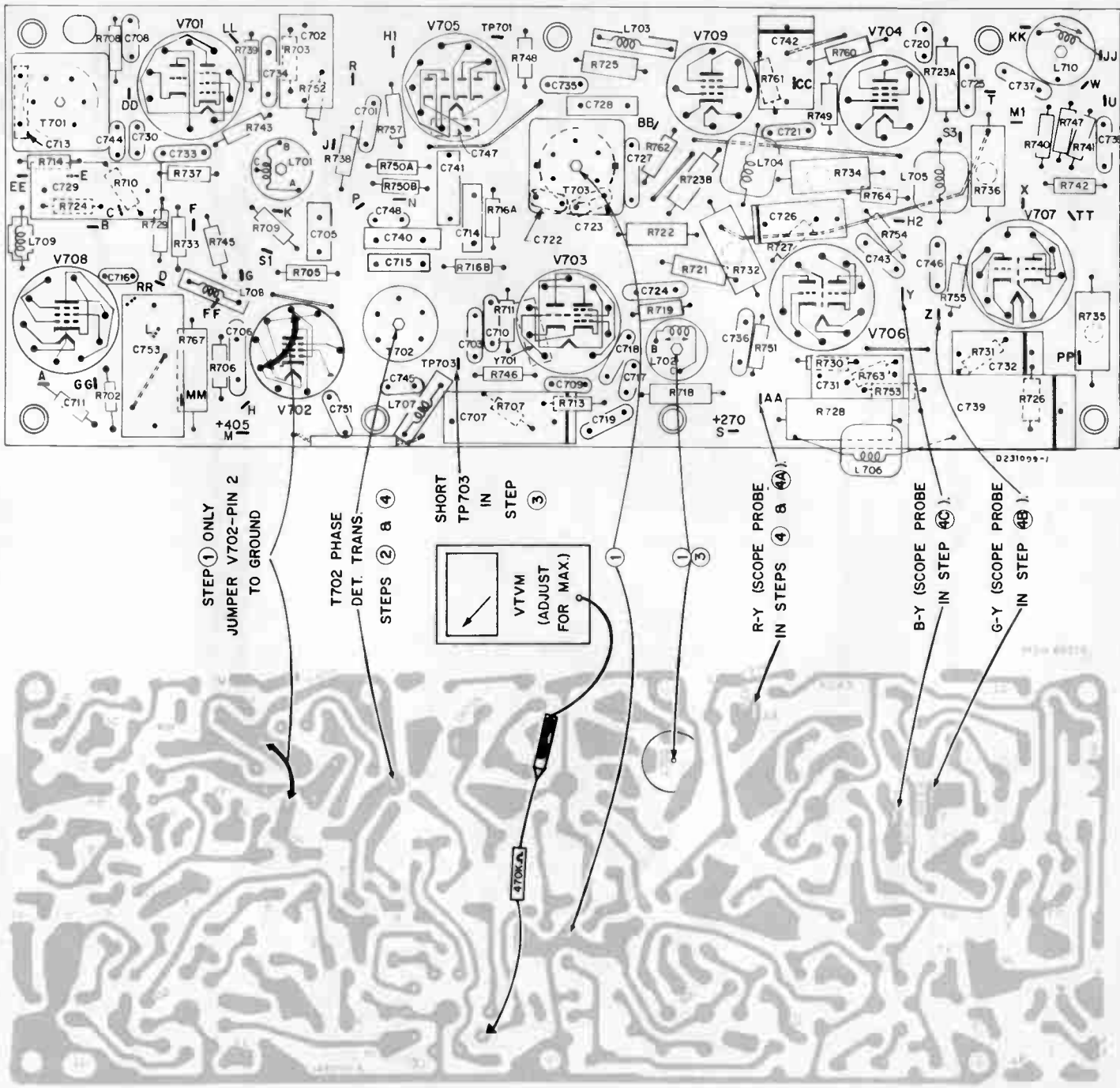
The shop procedure for color AFPC Alignment on page 23 should also have a 9 pin tube as V702. In Step ① pin 2 should be grounded. The corrected drawing is shown on the back of this page.

In the alignment chart on page 22, the instruction in Step 1 pin 2 of V702 should be grounded as shown below.

ALIGNMENT PROCEDURE		
STEP	ADJUST	REMARKS
1	Peak 3.58 mc. oscillator transformer (Jumper V702-2 to ground)	T703 (bottom) Adjust T703 for maximum DC reading on the V.T.V.M. If the 3.58 mc. oscillator is not running, no reading will be obtained. If necessary, adjust the reactance tube plate coil L702 to start the oscillator. After adjustment is made, remove jumper from V702—Pin 2.

COLOR AFPC ALIGNMENT
(SHOP PROCEDURE)

CHROMA BOARD (SERVICE POSITION)



STEP ① ONLY
JUMPER V702-PIN 2
TO GROUND

T702 PHASE
DET. TRANS.

STEPS ② & ④

VTVM
(ADJUST
FOR MAX.)

SHORT
TP703
IN
STEP
③

R-Y (SCOPE PROBE
IN STEPS ④ & ④A)

B-Y (SCOPE PROBE
IN STEP ④C)

G-Y (SCOPE PROBE
IN STEP ④B)



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VOLUME XVI

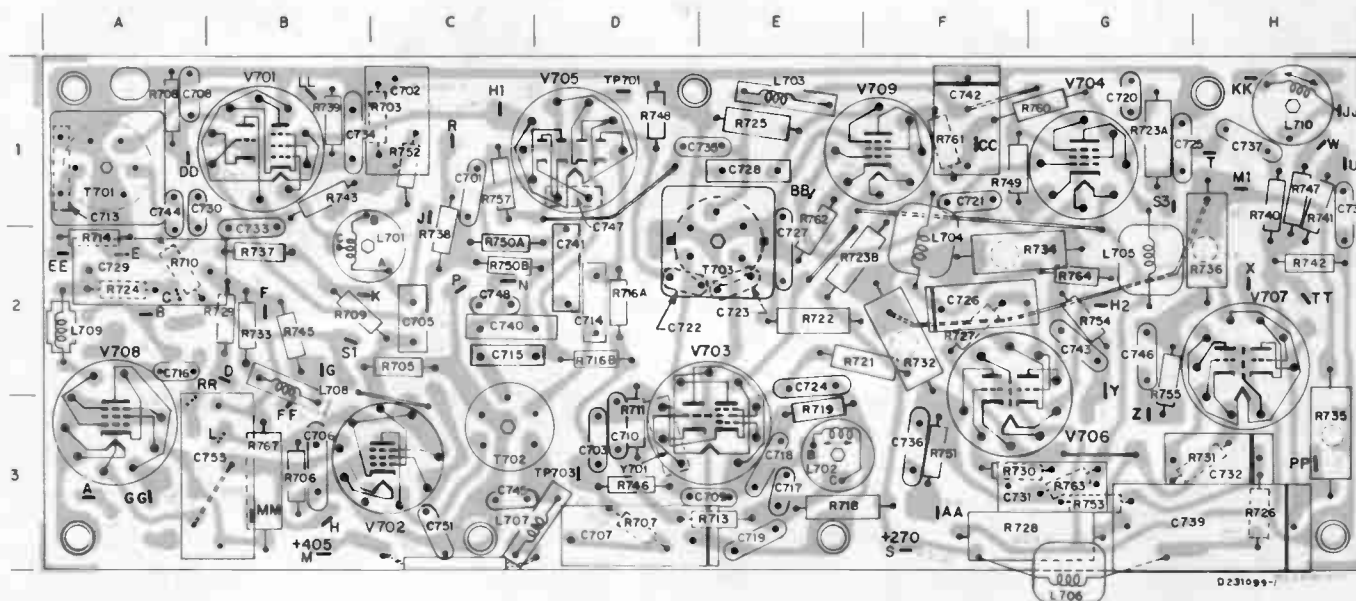
ISSUE 2

AUGUST 27, 1965

SERVICE DATA - Chassis CTC17X

1965 No. T12

The PW700 Solid Copper Circuit Component Assembly on page 34, 1965 No. T12, shows a seven pin tube instead of a nine pin tube for V702. The correct phantom view of PW700 is shown below.



PW700 Solid Copper Circuit Assembly for Chassis CTC17X (Chroma)

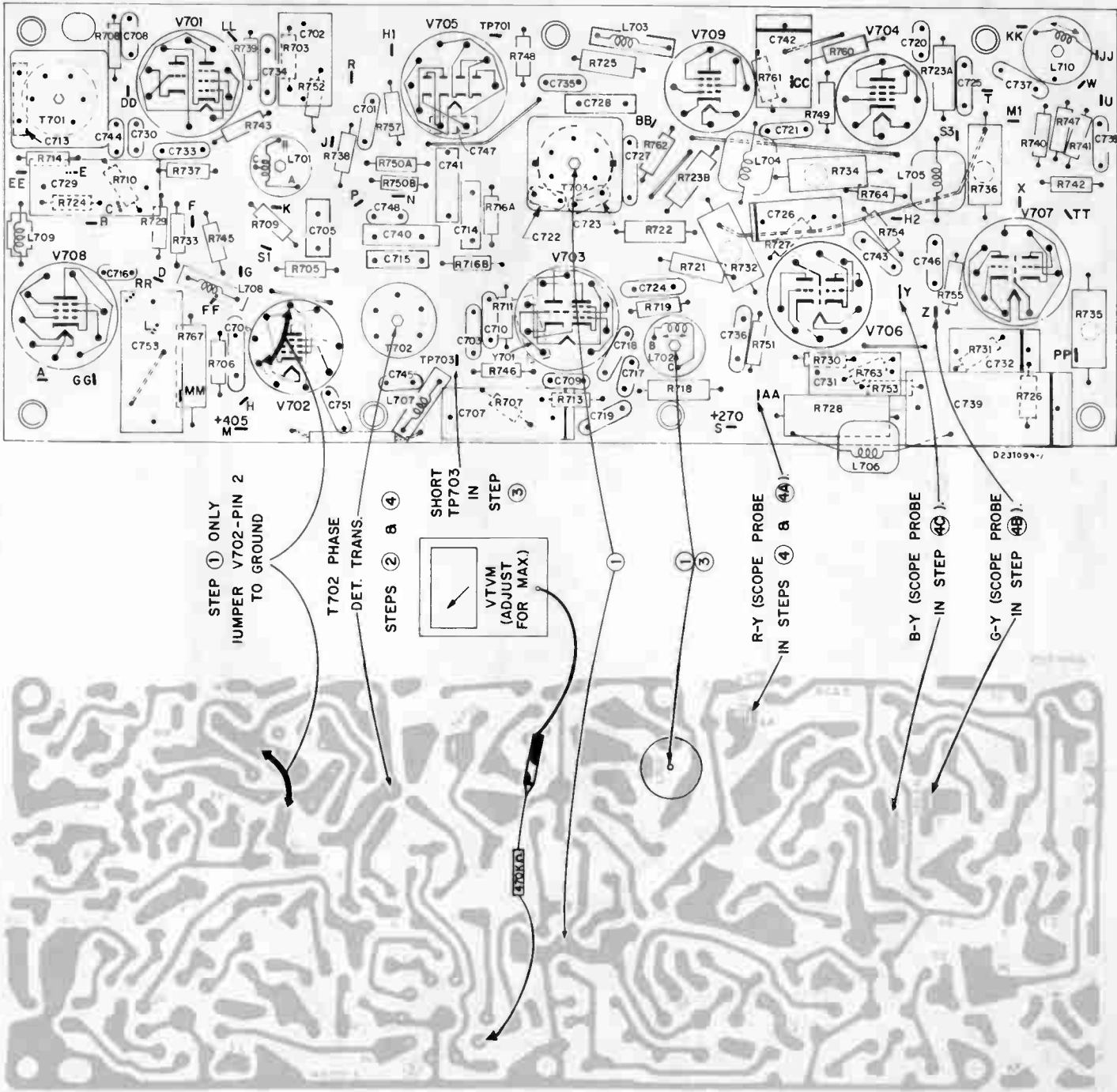
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ALIGNMENT PROCEDURE			
STEP	ADJUST	REMARKS	
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COLOR AFC ALIGNMENT
(SHOP PROCEDURE)

CHROMA BOARD (SERVICE POSITION)



STEP ① ONLY
JUMPER V702-PIN 2
TO GROUND

T702 PHASE
DET. TRANS.

STEPS ② & ④

SHORT
TP703
IN
STEP
③

VTVM
(ADJUST
FOR MAX.)

R-Y (SCOPE PROBE
IN STEPS ④ & ④A)

B-Y (SCOPE PROBE
IN STEP ④C)

G-Y (SCOPE PROBE
IN STEP ④B)

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"RADIO AND VICTROLA" SERVICE TIPS

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600 N. SHERMAN DRIVE, INDIANAPOLIS, I, INDIANA

VOLUME XVI, ISSUE 3

NOVEMBER 1, 1965

Lubrication, Cleaning and Adjustments for the
RP-217, -218, -219 Series Record Changers

Service Data
1964 No. 20

LUBRICATION

The record changer mechanism is properly lubricated at the factory so lubrication should not be necessary for a long period of time. When lubrication does become necessary it should be remembered that excessive lubrication can be detrimental to the operation of the changer. A couple of drops of oil or a small dab of grease is normally all that is required.

A light machine oil (* "Royco" #2, Singer Sewing Machine Oil or equivalent) is used to lubricate the drive motor bearings, idler wheel bearings, and other fast rotating parts. A cloth impregnated with this oil is used to wipe the stabilizer arm shaft (20A), pickup arm lift rod (47) and pickup arm pivot shaft (54) after any oxidation has been removed by polishing them and the inside of their housings with crocus cloth.

All other bearing and sliding surfaces such as the cycling gear, other slow rotating parts, lever pivot studs, cycling-gear-stud slot in the cycling slide (17), control lever stud (40), automatic neutral link detent lever (40), record push off lever, and points upon which the cycling slide rides, are lubricated with a medium weight clinging type non-solidifying grease (* "Rycon" #0 or equivalent). The cup of the turntable bearing is filled with grease and installed with the cup facing up (a metal washer is installed on each side of this bearing). A small dab of a heavy sili-congrease should be applied to the pickup vertical pivot shaft at the point where the pickup rides. Note: The trip pawl (18), trip lever (56) and clutch lever (57) should not be lubricated.

CLEANING

Oil or grease on any surface in the turntable drive system can cause slippage which in turn can produce WOW or stalling. It is therefore very important that the spindle, or shaft, of the motor, the idler wheel rubber tire, and the inside surface of the turntable rim be periodically cleaned to remove any accumulation of oil or grease. The surface of the landing lever (44) where it is contacted by the pickup arm pivot lever (54A) should be cleaned to avoid a condition of erratic landing. One of the causes for these conditions can be excessive lubrication, particularly of the drive motor upper bearing.

Recommended cleaning agents for the rubber parts of the mechanism are: isopropyl alcohol, or naphtha and in addition * "Chlorothene" may be used for the metal parts.

CAUTION: Exercise care in using cleaning agents or oils which will react with plastic so that they do not come in contact with any plastic parts.

(* "Royco" is a product of the Royal Engineering Co. - Hanover, N. J.

"Rycon" is a product of the Standard Oil Division of the American Oil Co.

"Chlorothene" is a product of the Dow Chemical Co.

ADJUSTMENTS

There are only three adjustments necessary for setting the proper operation of the RP-217, -218 & -219 record changers provided that no parts have been misshapen. There is one adjustment to regulate the correct landing of the stylus on the record and two adjustments to regulate the horizontal and vertical movement of the pickup arm to clear a full stack of records.

Landing Adjustment

The landing point of the stylus is controlled by means of an eccentric stud (44A) in the landing lever (44). When this stud is adjusted for proper landing on one size record (7 inch preferably) the points for the other two sizes are automatically set by fixed steps on the landing lever.

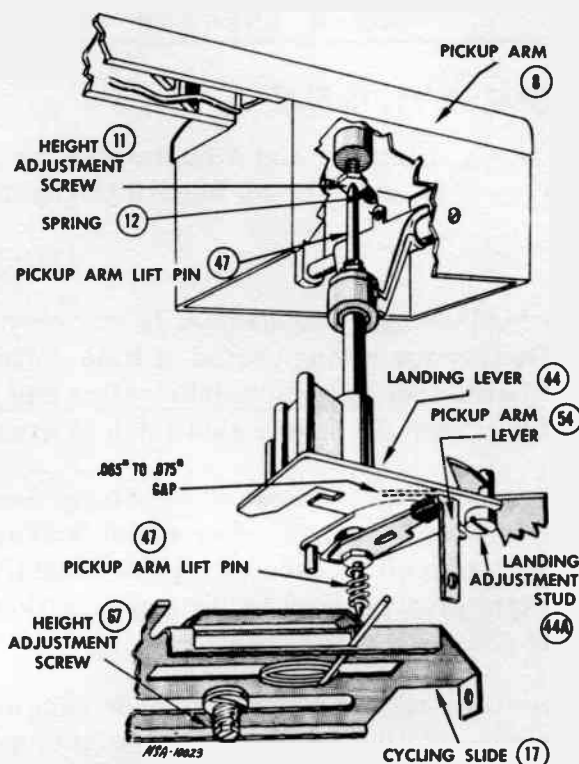
The landing adjustment stud (44A) is accessible from the top of the motor board through an access hole adjacent to and forward of the pickup arm pivot bearing and is also accessible from the under side of the motor board. It is adjusted as follows:

- 1 - Disconnect the power to the changer.
- 2 - Place a record on the turntable (7 inch preferable).
- 3 - Turn function Knob to "SEL" and rotate turntable by hand until the pickup arm is at the end of its inward travel and just starts to lower.
- 4 - Turn the landing adjustment stud (44A) to position the stylus so that it will land midway between the outer edge of the record and the grooves.
- 5 - Check landing on other two sizes and "touch-up" adjustment as necessary.

Height Adjustments

Two height adjustments are necessary. One is to provide a "clutch" clearance which controls the horizontal movement of the pickup arm, and the second adjusts the vertical lift of the pickup arm to clear a stack of records. They are adjusted as follows:

- 1 - Rotate the turntable until the mechanism is completely "Out of Cycle".
- 2 - Adjust the height adjustment screw (67) to obtain a clearance between the pickup arm lever (54) and landing lever (44) of 0.070" to 0.085" (about the thickness of a penny).
- 3 - Trip mechanism and rotate turntable, until pickup arm has completed its inward travel and is just ready to descend.
- 4 - Adjust height adjustment screw (11) so that the stylus is $1 \frac{3}{16}$ " above the surface of the turntable mat.





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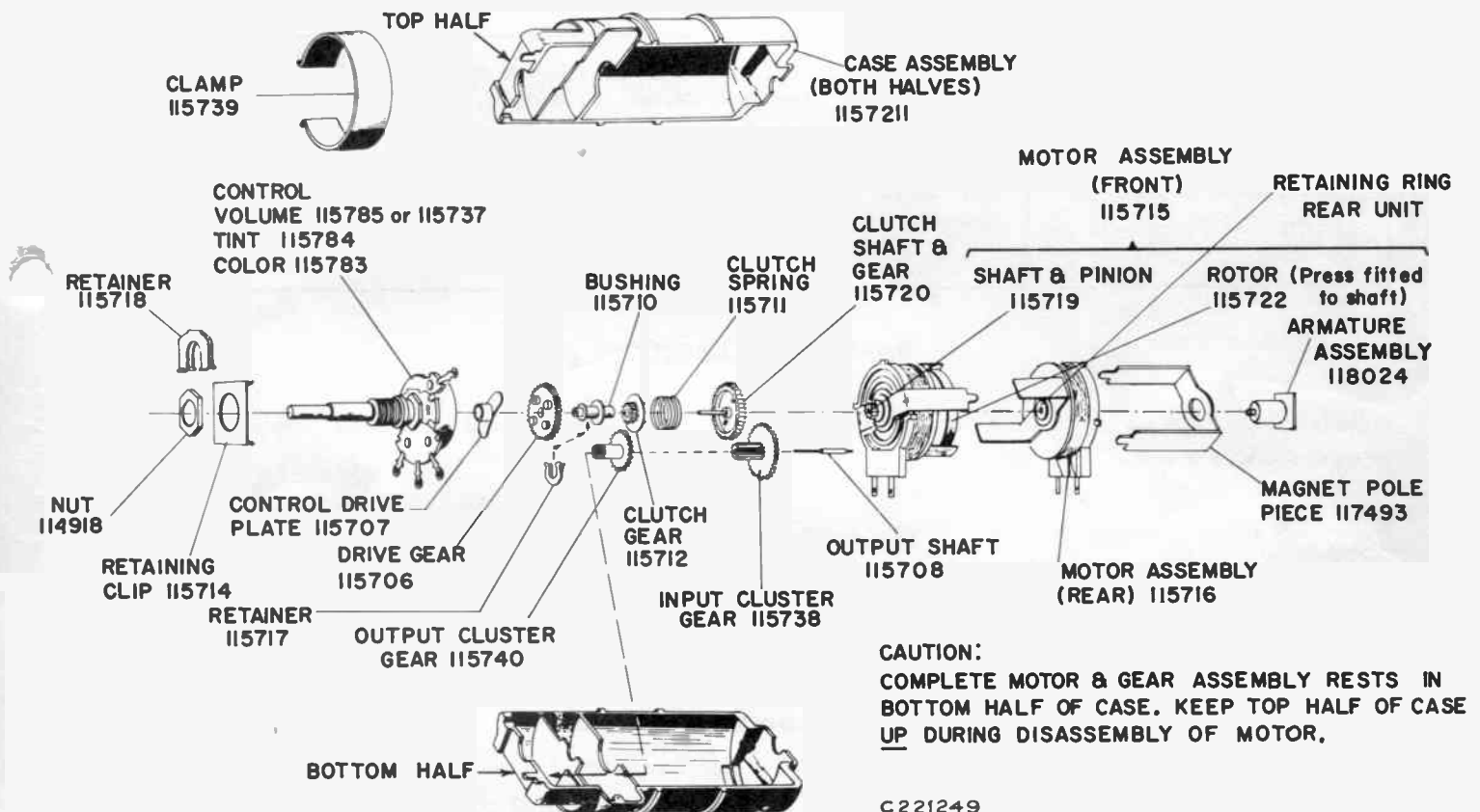
VOLUME XVI

ISSUE 3

DECEMBER 9, 1965

SERVICE HINTS AND PARTS AVAILABILITY FOR CTP 10F, G REMOTE CONTROL MOTOR

An identical type motor is used for volume, color, and tint functions in color chassis CTC 16X and 17X, although the potentiometer is different. This Tip includes Special Notes, Parts Availability, and a Service Chart for the motor. An exploded view of the motor identifies the individual parts.



SPECIAL NOTES:

1. Armature adjust screw is factory adjusted to within .002". Adjustment of armature in field is not advised. Replace armature if necessary.
2. Do not continue to run motor at end of potentiometer travel.
3. Do not continue to run motor having insufficient torque.
4. Do not add "shims" to any gear train or shaft assembly.
5. After removal of top motor case, make a visual check on placement of potentiometer and other parts before further disassembly.
6. Make sure all parts are seated and positioned properly in bottom case before top case is attached.
7. Apply power to motor and check operation before reinstallation on TMA.

MOTOR SERVICE CHART

SYMPTOM	MOST LIKELY CAUSE	CHECKS AND/OR CURES
Noisy Motor <i>(buzzing sound)</i>	Large rear pole piece bent or distorted.	Straighten or replace rear pole piece.
	Large rear pole piece improperly seated.	Check rear pole piece and/or replace.
	Burrs on back of rear pole piece; burrs on armature flange.	Remove burrs or replace parts.
Noisy Motor <i>(metallic clicking sound)</i>	Rotor hitting bent pole piece.	Leave motor in case, "spin" manually, make visual check for rotor clearance. Straighten and/or replace bent pole piece.
	Bent rotor shaft.	Replace shaft and/or rotor; or front motor assembly.
Loss of Torque <i>(motor fails to operate control and/or switch)</i>	Short pole piece on rear motor assembly loose or improperly seated.	Reseat short pole piece and tighten retainer ring or replace rear motor assembly.
	Pole pieces loose on front motor assembly.	Reseat pole pieces and tighten retainer ring or replace front motor assembly.

PARTS AVAILABILITY

Individual parts, such as gears, front motor assembly, armature, etc. can be ordered using Stock Numbers shown on exploded view of motor.

A complete motor assembly, Stock No. 117492, comes equipped with one of two volume potentiometers—Stock No. 115737 or 115785. The table below lists information necessary for selecting the correct potentiometer for each color chassis and motor application.

CHASSIS	FUNCTION	SYMBOL NO.	STOCK NO.	DRAWING NO.
CTC 16XP	Volume	R 120	115737	1472283-5
	Tint	R 143	115736	1472283-2
	Color	R 145	115735	1472283-1
CTC 16XM-XAC	Volume	R 120	115785	1472283-10
CTC 17XF-XAE-	Tint	R 143	115784	1472283-8
XAC-XAH	Color	R 145	115783	1472283-7



"RADIO AND VICTROLA"[®] PARTS TIPS

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VOLUME XVI ISSUE ■ 2

DECEMBER 30, 1965

RP-217B, 218B, 219
Parts List Correction

Service Data
1964 No. 20

RC-1210C, D, E
Circuit and Parts Changes

Service Data
1962 Nos. 14, 21
1963 No. 13
1964 No. 11

SYMBOL NO.	STOCK NO.	DESCRIPTION
Pickup Arm Assembly (page 18)		
Change: 15A	110022A	Stylus - sapphire/sapphire, complete with carriage, RP-217B-22, -29
To Read: 15A	110020A	Stylus - sapphire/sapphire, complete with carriage, RP-217B-22, -29
Delete: 21	115148	Knob - . . .
22	111198	Spring - . . .
23	111500	Retainer - . . .
Changer Assembly (page 22)		
Add: 175	115296	Screw - record changer mounting screw (RP-219)
176	115297	Retainer - mounting screw, "flip-up" clip (RP-219)

On page 19 Figure 34, the screw shown to the left of and adjacent to the pickup arm rest (28) should have a callout balloon (175) added to it.

SYMBOL NO.	STOCK NO.	DESCRIPTION
Delete: C31		Capacitor - ceramic, 300 μ f or 1000 μ f, +100-0%, 500 v
Change: C4		Capacitor - ceramic, 100 μ f, \pm 20%, 500 v, NPO
R6	502433	Resistor - 330,000 ohm, \pm 20%, 1/2 w
To Read: C4		Capacitor - ceramic, 330 pf, \pm 20%, 500 v, N750
R6	502415	Resistor - 150,000 ohm \pm 20%, 1/2 w
Add: C31		Capacitor - ceramic, 680 pf, \pm 20%, 500 v (connect from junction R4, S2B to junction R5, R9)
C34		Capacitor - ceramic, 3300 pf, \pm 20%, 500 v (connect from junction R32, S2B to ground)

RGM 49
Parts List Addition

Service Data
1965 No. 22

3VC8, 4VC8, VFP 65
Parts List Addition

Service Data
1964 No. 16
1963 No. 10
1962 No. 22

SYMBOL NO.	STOCK NO.	DESCRIPTION
Add:	117495	Stud - speaker mounting
	117496	Clip - speaker leads
	117497	Clip - speaker retaining
	117498	Washer - used with screw 116284

SYMBOL NO.	STOCK NO.	DESCRIPTION
Add:	115216	Trim - stainless steel cabinet end
	115247	Plate - friction, for changer tray (3VC6, 3VC8)

4VC6, 4VC8
Parts List Changes

Service Data
1963 No. 10

SYMBOL NO.	STOCK NO.	DESCRIPTION	
Change:	Z4897	Cabinet - center, less speaker cabinets and drop down drawer, 4VC64	
	Z4920	Cabinet - center, less speaker cabinets and drop down drawer, 4VC69	
	Z4905	Cabinet - center, less speaker cabinets and drop down drawer, 4VC82	
	Z4896	Cabinet - drop down drawer, 4VC64	
	Z4923	Cabinet - drop down drawer, 4VC69	
	Z4902	Cabinet - drop down drawer, 4VC82	
	Z4921	Cabinet - right hand speaker, 4VC69	
	Z4922	Cabinet - left hand speaker, 4VC69	
To Read:	Z4897	Cabinet - center, less speaker cabinets and drop down drawer, 4VC64 (Early Production)	
	Z4920	Cabinet - center, less speaker cabinets and drop down drawer, 4VC69, (Early Production)	
	Z4905	Cabinet - center, less speaker cabinets and drop down drawer, 4VC82 (Early Production)	
	Z4896	Cabinet - drop down drawer, 4VC64 (Early Production)	
	Z4923	Cabinet - drop down drawer, 4VC69 (Early Production)	
	Z4902	Cabinet - drop down drawer, 4VC82 (Early Production)	
	Z4921	Cabinet - left hand speaker, 4VC69	
	Z4922	Cabinet - right hand speaker, 4VC69	
	Add:	Z4981	Cabinet - center, less speaker cabinets and drop down drawer, 4VC64 (Late Production)
		Z4983	Cabinet - center, less speaker cabinets and drop down drawer, 4VC69 (Late Production)
Z4982		Cabinet - center, less speaker cabinets and drop down drawer, 4VC82 (Late Production)	
Z4984		Cabinet - drop down drawer, 4VC64 (Late Production)	
Z4986		Cabinet - drop down drawer, 4VC69 (Late Production)	
Z4985		Cabinet - drop down drawer, 4VC82 (Late Production)	
115216		Trim - stainless steel cabinet end, 4VC8	

VGP 61, 67, 72
Parts List Changes

Service Data
1965 Nos. 13, 14

SYMBOL NO.	STOCK NO.	DESCRIPTION
Change:	X6003	Cabinet - center section, less tray and speaker housing, VGP 61
	X6004	Cabinet - changer tray, VGP 61
	X6095	Cabinet - speaker housing, less hinges, VGP 61
To Read:	115022	Hinge - speaker housing, VGP 67, 72
	X6099	Cabinet - center section, less tray and speaker housing, VGP 61E
	X6100	Cabinet - center section, less tray and speaker housing, VGP 61G
	X6101	Cabinet - center section, less tray and speaker housing, VGP 61J
	X6102	Cabinet - changer tray, VGP 61E
	X6103	Cabinet - changer tray, VGP 61G
	X6104	Cabinet - changer tray, VGP 61J
	X6095	Cabinet - R.H. speaker housing, VGP 61E
	X6097	Cabinet - R.H. speaker housing, VGP 61G
	X6098	Cabinet - R.H. speaker housing, VGP 61J
	X6115	Cabinet - L.H. speaker housing, VGP 61E
	X6116	Cabinet - L.H. speaker housing, VGP 61G
	X6117	Cabinet - L.H. speaker housing, VGP 61J
	115002	Hinge - speaker housings, VGP 67, 72

RP-219-39
Parts List Changes

Service Data
1964 No. 14

SYMBOL NO.	STOCK NO.	DESCRIPTION
Change:	Q1	Transistor - input
	Q5	Transistor - output
To Read:	Q1	Transistor - input (SE4002)
	Q5	Transistor - output (34315 or 40022)
Add: For Record Changer Servicing Information - Refer to RP-217B, RP-218B, RP-219 Service Data - File: 1964 No. 20.		



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VOLUME XVI ISSUE 4

DECEMBER 30, 1965

SIMULATED SLATE TOPS CLEANING AND REPAIRING

General

A vinyl enamel is used to produce the simulated slate finish on the tops of some of the R/V and TV cabinetry. It is very rugged and can be easily cleaned and repaired. A cloth dampened with warm water and a small amount of a mild detergent will readily remove fingerprints, dust, dirt, ashes etc. After marks etc. are removed, the top should be wiped dry with a dry, lint free cloth. If a deeper cleansing is required to remove grease etc., "Johnson's Cream Polish" or a conventional paint thinner (VMP Naptha - Varnish Makers and Painters Naptha) may be used. High gloss waxes or cleaners should not be used as they will change the appearance of the finish.

Repairs to the finish can be accomplished with the normal "burn-in" and "touch-up" procedures using a low gloss black lacquer. If possible, sanding should be avoided as this will remove the original pebble finish of the surface.

PARTS REPLACEMENT

General

Whenever a defective part is replaced in an instrument, care should be exercised that it is connected to exactly the same points as those to which the original part was connected.

It has come to our attention that in some instances when a part has been replaced, particularly when one side is connected to ground, that a different grounding point has been used. This condition could cause a ground loop to exist in the chassis which may create undesired effects.

RC-1210E, F Alignment Correction

Service Data
1964 No. 12

Under "Alignment Procedure" on page 5 make the following corrections:

1 - Delete Step 1.

2 - Step 3 under Alignment Indicator -
connect to -

should read: V. T. V. M.
across C34

TRANSISTOR LEAD IDENTIFICATION

General

In the past a color dot was normally placed on the side of a transistor to identify the position of the collector lead. Present usage, however, does not always comply with this position of the color dot. It is also possible that the color dot will be omitted entirely as a lead identification.

Therefore, all color dot lead identification as given in any service data should be disregarded. Always use the position of the leads as shown in the service data, or in the transistor manual, for element identification since this is standardized.

TCT3, 3A Tape Transport Take-up Pulley and Clutch Disc

Service Data
1961 No. 15

A new take-up pulley and a new clutch-disc, that do not require the use of the graphite lubricant, are currently being used in the subject transports. These new parts may be identified thus: the clutch pad is plain and unimpregnated, and the pulley has a coating (blue) of a dry lubricant applied to the clutch bearing surface on the inside of the cup.

Should replacement of the pulley or of the clutch-disc become necessary, they should be replaced as a pair. One unit of the old will not function with the one unit of the new.

The new pulley and clutch-disc are packed as one unit and are available under Stock No. 111125 which supersedes Stock Nos. 110271 - Pulley and 110273 - Disc. - Clutch.

IMPORTANT - NO ADDITIONAL LUBRICATION OR PREPARATION IS REQUIRED PRIOR TO INSTALLATION OF THE NEW PARTS. DO NOT APPLY ANY LUBRICATION TO THE NEW CLUTCH AT ANY TIME.

RC-1208 Schematic Correction

Service Data
1961 No. 19
1963 No. 3

In the schematic diagram of the RC-1208 chassis, the junction of R1 and R2, shown connected to the junction of C3 and L2 or L1B (the antenna), should be connected to the opposite side of C3, at the junction of C3 and the base of Q1.

In the schematic diagram:

The polarity shown on capacitors C11 and C16 is reversed. The positive (+) side should be connected to the battery bus.

Terminals 2 and 3 of T5 are transposed. Terminal 2 connects to ground.

R10 should be 2200.

C15 is changed from 0.33 μ f to 0.30 μ f and the stock number is changed from 111250 to 108885.

In the chassis layout:

The positions of transistors Q7 and Q8 are transposed. Q7 should be the transistor nearest the edge of the board.

Terminals 1, 2, 3 and 4 of T5 are transposed. Terminal 1 should be terminal 4, terminal 4 should be terminal 1, terminal 2 should be terminal 3 and terminal 3 should be terminal 2.

Elements B and E of Q2 in the wiring view are transposed. The symbol is correct and the component view is correct.

RC-1215B Chassis
Schematic Correction

Service Data
1963 Nos. 15, T6-S1,
T11-S1, 1964 No. 4

In the schematic diagram of PB300, the left and right channel output are transposed ahead of the output capacitors. The connections should be as follows:

1. The junction of R323, R324 and C318 should connect to C301 the left channel output.
2. The junction of R301, R325 and C319 should connect to C320 the right channel output.
3. Terminals A and B of T301 are transposed - "A" should be "B" and "B" should be "A".
4. Diodes CR301 and CR302 are transposed - CR301 should be CR302 and CR302 should be CR301.

The PB300 Board layout shows the correct connections.

RC-1218E, F, J, K
Schematic Correction

Service Data
1965 Nos. 18, T12-S1

The connections to Q407 should be corrected in the schematic diagram as follows:

C431 should connect to R461 and the Emitter of Q407 instead of to the Collector of Q407.

The Collector of Q407 should connect to the "B" bus (term. A P)

The circuitry of Q407 should be the same as that of Q408.

The bearing in the idler wheel on these record players is made of a sintered metal which is oil impregnated during manufacture. During assembly Cosmolube #22 is applied to silence bearing noise.

Units which have been in long term storage may have had the oil drawn from the bearing by the packing material. When this happens, the bearing absorbs the lubricant from the Cosmolube #22 and leaves only the thickening agent on the inner surface of the bearing and on the idler shaft. This residue oxidizes and causes the turntable to slow down or stop.

The following steps will correct this condition should it be encountered:

1. Remove the affected idler wheel and discard.
2. Clean all residue from the idler wheel shaft with an alcohol solvent.
3. Apply a light coating of oil (Singer sewing machine or equal) to the idler wheel shaft.
4. Install a new idler wheel, RCA Stock No. 102934

RC-1209, 1210 Chassis
Dial Slippage on AM

Service Data
1962 Nos. 14, 19, 21
1963 Nos. 6, 13
1964 Nos. 11, 12

Some instances of AM tuning dial slippage has been reported in the subject series instruments. This has been found to be due to the omission of the restraining loop over the lug on the AM tuning-gang drive pulley. The FM tuning is not affected.

When this condition is encountered the dial cord stringing should be checked and restrung if necessary to include the restraining loop.

The dial cord lengths, loop to loop, are:
RC-1209 (pointer drive) 26 ⁵/₁₆", (capacitor drive) 35 ⁷/₁₆"
RC-1210 (pointer drive) 26 ³/₈", (AM drive) 16 ¹/₂"

RC-1213A, B, E, F, H
Chassis Layout Correction

Service Data
1963 No. 5

The chassis layout views on Pages 3 & 4 show incorrect terminal numbering on the output transformer T4; the schematic is correct. The terminals should be numbered as follows:

- 4 should be 1
- 5 should be 2
- 1 should be 3
- 2 should be 4
- 3 should be 5

In the Alignment Procedure on Page 2, Step 5 under "Adjust" should read C1-A-T (Ant. Trimmer).

STEREO HEADPHONES

General

All RCA "Victor" instruments that have provisions for the connection of stereo headphones, are designed for the use of low impedance dynamic types such as the RCA model XFK 11 which has an impedance of 45 ohms.

Other makes of headphones may be used provided they are low impedance (below 50 ohms) dynamic types. The use of high impedance dynamic or crystal type headphones is not recommended.

RP-218, -219 Stabilizer Arm
Parts Clarification
Service Data
1962 Nos. 17, 17-S1
1964 No. 20

Early production of the RP-218 changer used an intermix housing that required a stabilizer arm with a greater length of shaft from the locating pin to the end to permit the arm to turn when it is raised. This particular arm is no longer available but Parts and Accessories have effected a modification to the later (shorter) shaft so that it may be used in place of the early (longer) shaft. This modification consists of a hole drilled and tapped in the bottom of the shaft to permit a washer to be fastened thereto by a screw - the washer and screw are supplied with this arm. This washer acts as the stabilizer arm retainer, thus the retaining "C" washer is not used in this application.

Correct parts lists as follows:

20	110916	Arm - stabilizer, RP-218-1, -12, -12A, RP-218B-12, RP-219A -12 -for late production using short intermix housing
20	115007	Arm - stabilizer, including screw and washer, RP -218 -1, -12, -12A -for early production using long intermix housing

RP-217, 218, 219
Pickup Cartridges
Service Data
1965 Nos. 13, 14, 15, 16, 17, 18, 23, 24

The feather action pickup cartridges used in the new small-head pickup arms are as follows:

Pickup Complete	Pickup Body only	Styli	Styli Type	Pickup Capacity
	(115346)*			
115276	115703	115329	S/S	3900 pf
115277	115703	115911	D/S	3900 pf
115302	115347	115329	S/S	1600 pf
115303	115347	115911	D/S	1600 pf

* Stock No. 115703 supersedes 115346

An exploded view of the new pickup arm is shown in Service Data 1965 No. 18.

RP-217, 218, 219
Pickup cartridge removal and installation
Service Data
1964 No. 20

When removing or installing a "feather action" pickup cartridge in the pickup arm, it is important that the sides of the cartridge cavity (head) of the arm should be spread slightly to allow the cartridge mounting shaft to be easily removed without using force.

If the sides of the cavity are not spread and the cartridge and shaft are forced out, a groove will be formed in the side of the cavity and when the shaft is reinstalled it will not fit snugly and may drop out.

YGS 11
Component Identification
Service Data
1965 No. 26

In the bottom view of chassis on page 2 change balloon callout 31 to 29.

RP-217, 218, 219
Corrections
Service Data
1964 No. 20

Change:

Page 3, Figure 4,
Clutch Lever (56)
Trip Lever (57)

To Read:

Trip Lever (56)
Clutch Lever (57)

Page 10, first paragraph, second line,
"resets the clutch lever (56)..."

"resets the trip lever (56)!"

Page 12, Service Hints, first line,
"...check for bent ear on clutch..."

"...check for bent ear on trip..."

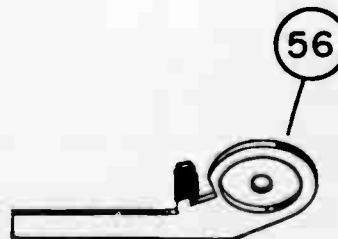
Page 13, "Premature trip" first line,
"Ear on clutch lever (56) bent"
third line
"Clutch lever (56)..."
sixth and seventh line
"Grease between clutch lever (56) and trip lever (57)"

"Ear on trip lever (56) bent"
"Trip lever (56)..."
"Grease between trip lever (56) and clutch lever (57)"

Page 13, "Trip In Manual", first line,
"Ear on clutch lever (56) bent"

"Ear on trip lever (56) bent"

On Page 17, Figure 32, and Page 20, Figure 25, the trip lever shown has been modified by the removal of the triangular protrusion.



1-YB-29A
Earphone Jack

Service Data
1961 No. 14-S1

The model 1-YB-29A embodies an earphone jack that is mounted on the rear of the instrument, behind the counter, to provide for private listening. When an earphone accessory (RCA RK-303 or equivalent) is plugged into this jack, the loudspeaker is automatically silenced.

The earphone jack is stocked by Parts and Accessories under Stock No. 111137 and is connected into the circuit thus:

The "Brown" lead from the output transformer is connected to the tip (top leaf) contact of the jack.
The "White" lead from the speaker is connected to the break contact (center leaf) of the jack.
The "sleeve" (barrel) connection of the jack connects, at the speaker, to the "Black" wire from the transformer.

RC-1222A (RGH 12)
Schematic Correction

Service Data
1965 No. 7

The base and emitter voltages of Q7 are transposed with the base and emitter voltages of Q8. The correct voltages are:

Collector	Q7 - -9.0v	Q8 - -4.5v
Base	Q7 - -4.68v	Q8 - -0.18v
Emitter	Q7 - -4.52v	Q8 - -0.02v

RC-1202K, P, R & T Chassis
Corrections

Service Data
1961 No. 10

In the schematic diagram, C11B, shown connected to the junction of T4 and R12, should be connected to the junction of T4 tap, C12 and V5 pin 7.

In the chassis layouts, R12 is positioned incorrectly, it is shown connected to the end terminal of T4 (primary tap); it should be positioned and connected to the center terminal of T4 (end of primary winding).

RC-1224 Chassis
Oscillation on Strong Signal

Service Data
1965 No. 11

In a strong signal area an oscillation may be set up which will manifest itself by clamping of the A.G.C. and by causing a reverse bias to exist between the base and emitter of Q3, the first IF transistor.

This condition may be corrected by installing a ferrite bead on the emitter lead of Q4, the second IF transistor. The installation of the bead is accomplished by unsoldering the emitter lead of Q4, slipping the lead through the hole in the bead, and reinserting and resoldering the lead in the board.

The ferrite bead is available from Parts and Accessories under stock number 116761.

RGM 29
Correction

Service Data
1965 No. 20

In the schematic diagram of the RGM 29, the shield connection of Q4 should be removed from the base of Q4 and connected to ground.

In the chassis layout the shield of Q4 should be connected to the strip to which C25, R13 and the jumper are connected; this is the common or ground strip which is adjacent to the connection as shown.

RC-1215 Series Chassis
Schematic Correction

Service Data
1963 No. 15, T11-S1, T6-S1
1964 Nos. 4, 18, 19, T2-S1, T6-S1

On PB300 printed board, the B+ line feeding to R309 and T301 is shown connected, where it crosses, to the line joining R311, L302, C309 and C313. This connection is incorrect; there should be no connection at this point.

VGT 6, 7 Series
Specification Correction

Service Data
1965 No. 18

On page 2 of the Service Data the stock numbers shown for the pickup and stylus should be changed to read as follows:

Pickup (complete) (stock #115277)

Pickup (body only) (stock #115703)

Styli (stock #115911)

The listing in the parts list on page 18 is correct.

RS-195, A & B
Switch Change

Service Data
1961 Nos. 14, 14-S1

In "Radio and Victrola" Service Tips, Volume XVI, Issue 1 of March 12, 1965, a revision in the RS-195, A & B chassis was explained. This revision involved a change in the "Play/Record" switch S1.

The stock number of the new switch is 116513. Add this number to the replacement parts list.

YGS 21
Production Changes

Service Data
1965 No. 27

Late production of the YGS 21 tape recorder embodies the following changes:

Q1	changed from 2SB303 to 2SB346
R1	changed from 30 K ohms to 1.8 K ohms
R6	changed from 15 K ohms to 8.2 K ohms
R7	changed from 10 K ohms to 6.8 K ohms
R8	changed from 6.8 K ohms to 4.7 K ohms
R9	changed from 390 ohms to 240 ohms



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PARTS TIPS

IMPORTANT INFORMATION FOR YOUR SERVICE DEPARTMENT

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600 N. SHERMAN DRIVE, INDIANAPOLIS, 1, INDIANA

VOLUME XVI, ISSUE 3

DECEMBER 31, 1965

RP-217C, -218C, -219C Changers
New Pickup Arm Assembly

Service Data
1965 Nos. 13, 14, 15, 16
17, 18, 23, 24

The RP-217C series, RP-218C series and some of the RP-219C series of record changers embody a newly designed small-head pickup arm and associated pickup. This arm and pickup is used in all models of the above series changers which use a ceramic type pickup. It is not used in the RP-219C-39, -42 & -49 changers which utilize a crystal pickup.

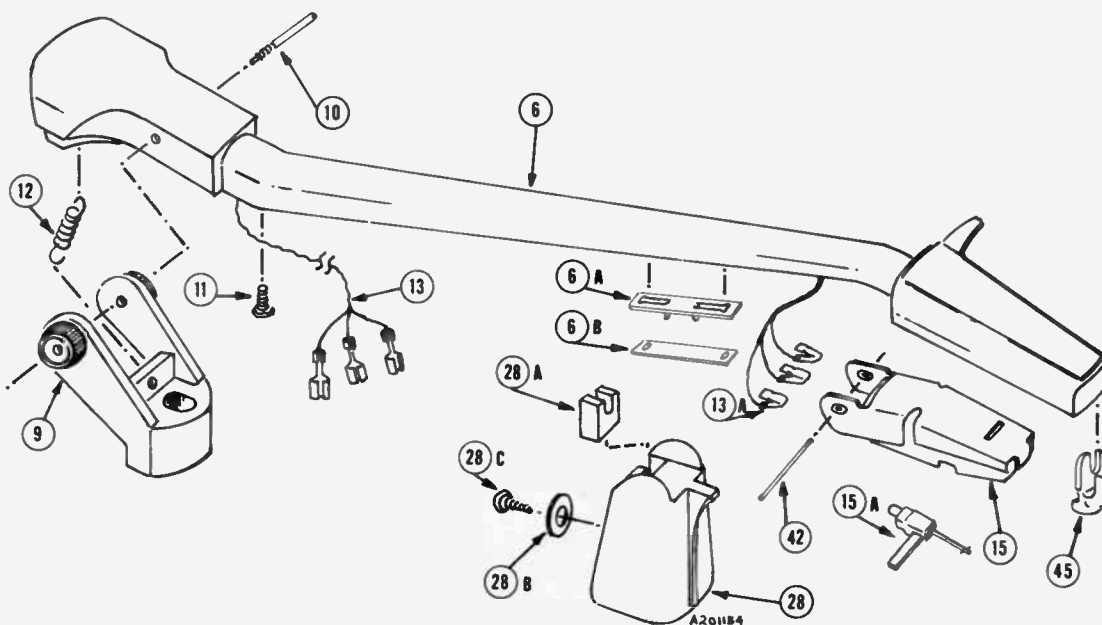
An exploded view of the new arm is contained in Service Data 1965 Nos. 17 & 18 and is reproduced below for your information and convenience. The Service Data for the individual instruments which use a changer embodying this new arm contain the parts list for the arm. The complete parts list for all versions of the new arm is included herein.

The RP-217C, RP-218C and RP-219C group of changer mechanisms are basically the same as those in the RP-217B, RP-218B and RP-219 group, the difference being mainly in appearance items. Servicing and parts information for a "C" group changer is referenced to Service Data 1964 No. 20 for a similar "B" group changer. The differences in the parts, where they exist, are listed in the Replacement Parts List in the individual instrument data.

To obtain complete and correct information on a RP-217C, RP-218C or RP-219C changer, Service Data 1964 No. 20 and the Service Data on the individual instrument must be used in conjunction with each other.

REPLACEMENT PARTS

SYMBOL NO.	STOCK NO.	DESCRIPTION
6	115348	Arm—pickup arm, less pickup (RP-217C-12, -22, -29)
6	115702	Arm—pickup arm, less pickup (RP-218C-12, -12B, -12S)
6	115349	Arm—pickup arm, less pickup (RP-219C-12, -12A, -29H)
6A	115926	Clip—pickup arm rest (Part of arm)
6B		Plate—magnetic, pickup arm rest (RP-218C-12B, RP-219C-12, -12A)
9	115343	Bracket—pickup arm horizontal pivot (RP-217C-12, -22, -29, RP-219C-12, -29H)
9	115556	Bracket—pickup arm horizontal pivot (RP-218C-12, -12B, -12S, RP-219C-12A)
10	115342	Shaft—pickup arm vertical pivot
11	115340	Screw #6—32 x 0.38" flat hex hd.—pickup arm lift
12	115339	Spring—pickup arm counterbalance
13	115345	Cable—pickup (part of arm)
13A		Connector—single contact, male—for pickup
15	115276	Pickup—with S/S styli—with slot mounting (RP-217C-22, -29)
15	115302	Pickup—with S/S styli—with hole mounting (RP-219C-29H)
15	115277	Pickup—with D/S styli—with slot mounting (RP-217C-12, RP-218C-12, 12B, 12S)
15	115303	Pickup—with D/S styli—with hole mounting (RP-219C-12, -12A)
15	115347	Pickup—less styli—with hole mounting (RP-219C-12, -12A, -29H)
15	115703	Pickup—less styli—with slot mounting (RP-217C-12, 22, 29, RP-218C-12, -12B, -12S)
15A	115329	Styli—0.7 mil syn. sapp./3 mil syn. sapp. assembly (RP-217C-22, 29, RP-219C-29H)
15A	115911	Styli—0.7 mil diamond/3 mil syn. sapp. assembly (RP-217C-12, RP-218C-12, -12B, -12S, RP-219C-12, -12A)
28	115915	Rest—pickup arm, magnetic
28A	115910	Magnet—pickup arm rest
28B	115920	Clamp—pickup arm rest magnet retaining
28C		Screw—#4 x 0.05" S.T., P.H., magnet retaining
42	115341	Shaft—pickup vertical pivot
45	115327	Retainer—pickup, with pad





RCA VICTOR

