H.G.PALMER

1/06 TV RECEIVER CHASSIS

RC1P TV REMOTE CONTROL UNIT

SERVICE MANUAL

CIRCUIT DIAGRAMS

PARTS LISTS

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Sales Research Department

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INSTALLATION

MAINS SUPPLY

The power transformer is wired-up in the factory for 240 V. operation of 50 cps.

FUSES

1. 1.5 Amp. fuse in the primary of the power transformer.
2. Copper wire fuse of 0.010" dia. on the 6.3V filament windings.

AERIAL CONNECTION

Normal 300 ohms transmission line connected directly to the terminals - panel, at the rear of the cabinet.

INSTALLATION

Install receiver so that direct light from windows or doors or bright artificial lighting does not fall on the screen, and where there is good ventilation.

INFORM THE CUSTOMER

(a) Switching Off:

Use the OFF knob on the control panel. Never switch off the set at the power point.

(b) Faulty Sound or Picture:

Switch off the set immediately, remove power plug from wall socket and call H.G.P. Service.

DISMANTLING

CHASSIS REMOVAL

Most servicing can be performed without removing the chassis. For service access, remove the cabinet back. You will find the chassis is vertically mounted around the neck of the picture tube and pivoted at the base. After withdrawal of the two transit screws only one bolt is necessary to retain it in position. Removal of this single bolt allows the chassis to be tilted outwards exposing the components.

DISMANTLING (CONT.)

If complete removal is necessary first disconnect the power plug from the mains socket, then disconnect picture tube socket and pull out cathode-lead pin from the side of this socket. Then pull out:

Yoke plug, 12-pin plug (connection between tuner and chassis).

E.H.T. Lead.

Speaker leads.

Pins of 300 ohms strip (connection between Contrast Pot and chassis).

Shielded lead from its sockets, mounted on the tuner. (Tuner output to IF strip.)

In this position the chassis can easily be lifted out of its hinges and removed altogether from the cabinet.

STORING AND TRANSPORTING CHASSIS

Two transit brackets have been provided both side of the chassis for storing and transporting, to safeguard valves and wiring components.

PICTURE TUBE REMOVAL

Remove chassis mounting base from the cabinet bottom (4 bolts, ½" x ¼" RH).

Remove spring, earthing picture tube external conductive coating.

Remove picture mounting bolts (2 top and 2 bottom bolts ½" x ¼" RH) then lift out the picture tube.

PICTURE TUBE TAPING

All replacement picture tubes AW 59-91 must be taped around the edge with 'Everseal' rubber strips, 1½" wide.
Do not attempt to handle the picture tube by its neck, breakage of the tube may cause injury.

ALIGNMENT PROCEDURES

VIDEO I. F. ALIGNMENT

Remove Yoke plug from socket. Set channel selector on blank channel and supply - 8V bias to 1st I. F. 6U9 valve junction R 2 C26.

Connect oscilloscope to grid pin 8 of 6Y9 valve socket through a 47K ohms resistor. Inject signal from a properly terminated sweep generator via 1000 pf capacitor to the I. F. injection point on tuner.

Set sweep generator output to give 2 V pp output on oscilloscope screen during alignment; adjust the I. F. transformers for peak output at the points on the response curve at which the markers occur; adjust the trap I. F. coils for minimum output at the points on the response curve at which the markers occur.

Coils:	L 1	32 mc/s	Maximum
	T 7	34 mc/s	Maximum
	T 8	34 mc/s	Maximum
	Link coil on tuner	36 mc/s	Maximum

Traps:	L 2	38 mc/s marker for Minimum
	L 3	30.6 mc/s marker for Minimum
	L 4	29 mc/s marker for Minimum

Repeat if necessary to obtain maximum gain of response curve Fig. 1 illustrated on circuit diagram, with minimum gain at 30.6 mc/s, 38 mc/s and 29 mc/s marker frequencies.

NOTE: Reduce bias if required during alignment of traps: overall I. F. curve should maintain a substantially constant shape with a bias change from 0-15V.

SOUND ALIGNMENT

This alignment is made by injecting an accurate 5.5 mc/s signal into pin 8 of V3A 6Y9. The station alignment method which follows is practical in that an accurate 5.5 mc/s signal is available, and could be used whenever possible. The alignment procedure is the same whether the test signal originates from a station or from a generator.

Tune in station (or connect 5.5 mc/s crystal controlled generator pin 8 V3A 6Y9).
Connect VTVM (set for DC voltage measurement) to ratio detector from positive of AA119 diode to ground.

Adjust signal input to maintain +5 volts at this point.

1. ADJUST audio take off coil L10, and primary (bottom) of ratio detector T6 for maximum reading.

2. SET VTVM to junction of R45, R46 and ground. ADJUST secondary (top) of ratio detector T6 for zero reading. (Note: The primary and secondary of the ratio detector T6 have two tuning points; the proper position of cores should be towards the outside of the coil.)

5.5 mc/s TRAP ADJUSTMENT L7

Carefully tune receiver to local station and advance contrast control.

Adjust L7 to find the two points of adjustment at which beat is just noticeable on the picture tube screen. Rotate the core towards centre of two points.

VERTICAL LINEARITY AND SIZE ADJUSTMENT

Located at the rear of receiver near vertical hold potentiometers

Vertical size control R62 should be adjusted in conjunction with the vertical linearity control R61 to obtain correct vertical scanning. Both these controls are slotted potentiometers for screwdriver adjustment.

HORIZONTAL LINEARITY ADJUSTMENT

To adjust, release hex. locking nut and adjust metal insert in coil L13.

A.G.C. LEVEL SETTING

1. Contrast control set to minimum.
2. A.G.C. control R31 is adjusted till a milky picture without loss of sync is obtained.
3. Check operation of contrast control for normal picture; if required, reset A.G.C. control.

PICTURE TUBE ADJUSTMENTS (See page 13.)

Picture Tilt - Loosen yoke bracket screws. Adjust yoke to correct picture tilt. Re-tighten yoke bracket screws.

Picture Centring - Rotate the two centring rings located at rear of yoke assembly until picture is properly centred.

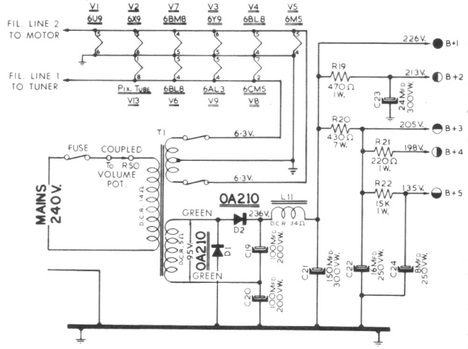
VALVES AND DIODES

Circuit Ref.	Type		Operation
V1	6U9	A section	Pentode: 1st Video Amplifier.
		B section	Triode: 2nd Sync clipper, Phase Inverter.
V2	6X9	A section	Pentode: 2nd Video IF.
		B section	Triode: AGC Amplifier.
V3	6Y9	A section	Pentode: Video Amplifier.
		B section	Pentode: 1st Sync clipper.
V4	6BL8	A section	Pentode: 5.5 Amp. Limiter.
		B section	Triode: Audio Amplifier.
V5	6M5		Pentode: Audio Output
V6	6BL8	A section	Pentode: Hon. Osc. (Collpit)
		B section	Triode: AFC, Reactance.
V7	6BM8	A section	Pentode: Vertical Output.
		B section	Triode: Vertical Oscillator.
V8	6CM5		Pentode: Line Output.
V9	6AL3		Diode: Damper.
V10	1S2		Diode: EHT. Rectifier.
V11	6ES8		Twin Triode: RF Amplifier.
V12	6HG8		Triode Pentode: Converter.
V13	110°	23" Picture Tube AW 59-91	Used with safety glass.
	110°	23" Picture Tube A 59 -11W	Used without safety glass.
D1	OA210	Voltage Doubler	Silicon Rectifier.
D2	OA210	Voltage Doubler	Silicon Rectifier.
D3	OA90		Video Detector.
D4 & D5	2XAA119		Radio Detectors (matched pair).

I/06 TV CHASSIS

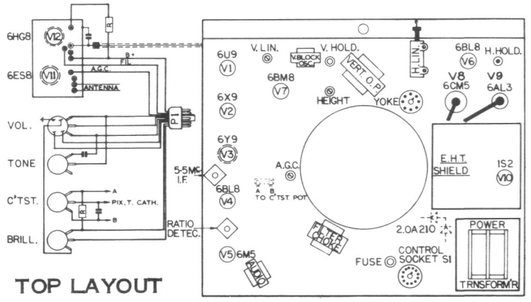
C.№	
R.№	

POWER SUPPLY
CIRCUIT DIAGRAM

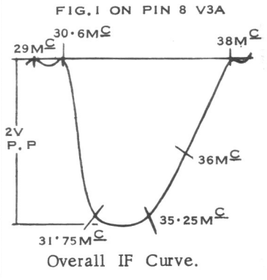


NOTES:

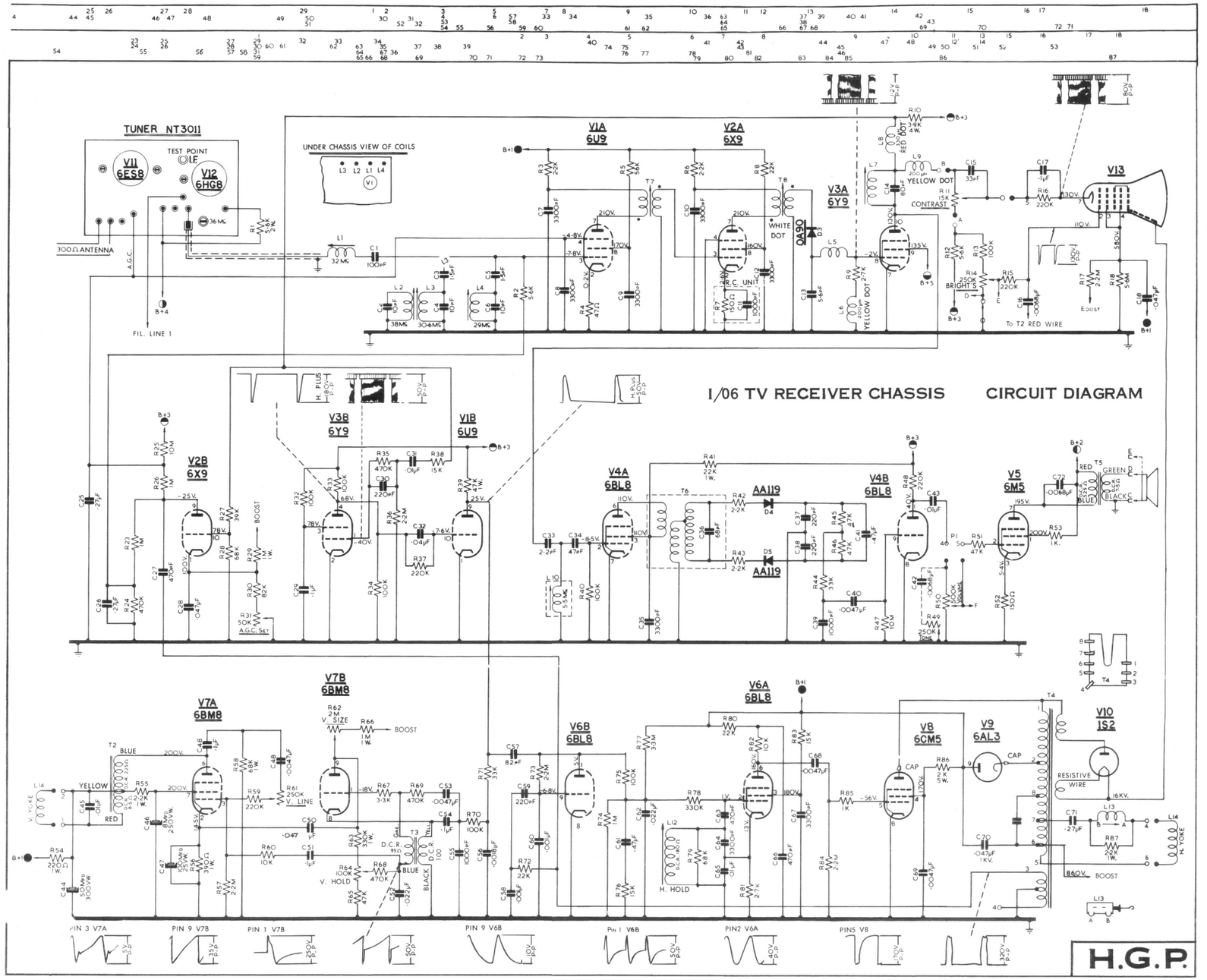
1. ALL RESISTORS ½ WATT UNLESS OTHERWISE SPECIFIED.
2. R49 & C42 NOT USED ON SOME MODELS.
3. TUNER LINK LEAD CUT IN TUNER.
4. VOLTAGE MEASUREMENTS:
   - A. MEASURED ON STANDARD PRODUCTION CHASSIS, ON SIGNAL GIVING 80 V.P.P. DRIVE TO PIX. CATHODE, CONTROLS SET FOR NORMAL OPERATION.
   - B. D.C. VOLTAGE MEASUREMENTS TAKEN WITH V.T.V.M. FROM SOCKET PIN TO CHASSIS.
   - C. A.C. VOLTAGES TAKEN WITH 2000 O.P.V.A.C. METER.
5. WAVE FORMS TAKEN WITH HIGH IMPEDANCE LABORATORY QUALITY OSCILLOSCOPE.
6. SPEAKER OUTLETS: USE SOCKETS C & D FOR SPEAKER CONNECTION FOR MODELS WITHOUT R.C.
   USE " C & E " " " " " "
   WITH R.C.
7. FIG.1 OVERALL I.F. RESPONSE CURVE AS MEASURED AT GRID PIN 8 6Y9 THROUGH 47 KOHM RESISTOR.



TOP LAYOUT



Overall IF Curve.

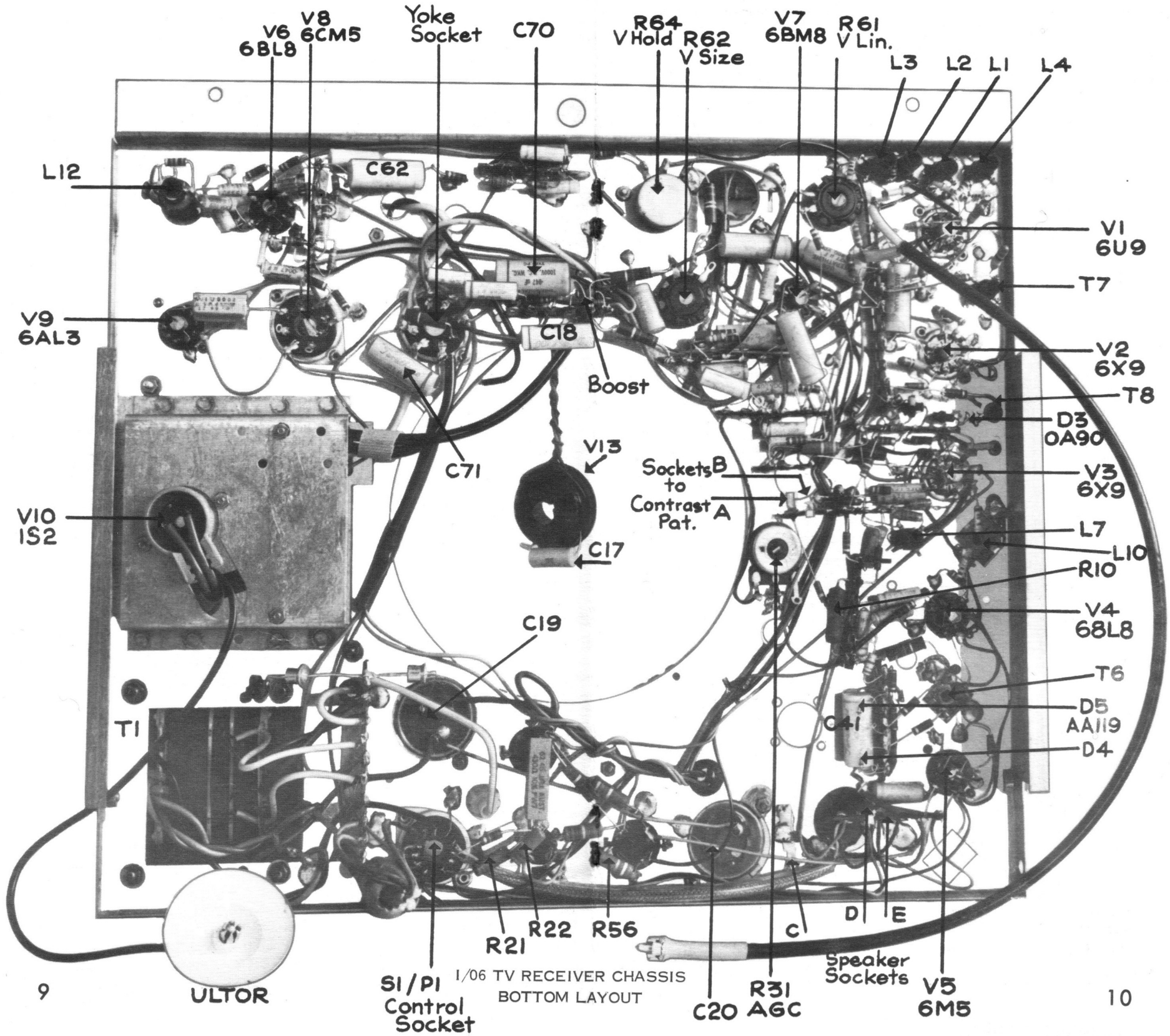


COILS AND TRANSFORMERS

Circuit Ref.	Description	K. G. H. Part No.
L 1	Tuner link coil	1/02/060
L 2	38 mc/s trap coil	1/02/060
L 3	30.6 mc/s trap coil	1/02/060
L 4	29 mc/s trap coil	1/02/060
L 5	Tweet coil	1/02/052
L 6	Grid peaking coil. Yellow dot	1/06/056
L 7	5.5 mc/s trap coil	1/02/062
L 8	Plate peaking coil Red dot	1/06/057
L 9	Plate peaking coil Yellow dot	1/06/056
L10	5.5 mc/s sound take off	1/01/055
L11	Filter choke	1/01/051
L12	H. Osc. coil red dot	1/06/058
L13	H. linearity coil (Miniwatt)	AT4008T/91
L14	Yoke (Miniwatt)	AT1011T/94
T 1	Mains Power Transformer	1-01-050 OR 1-06-050
T 2	Vertical output transformer	1-01-054
T 3	Blocking oscillator transformer	1-01-053
T 4	Line output transformer (Miniwatt)	NT3102
T 5	Audio output transformer	1-01-052
T 6	Ratio detector	1-06-059
T 7	1st Video I.F.	1-02-061
T 8	2nd Video I.F. white dot	1-03-063
	Tuner (Miniwatt)	NT3011

NOTE:

L12 H Osc. coil white dot can also be used. (If used, leave centre tap open circuit, do not earth.)



I/06 TV RECEIVER CHASSIS
BOTTOM LAYOUT

RESISTORS

Circuit Ref.	Value	Tol.	Wattage
R1	5.6K	ohms 10%	2 watt
R2	5.6K	ohms 10%	½ watt
R3	2.2K	ohms 10%	½ watt
R4	47	ohms 10%	½ watt
R5	56K	ohms 10%	½ watt
R6	2.2K	ohms 10%	½ watt
R7	RC unit 26-38		
R8	22K	ohms 10%	½ watt
R9	2.7K	ohms 10%	½ watt
R10	3.9K	ohms 10%	4 watt
R11	15K pot linear curve		
R12	5.6K	10%	½ watt
R13	100K	10%	½ watt
R14	250K pot linear curve		
R15	220K	10%	½ watt
R16	220K	10%	½ watt
R17	2.2M	ohms 10%	½ watt
R18	5.6M	ohms 10%	½ watt
R19	470	ohms 10%	1 watt
R20	430	ohms 10%	7 watt
R21	220	ohms 10%	1 watt
R22	15K	ohms 10%	1 watt
R23	1M	ohms 10%	½ watt
R24	470K	ohms 10%	½ watt
R25	10M	ohms 10%	½ watt
R26	1 M	ohms 10%	½ watt
R27	39K	ohms 10%	½ watt
R28	68K	ohms 10%	½ watt
R29	1 M	ohms 10%	1 watt
R30	82K	ohms 10%	½ watt
R31	50K	linear pot	
R32	100K	ohms 10%	½ watt
R33	100K	ohms 10%	½ watt
R34	100K	ohms 10%	½ watt
R35	470K	ohms 10%	½ watt
R36	2.2M	ohms 10%	½ watt
R37	220K	ohms 10%	½ watt
R38	15K	ohms 10%	½ watt
R39	47K	ohms 10%	1 watt
R40	100K	ohms 10%	½ watt
R41	22K	ohms 10%	1 watt
R42	2.2K	ohms 10%	½ watt
R43	2.2K	ohms 10%	½ watt
R44	33K	ohms 10%	½ watt

Circuit Ref.	Value	Tol.	Wattage
R45	47K	ohms 10%	½ watt
R46	47K	ohms 10%	½ watt
R47	10M	ohms 10%	½ watt
R48	220K	ohms 10%	½ watt
R49	250K	tone "C" curve	
R50	500K	Volume "C" curve	
R51	47	ohms 10%	½ watt
R52	150	ohms 10%	½ watt
R53	1 K	ohms 10%	½ watt
R54	220	ohms 10%	1 watt
R55	2.2K	ohms 10%	1 watt
R56	390	ohms 10%	1 watt
R57	2.2M	ohms 10%	½ watt
R58	68K	ohms 10%	1 watt
R59	220K	ohms 10%	½ watt
R60	10K	ohms 10%	½ watt
R61	250K	ohms linear pot	
R62	2 M	ohms linear pot	
R63	330K	ohms 10%	1 watt
R64	100K	ohms linear pot	
R65	47K	ohms 10%	½ watt
R66	1 M	ohms 10%	1 watt
R67	3.3K	ohms 10%	½ watt
R68	470K	ohms 10%	½ watt
R69	470K	ohms 10%	½ watt
R70	100K	ohms 10%	½ watt
R71	33K	ohms 10%	½ watt
R72	22K	ohms 10%	½ watt
R73	2.2M	ohms 10%	½ watt
R74	1 M	ohms 10%	½ watt
R75	100K	ohms 10%	½ watt
R76	15K	ohms 10%	½ watt
R77	3.3M	ohms 10%	½ watt
R78	330K	ohms 10%	½ watt
R79	68K	ohms 10%	½ watt
R80	22K	ohms 10%	½ watt
R81	2.7K	ohms 5%	½ watt
R82	10K	ohms 10%	½ watt
R83	15K	ohms 10%	½ watt
R84	2.2M	ohms 10%	½ watt
R85	1K	ohms 10%	½ watt
R86	2K	ohms 10%	5 watt
R87	2.2K	ohms 10%	1 watt
R88	2.2K	ohms 10%	½ Watt

CAPACITORS

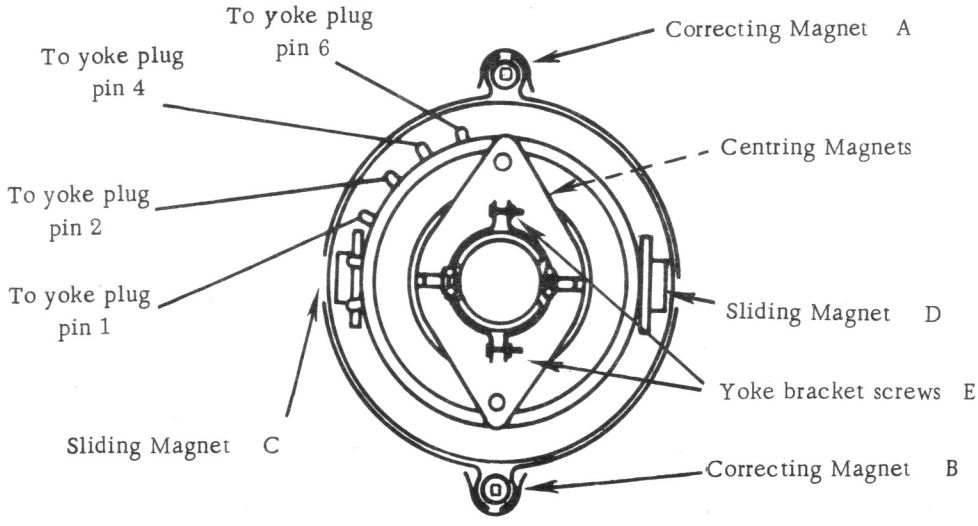
Circuit Ref.	Value	Tol.	Voltage	Type
C1	100 pf	5%	500V	D.C. Ceramic
C2	10 pf	5%	500V	D.C. Ceramic
C3	1.5pf ± 0.25 pf		500V	D.C. Ceramic
C4	10 pf	5%	500V	D.C. Ceramic
C5	1.5pf ± 0.25 pf		500V	D.C. Ceramic
C6	10 pf	5%	500V	D.C. Ceramic
C7	3300pf	-20+50%	500V	D.C. Ceramic
C8	3300 pf		do.	
C9	3300 pf		do.	
C10	3300 pf		do.	
C11	Part of RC unit R7			
C12	3300 pf.	-20+50%	500V	D.C. Ceramic
C13	5.6 pf	5%	500V	D.C. Ceramic
C14	80 pf	10%	500V	D.C.
C15	33 pf	10%	500V	D.C. Ceramic
C16	.0068 mfd	10%	600V	Polyester
C17	.1 mfd	10%	200V	Polyester
C18	.047 mfd	10%	600V	Polyester
C19	100 mfd		200V	WKG Electro
C20	100 mfd		200V	WKG Electro
C21	150 mfd		300V	WKG Electro
C22	16 mfd		250V	WKG Electro
C23	24 mfd		300V	WKG Electro
C24	8 mfd		250V	WKG Electro
C25	0.27 mfd	10%	200V	DC Polyester
C26	0.27 mfd	10%	200V	DC Polyester
C27	470 pf	10%	600V	DC Styroseal
C28	0.047 mfd	10%	400V	DC Polyester
C29	0.1 mfd	20%	200V	DC Polyester
C30	220 pf	10%	125V	DC Styroseal
C31	.01 mfd	10%	400V	DC Polyester
C32	.04 mfd	20%	200V	DC W99
C33	2.2 pf ± 0.25 pf	NPO	500V	DC Ceramic
C34	47 pf ± 5%	NPO	500V	DC Ceramic
C35	3300 pf	-20+50%	500V	DC Ceramic
C36	68 pf	N750		Ceramic

Circuit Ref.	Value	Tol.	Voltage	Type
C37	220 pf	10%	125V	DC Styroseal
C38	220 pf	10%	125V	DC Styroseal
C39	.001 mfd	10%	400V	DC Polyester
C40	.0047 mfd	10%	400V	DC Polyester
C41	.47 mfd	10%	200V	DC Polyester
C42	.0068 mfd	10%	600V	DC Polyester
C43	.01 mfd	10%	400V	DC Polyester
C44	50 mfd		300V	WKG Electro
C45	.01 mfd	10%	400V	DC Polyester
C46	8 mfd		250V	WKG Electro
C47	100mfd		25V	WKG Electro
C48	.1mfd	10%	400V	DC Polyester
C49	0.0047 mfd	10%	400V	DC Polyester
C50	.047 mfd	10%	400V	DC Polyester
C51	.1 mfd	10%	200V	DC Polyester
C52	.022 mfd	10%	400V	DC Polyester
C53	.0047 mfd	10%	400V	DC Polyester
C54	.1 mfd	10%	400V	DC Polyester
C55	.001 mfd	10%	400V	DC Polyester
C56	.0018 mfd	10%	400V	DC Polyester
C57	82 pf	10%	600V	Styroseal
C58	.001 mfd	10%	400V	DC Polyester
C59	220 pf	10%	1000V	Styroseal
C60	.001 mfd	10%	400V	DC Polyester
C61	.47 mfd	10%	200V	DC Polyester
C62	.022 mfd	10%	400C	DC Polyester
C63	470 pf	10%	600V	DC Styroseal
C64	.0033 mfd	5%	630V	DC Polyester
C65	.01 mfd	10%	400V	DC Polyester
C66	470 pf	10%	600V	DC Styroseal
C67	3300pf	-20+50%	500V	DC Ceramic
C68	.0047 mfd	10%	400V	DC Polyester
C69	4700 pf	-20+50%	500V	DC Ceramic
C70	.047 mfd	20%	1000V	DC Paper
C71	.27 mfd	10%	200V	DC Polyester
C72	.0068 mfd	10%	600V	DC Polyester
C73	1000 pf	10%	400 VDC	Polyester

NOTE: Ceramic Capacitors C7, C8, C9, C10, C12, C35, C67:

Capacitance either 2,200 pf or 3,300 pf ± 50%.
500V. DC working types used.

YOKE WIRING



The two ferrite magnets mounted on sliding clips C and D are for compensation of horizontal 'pincushion' distortion.

Two cylindrical correcting magnets A and B are for compensation of vertical pincushion distortion. These magnets can be turned between the pole shoes for correction. Normally these magnets do not require field adjustment and are factory set and sealed.

Note: Yoke plug pins 3 and 8 have jumper wired in, therefore when yoke plug is removed, R plus to 6CM5 V8 is removed and horizontal output stage does not work, permitting receiver to be bench aligned on video I.F. and sound.

TWELVE-PIN SOCKET (P1) WIRING

(Tuner sub chassis to mains chassis connection).

Pin Socket		Pin Socket	
1	wired to power cord mains input	7	Tuner B + 4
2	wired to fuse	8	wired to 22oK (R15) brightness
3	wired to earth	9	speaker transformer T5, E.
4	wired to C43 (V4B plate) volume	10	Filament 6.3V line 2
5	wired to R51 (6M5 grid) volume	11	Filament 6.3V line 1
6	Tuner AGC	12	Speaker transformer T5, D.

RC1P TV REMOTE CONTROL UNIT

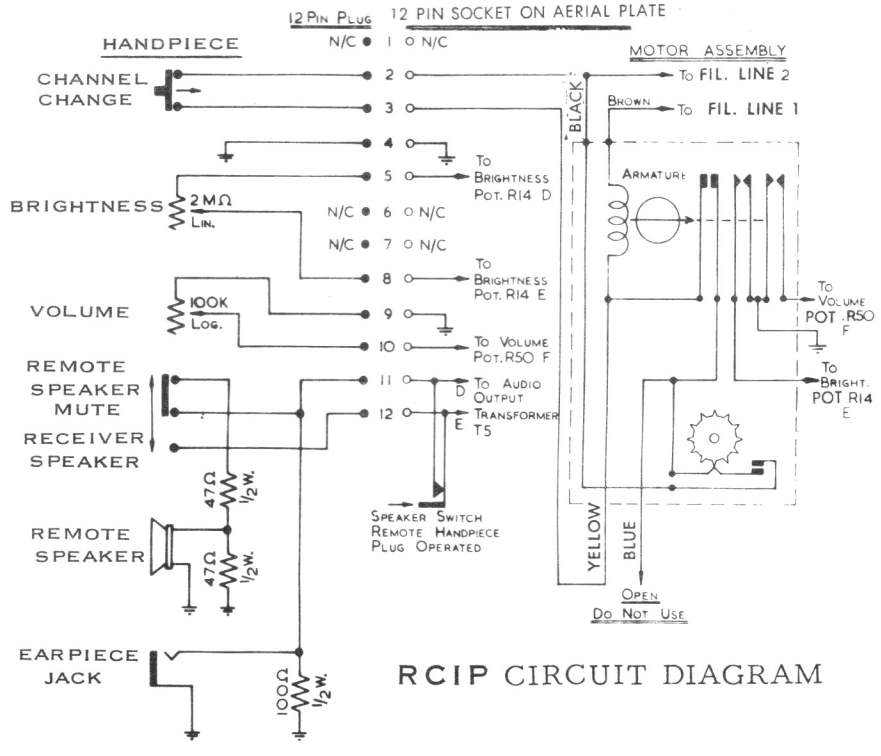
The RC1P TV Remote Control Unit has been designed to perform the following operations:

Channel Selection
Speaker Selection
Sound Volume adjustment
Picture brightness adjustment.

The Remote Control Unit is equipped with 25 feet of flex, sufficient for quite large rooms, and a plug at the end of the flex connects with a socket on the back of the receiver. When not in use, the Hand Unit may be laid on the top of the TV cabinet or placed on the wire hook attached to the cabinet back. If desired, the flex may be coiled around the spools provided on the cabinet back.

SETTING UP PROCEDURE FOR AUTOMATIC INDEXING

The nylon Indexing Sprocket of the Remote Control drive at the rear of the tuner is numbered 0-11 to correspond to the Australian Television Channels. The sprocket teeth which correspond to the channels which are required by the user are the only ones to be left intact. All teeth which represent the channels not required are to be broken off by bending them back with a pair of long-nosed pliers.



RC1P CIRCUIT DIAGRAM

RCIP

TV REMOTE CONTROL UNIT

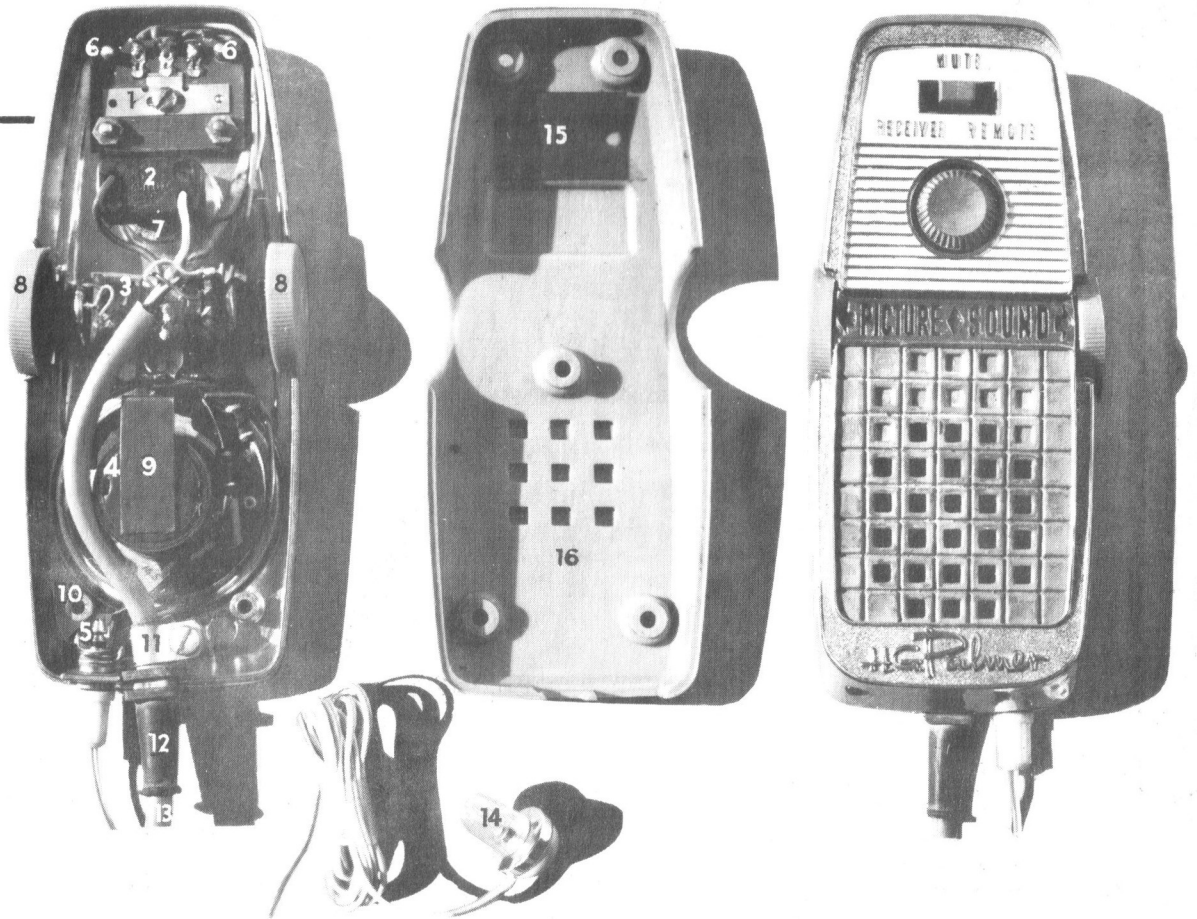
PARTS LIST

PART NO.	DESCRIPTION
108-1	Top Plate
108-2	Bottom cover
108-3	Control Knob
108-4	Push Button
108-5	Spring Retaining Speaker
108-7	Mounting Stud
108-8	Pillar Nut
108-9	Grommet Cable Entry
108-10	Switch 3 position sliding
108-11	Hook (Mounting unit at rear of receiver)
2624	Switch push off
2648	Switch push on
2.V	2" Speaker
15/01/101	Potentiometer Min 100K C Curve
15/01/102	Potentiometer Min 2.0 meg A Curve
ST.212	12 Pin Socket
PS212C	12 Pin Plug
MR13	Earphone and plug with
T40D	Jack Miniature
SM52	2 Lug Strip
CS	Remote control motor unit
679-2-5	Ant. terminal strips
15/01/002	Plate mounting remote control motor
15/01/003	Spacer mounting R/C plate
15/01/004	Plate mounting R/C socket and Ant. strip
15/01/006	Bracket mounting switch (R/C & Ant. plate)
1/05/209	Insulator strip (Ant. lead tuner)
H.180	Clamp cable

RCIP TV REMOTE CONTROL UNIT

PARTS IDENTIFICATION

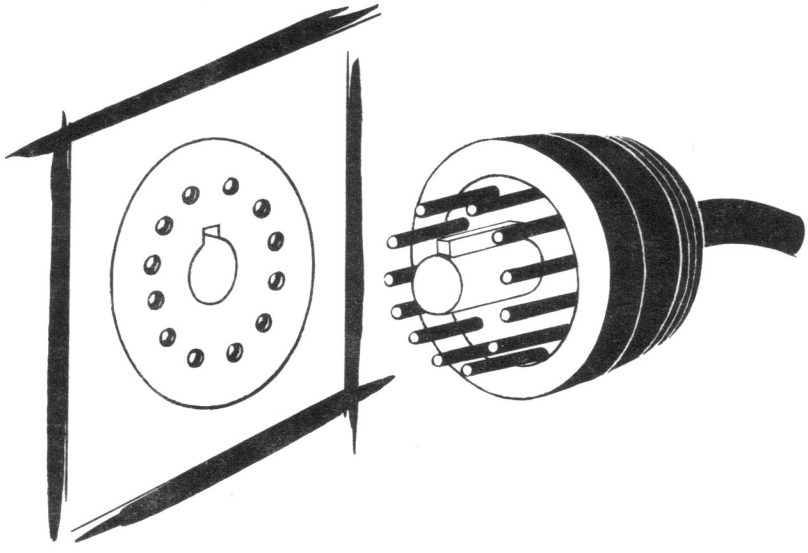
1. Slide Switch
2. Push Switch
3. 100 K ohm Volume Pot "C" Curve
4. 2" Speaker, 2V
5. Earpiece Jack
6. Pillar Nut
7. Spacer
8. Knobs
9. Speaker Spring
10. Mounting Studs
11. Hose Clamp
12. Cord Grommet
13. Cable to R/C Socket
14. Earpiece
15. Slot Cover
16. Bottom Cover



Speaker Output 200 mW

SETTING UP FOR REMOTE CONTROL OPERATION

Fit the Hand Unit plug well into the TV receiver, taking care to line up the key tongue of the plug with the keyway slot of the socket.



Switch on the TV Receiver and turn the volume and brightness controls of the set to a high level.

Full Remote Control by the Hand Unit is now available.

INTERACTION BETWEEN TV RECEIVER AND R/C HAND UNIT

When TV Receiver and Remote Control Unit are interlinked the controls of either the Hand Unit or the TV Receiver cannot be raised above the level of the other's setting. The lowest setting of either will operate as a limit.

So when you want to operate the Hand Unit set the TV Receiver Controls to the maximum and reduce volume and brightness to the desired level by using the wheel knobs.

Likewise when you want to operate the controls on the TV set the Hand Controls to maximum and reduce volume and brightness from the controls on the TV set.

OPERATING BY REMOTE CONTROL

SPEAKER SELECTION

You may select RECEIVER speaker or the REMOTE speaker in the Hand Unit or MUTE both with the slide switch and listen through earpiece. (You will notice that the earpiece is on even when either of the speakers is working.)

CHANNEL SELECTION

To change channels press the central button once and release. The motor driven channel selector in the TV receiver will then automatically rotate to the next pre-set position.

The Channel Selector rotates in clockwise direction only. (e.g. from Channel 4 to Channel 2 through 5, 6, 7 etc). Your receiver has been pre-set before delivery to stop at the Channels available for reception. If you wish the Channel Selector to travel non-stop past one or more stations, hold the button down.

ADJUSTING SOUND AND PICTURE BRIGHTNESS

Set SOUND volume and PICTURE brightness to the desired level by turning the wheel knobs.

SWITCHING OFF

The Remote Control Unit is used for convenient selection of channels, as well as sound and picture adjustment. Reception is switched off at the TV set.

MODIFICATIONS

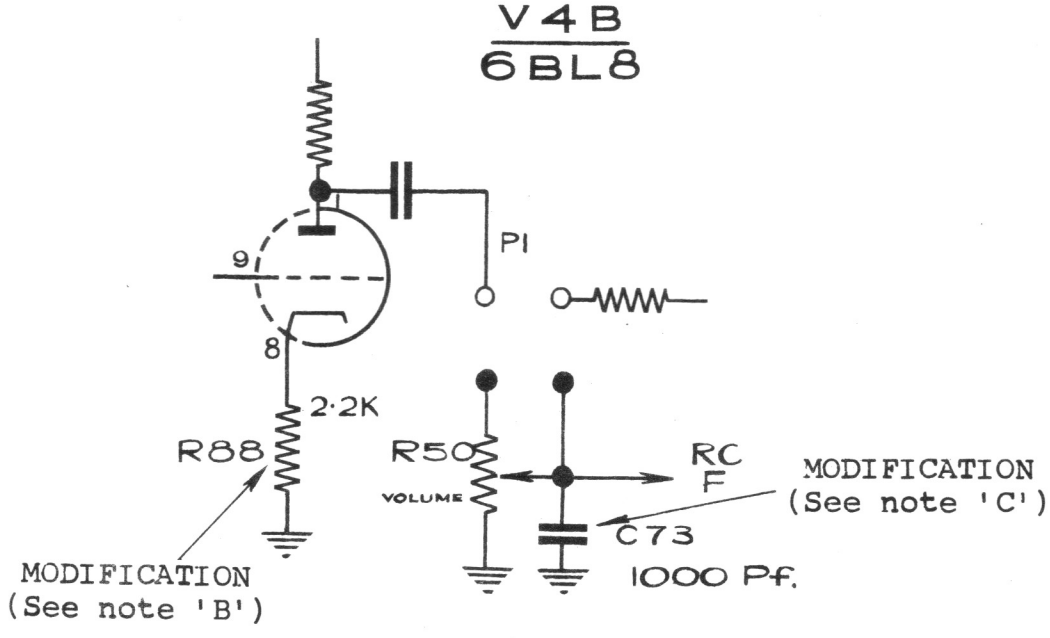
SINCE THE PRODUCTION STARTED THE FOLLOWING CHANGES HAVE BEEN MADE:

A) Audio Output Transformer changed to OPS 55 type.

B) 2.2K ohms ½ Watt 10% Resistor added from cathode of V4B. 6BL8 pin 8, to earth. This resistor will be listed as R88.

C) For models, which do not have Tone Control: a/1000pf. 400V. 10% polyester condenser has been fitted from the moving arm of Volume Control (R50) to earth. This condenser will be listed as C73.

Reason for change: to improve sound.



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