



# RADIO CORPORATION PTY. LTD.

DIVISION OF ELECTRONIC INDUSTRIES LTD.

126-130 GRANT STREET, SOUTH MELBOURNE, S.C.4.

BULLETIN: GPS-3  
File: Receivers  
Portable.  
Date: 20/4/55  
Page: 1.

## TECHNICAL BULLETIN

### “MODEL GPS” (2nd Version)

5 VALVE SUPERHETERODYNE UNIVERSAL PORTABLE RECEIVER

Function Switch Positions

1. Internal Battery Operation.
2. Receiver "Ofr."
3. AC. or DC. Mains Operation.
4. Battery Reactivation.

#### FOR OPERATION FROM:

195-260 Volt 40-60 Cycle A.C. electric supply mains.  
 195-260 Volt D.C. electric supply mains or  
 9 volts "A" battery and  
 90 volts "B" battery. (Two 45 volt "B" batteries connected in series.)

#### POWER CONSUMPTION:

Battery operation:- 50mA. "A" Battery.  
 11mA. "B" Battery.  
 A.C. operation:- 100mA. 230 volts 50 cycle A.C. input to receiver. Mains resistor adjustable clip adjusted to 230V. position  
 D.C. operation:- 60mA. 230 volts D.C. input to receiver. Mains resistor adjustable clip adjusted to 230V. position.

#### TUNING RANGE:

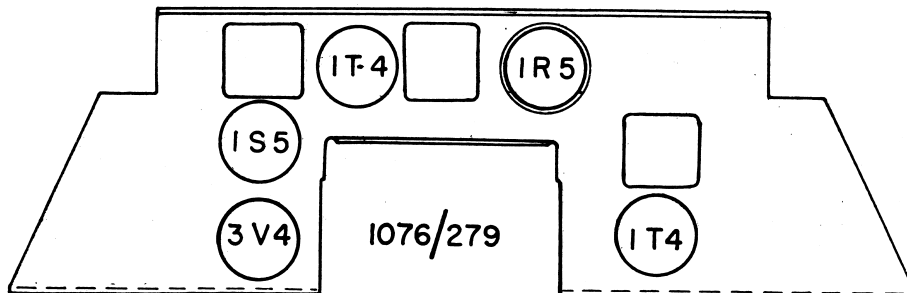
535 to 1620 Kilocycles. 560.7 to 185.18 Metres.

#### POWER OUTPUT:

250 milliwatts (max.).  
 100 milliwatts (undistorted).

#### THIS BULLETIN CONTAINS:-

1. Technical Data.
2. Alignment Procedure.
3. Circuit Diagram.
4. Component Parts List.
5. I.F. and R.F. Transformer Connections.
6. Instructions for fitting New Batteries.
7. Instructions for changing Mains Voltage Tap Positions.
8. Cleaning Agent for Plastic Cabinet.
9. External Aerial and Earth Connections.
10. Storage when out of use.
11. Battery Reactivation.
12. Alignment Template.
13. Dial Readings.



2.

## ALIGNMENT INSTRUCTIONS

EQUIPMENT	ALIGNMENT CONDITIONS
Signal Generator:	Load Impedance: 10,000 ohms.
Output Meter:	Output Level: 25 milliwatts.
Safety Lamp: 230 volt 40 watt incandescent lamp.	Volume Control: Max. vol. (fully clockwise).
Mica Capacitor: 0.01MF (part No. PC145) for I.F.T. Alignment.	'A' Battery: 9 volts.
Alignment Template: Part No. PB758	'B' Battery: 90 volts (two 45 volt 'B' batteries connected in series).
Alignment Tools: Part No. PM581 and M195.	Intermediate Freq.: 455 Kc/s.

**TO REMOVE CHASSIS FROM CABINET:** Turn the receiver switch marked "BATT"-  
"OFF"- "MAINS"- "REACT" to the "OFF" position and withdraw the AC/DC mains lead  
plug from the small socket at the rear of the receiver cabinet.

Remove the dial pointer centre tuning push-on knob by pulling it straight  
off the tuning control spindle. Remove volume control and ON/OFF switch knobs  
by loosening off the small grub screws in the knobs. (The first production run had  
push-on type knobs and no grub screws). Unscrew and remove two screws through  
top ridge of cabinet, then from top of cabinet prise rear section of cabinet  
away from front section. Disconnect from speaker the lead connecting speaker  
frame to chassis.

The chassis is held in the cabinet by a  $\frac{3}{4}$ " x 5/32" Whit. screw and nut at  
each end of the chassis. Loosen off these two screws, withdraw speaker lead plug  
from socket on chassis then lift the chassis out of the cabinet.

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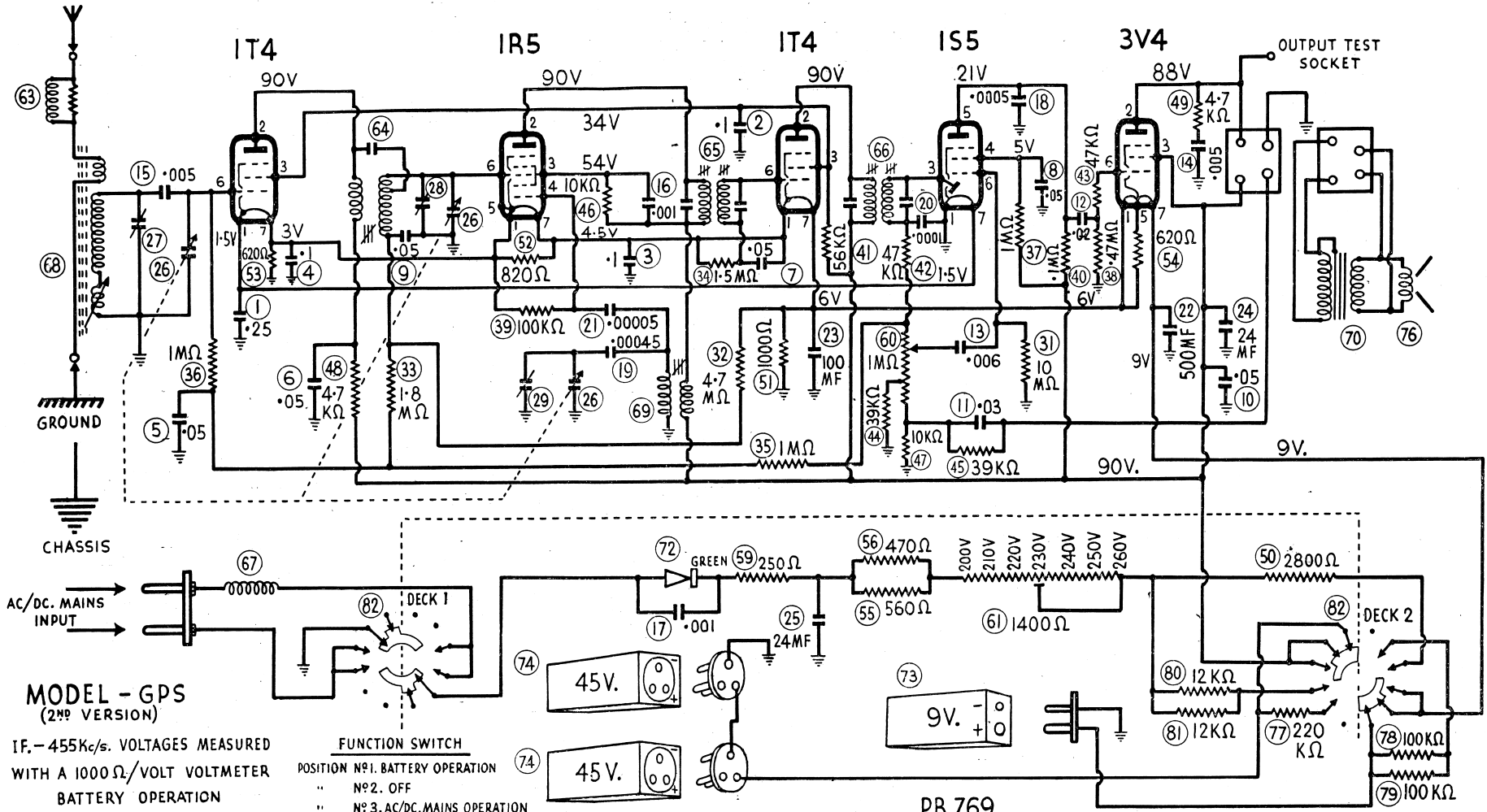
Opera- tion.	Generator connection.	Generator Frequency.	Dummy Antenna.	Instructions.
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1. The receiver may be aligned when operating it from batteries or from the  
A.C. or D.C. mains. When operating it from the A.C. or D.C. mains apply  
the safety lamp between the receiver chassis and ground to make sure the  
chassis is not above earth potential; if it is, reverse the receiver plug  
in the power point socket.
2. The wire connecting the speaker frame to the receiver chassis which was  
disconnected when removing the chassis from the cabinet is to be reconnected  
during alignment of the receiver.
3. To control 455 Kc/s. 0.01MF mica Leave grid wire attached to valve  
grid of IT4 capacitor socket. Peak 2nd IF trans. pri. and  
IF valve in series sec. for max. output.  
(pin No. 6) with  
generator.
4. To control 455 Kc/s. 0.01MF mica Leave grid wire attached to valve  
grid of IR5 capacitor socket. Turn gang plates fully out  
valve (pin in series of mesh. Peak 1st IF trans. pri. and  
No. 6). with sec. for max. output.  
generator.
5. Repeat operations No. 3 and 4.
6. **ALIGNMENT TEMPLATE:** A cardboard alignment template part No. PB 758 is  
available from the factory. The template may be made by using the diagram  
on page 12 and fastening it to a piece of cardboard.
7. **DIAL POINTER SETTING:** Fit alignment jig to chassis, then fit push-on pointer-  
tuning knob to tuning spindle. Fully mesh cond. gang plates and set centre  
of dial pointer on centre of end of travel spot on template near 540 Kc/s.
8. To inject a signal into the receiver rod aerial connect to the active terminal  
of the signal generator approx. 2 ft. of aerial wire then fashion the  
wire into a vertical position.

9. Place receiver chassis in a horizontal position with the rod aerial uppermost and so that the fixed primary winding end of the rod aerial points to the 2 ft. of aerial wire attached to the generator and so that the fixed primary winding is not closer than 2 ft. from the 2 ft. of aerial wire.
10. Refer para. 600 Kc/s.  
8 and 9
- Turn cond. gang and dial pointer until centre of dial pointer is on 600 Kc/s. mark on dial template. Leave the cond. gang and dial pointer set in this position and peak osc. coil ind. trim. (iron core) and then from the base of the RF trans. peak the RF. trans. ind. trim. (iron core). Also peak for max. output the secondary trimmer coil on the ferrite rod by sliding the trimmer coil along the aerial rod.
11. Refer para. 1400 Kc/s.  
8 and 9
- Turn cond. gang and dial pointer until centre of pointer is on 1400 Kc/s. dial mark on template. Adjust osc. coil trim. cond. for logging and peak RF trans. trim. cond. then rod aerial trimmer cond. for max. output.
12. Refer para. 600 Kc/s.  
8 and 9
- Turn cond. gang and dial pointer until centre of dial pointer is on 600 Kc/s. mark on dial template. Leave the gang and dial pointer set in this position. Repeak osc. coil ind. trim. (iron core) RF. trans. ind. trim. (iron core) and the secondary trim. coil on the ferrite rod. Do not rock the gang to and fro through the signal while adjusting the trimmers or move the dial pointer off 600 Kc/s. dial template mark until after the ind. trimmer of these three coils have been peaked for max. output.
13. Refer para. 1400 Kc/s.  
8 and 9
- Turn cond. gang and dial pointer until centre of dial pointer is on 1400 Kc/s. mark on dial template. Adjust oscl. coil trim. cond. for logging and peak RF trans. and ferrite rod aerial trimmer conds. for max. output.
14. Refit receiver chassis to cabinet in the exact reverse procedure to removing it. Make sure that the grub screws in the control knobs are tightened securely.

TUNING RANGE AFTER ALIGNMENT, 535 to 1620 Kc/s.



**MODEL - GPS**  
(2<sup>nd</sup> VERSION)

IF. - 455Kc/s. VOLTAGES MEASURED  
WITH A 1000 Ω/VOLT VOLTMETER

**BATTERY OPERATION**

**FUNCTION SWITCH**

- POSITION №1. BATTERY OPERATION
- .. №2. OFF
- .. №3. AC/DC. MAINS OPERATION
- .. №4. REACTIVATE

Circuit No.	Description	Tol.	±	Rating	Part No.
1.	.25 MF Paper Condenser	20%		200V. DCW	PC146
2.	.1 MF ,, ,,	20%		200V. DCW	PC218
3.	.1 MF ,, ,,	20%		200V. DCW	PC218
4.	.1 MF ,, ,,	20%		200V. DCW	PC218
5.	.05 MF ,, ,,	20%		200V. DCW	PC102
6.	.05 MF ,, ,,	20%		200V. DCW	PC102
7.	.05 MF ,, ,,	20%		200V. DCW	PC102
8.	.05 MF ,, ,,	20%		200V. DCW	PC102
9.	.05 MF ,, ,,	20%		200V. DCW	PC102
10.	.05 MF ,, ,,	20%		200V. DCW	PC102
11.	.03 MF ,, ,,	20%		200V. DCW	PC303
12.	.02 MF ,, ,,	20%		400V. DCW	PC111
13.	.006 MF ,, ,,	20%		600V. DCW	PC217
14.	.005 MF ,, ,,	20%		600V. DCW	PC252
15.	.005 MF Mica Condenser	10%		1000 VT	PC249
16.	.001 MF ,, ,,	10%		1000 VT	PC108
17.	.001 MF ,, ,,	10%		1000 VT	PC108
18.	.0005 ,, ,,	10%		1000 VT	PC144
19.	.00045 ,, ,,	2½%		1000 VT	PC727
20.	.0001 ,, ,,	10%		1000 VT	PC110
21.	.00005 ,, ,,	10%		1000 VT	PC141
22.	500 MF Electrolytic Condenser	20%		12 PV	PC295
23.	100 MF ,, ,,	20%		12 PV	PC963
24.	24 MF ,, ,,	20%		350 PV	PC184
25.	24 MF ,, ,,	20%		350 PV	PC184
26.	3 Gang variable cond. with gears				PC985
27.	3-55 MMF Trimmer Cond.				PC899
28.	1.5-15 MMF Trimmer Cond.				PC928
29.	0-30 MMF W.W. Trimmer Cond.				PC663
30.					
31.	10 Megohm Carbon Resistor	15%	½ W.		R1063
32.	4.7 Megohm ,, ,,	15%	½ W.		R4753
33.	1.8 Megohm ,, ,,	10%	½ W.		R1852
34.	1.5 Megohm ,, ,,	15%	½ W.		R1553
35.	1 Megohm ,, ,,	15%	½ W.		R1053
36.	1 Megohm ,, ,,	15%	½ W.		R1053
37.	1 Megohm ,, ,,	10%	½ W.		R1052
38.	.47 Megohm ,, ,,	15%	½ W.		R4743
39.	100,000 Ohm ,, ,,	10%	½ W.		R1042
40.	100,000 Ohm ,, ,,	10%	½ W.		R1042
41.	56,000 Ohm ,, ,,	10%	1 W.		Z5632
42.	47,000 Ohm ,, ,,	15%	½ W.		R4733
43.	47,000 Ohm ,, ,,	15%	½ W.		R4733
44.	39,000 Ohm ,, ,,	10%	½ W.		R3932
45.	39,000 Ohm ,, ,,	10%	½ W.		R3932
46.	10,000 Ohm ,, ,,	10%	½ W.		R1032
47.	10,000 Ohm ,, ,,	10%	½ W.		R1032
48.	4,700 Ohm ,, ,,	10%	½ W.		R4722
49.	4,700 Ohm ,, ,,	15%	½ W.		R4723
50.	2,800 Ohm Wire Wound Resistor	5%	10 W.		PR701
51.	1000 Ohm Carbon Resistor	10%	½ W.		R1022
52.	820 Ohm ,, ,,	10%	½ W.		R8212
53.	620 Ohm ,, ,,	5%	½ W.		R6211
54.	620 Ohm ,, ,,	5%	½ W.		R6211
55.	560 Ohm ,, ,,	10%	1 W.		Z5612
56.	470 Ohm ,, ,,	10%	1 W.		Z4712
57.					
58.					

6.				
59.	250 Ohm Wire Wound Resistor	5%	10 W.	PR721
60.	1 Megohm Carbon Potentiometer tapped at 400 K. ohms.			PR820
61.	1400 Ohm Wire Wound Adjustable Resistor	5%	10 W.	PR814
62.				
63.	Antenna Loading Coil			PT942
64.	RF Transformer			PT890-1
65.	1st IF Transformer			PT864-2
66.	2nd IF Transformer			PT869-3
67.	RF Choke			PT954
68.	Ferrite Rod Aerial			L120
69.	Oscl. Coil			PT860
70.	Speaker Input Trans. 10,000-3.5 Ohms Imped.			PT916
71.				
72.	Metal Rectifier type 14B261 (refer page 11)			M230
73.	9 Volt 'A' Battery			M271
74.	45 Volt 'B' Battery (two)			M130
75.				
76.	5" Permag Speaker type 5F Cone No. F91 or Cone No. F89			K181
77.	220,000 Ohm Carbon Resistor	10%	1 W.	Z2242
78.	100,000 Ohm " "	10%	1 W.	Z1042
79.	100,000 Ohm " "	10%	1 W.	Z1042
80.	12,000 Ohm " "	10%	1 W.	Z1232
81.	12,000 Ohm " "	10%	1 W.	Z1232
82.	Function Switch 2 Deck 4 Position			S205
	Dial Reading N.S.W.			17/814-2
	Dial Reading Vic.-Tas.			17/814-3
	Dial Reading Qld.			17/814-4
	Dial Reading S.A.-W.A.			17/814-5
	Dial Cover - clear circular plate			276/81
	Dial Cover Mt. Screws (2) $\frac{1}{4}$ " x $\frac{1}{8}$ " Csk. Hd.			11/560-2
	Dial Mt. Plate - metal - into which screws fasten			28/814
	Four Pin Socket Assy. - speaker and aerial and earth			A104/814
	Four Pin Plug Assy. - less cover speaker lead			A105/814
	Four Pin Plug Assy. Cover			285/81
	Resistor Strip Assy. - mains resistors			A106/814
	Terminal Strip Assy. - 2 lug			A557/30c
	Baffle Board - cardboard - speaker			7/814
	Clip (2) holds front to rear at cab. base			12/814
	Cabinet Top Ridge Fastening Stud - female			13/814
	Cabinet Top Ridge Fastening Stud - male			16/814
	Mount Pillar (2) holds ends of rod aerial			278/81
	Clip - holds battery leads to cabinet			91/754
	External Aerial and Earth Plugs			11/252
	Clips IF trans. mount			7/670
	Valve Shield			38/635
	Grommet - rubber - gang mount			64/30A
	'A' Battery Plug - 2 pin			482/30c
	'B' Battery Plug - 3 pin			335/30c
	7 Pin Socket - flange mount (4)			A104/58
	7 Pin Socket - rubber mount (1)			A104/58-1
	Rubber Base - socket mount			2/681
	Brass Rivet (2) socket-rubber base mt.			9/681
	Spacer - AC. 2 pin plug mt.			45/765
	Spacer - 4 pin socket mt. A. and Earth			21/218A-20
	Rectifier Mt. Bracket			64/678
	Tuning Knob - less pointer			274/81-5
	Tuning Knob Pointer - force fit on knob			275/81
	Tuning Knob Insert - moulded			277/81

Pins (2) AC. plug on chassis	33/678
Mount Strip - bakelite - AC. plug pins	29/678
Volume Knob	273/81-5
ON/OFF Switch Knob	273/81-35
Insert - moulded - vol. and ON/OFF switch knob	280/81
Brass Collar - vol. and ON/OFF switch knob	56/678
Grub Screw - brass collar 3/16" x 5/32" cup point	30/560-3
Handle Slide - stepped section, mouldings through which handle slides	282/81
Handle Slide Cover - flat section, mouldings through which handle slides	281/81
Screw 1/2" x 5/32" Whit. Rd. Hd. chassis to cab. mt.	16/560-10
Nut 5/32" Whit. hex.	3/478-4
Plate - metal - chassis mount screw	27/814
AC. Power Cord Lead and 2 Pin Receiver end Plug	PA431

#### STYLING LIST

	BROWN	MAROON	IVORY	L. GREY
Cabinet Front	262/81-1	262/81-2	262/81-5	262/81-6
Cabinet Back	263/81-1	263/81-2	263/81-5	263/81-6
Badge "Astor"	498/30C-18	498/30c-18	498/30c-17	498/30c-17
Handle Assy. complete	A103/814-1	A103/814-2	A103/814-5	A103/814-6
Handle	10/814	10/814	10/814	10/814
Handle Grip	283/81-1	283/81-2	283/81-5	283/81-6
Name Plate	284/81	284/81	284/81	284/81

Grip Mount Rivets (2) 55/557 changed to 5/16" x 1/8" oval Cs/k. Hd. screw  
 11/203-6 and 1/8" Whit. nut 3/478-2.  
 Name Plate Screws 1/4" x 1/8" Cs/k. Hd. 11/560-2

#### ROD AERIAL CONNECTIONS

PRIMARY (5 turns - fixed winding)

Lead from end turn, nearest to end of rod - EXTERNAL GROUND SOCKET  
 Lead from end turn, next to secondary - AERIAL LOADING COIL

SECONDARY (fixed winding)

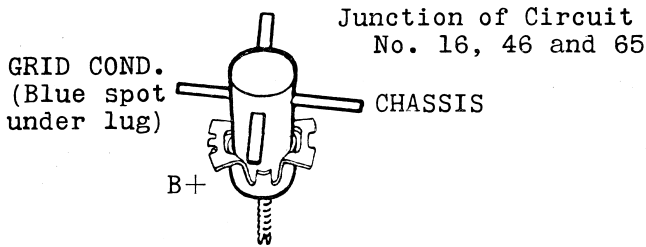
Lead from end turn next to fixed primary - GRID  
 Lead from end turn next to sec. trim. coil - A JUNCTION LUG FOR THIS LEAD  
 AND THE LEAD FROM SEC. TRIM COIL.

SECONDARY TRIM COIL (moveable winding)

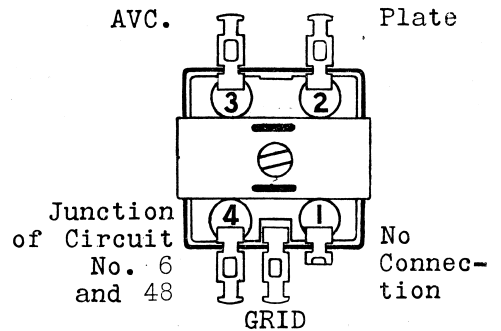
Lead from end turn next to fixed secondary - A JUNCTION LUG FOR THIS LEAD AND  
 THE LEAD FROM SEC. END TURN NEXT TO TRIMMER COIL.  
 Lead from end turn nearest to end of rod - RECEIVER CHASSIS.

8.

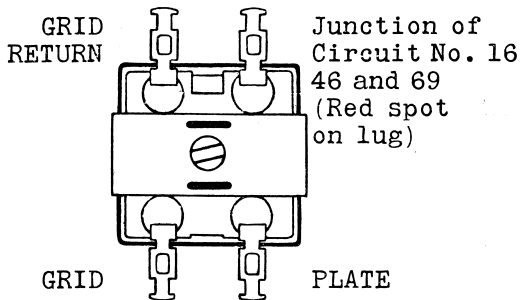
**OSCL. COIL**



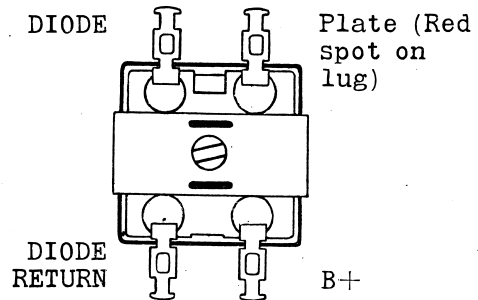
**RF. TRANS.**



**NO. 1 IF. TRANS.**



**NO. 2 IF. TRANS.**



**BATTERY REACTIVATION**

By following the reactivation instructions detailed below the life of the batteries used in this receiver may be extended.

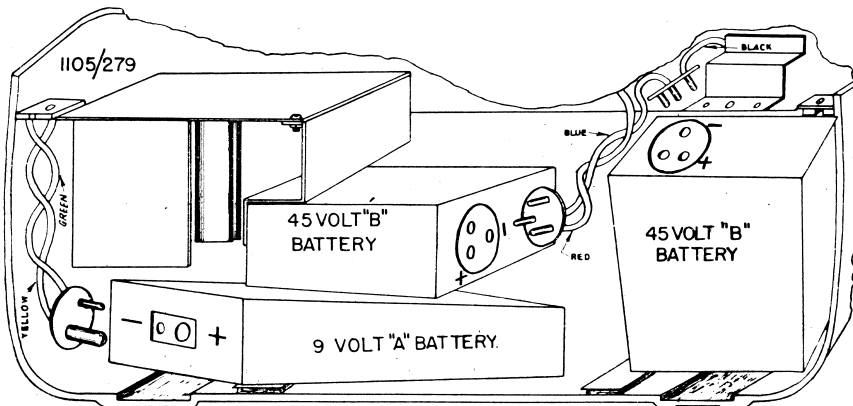
1. Do not reactivate the batteries until the receiver has operated for a total of 15 to 20 hours.
2. The batteries should be reactivated for approximately 5 to 7 times the total time (as soon as convenient) the receiver has been operated from the internal batteries.
3. The batteries should be connected normally inside the receiver.
4. (a) To begin reactivation, connect the receiver to the AC or DC supply mains, then switch the power "ON."  
 (b) Turn the receiver switch knob to the position marked "MAINS" and check that the receiver operates normally.  
 (c) If the receiver does not operate when first connected to the DC mains, remove and reverse the mains lead plug in the small recess in the rear of the receiver cabinet.  
 (d) Turn the switch to the position marked "REACT," then reactivation of the batteries will commence.  
 (e) At the end of the reactivation period turn the receiver switch to the position marked "OFF."
5. To avoid slow discharge of the batteries be careful not to disconnect the power cord lead from the receiver or switch off the supply mains while the receiver switch is set to the "REACT" position. Switch to "REACT" only during reactivation.
6. It must be understood that as the batteries deteriorate through use or age their ability to be reactivated gradually decreases.

**BATTERY REPLACEMENT (refer diagram)**

The internal batteries used are one 9 volt "A" battery and two 45 volt "B" batteries. When connecting new batteries, follow the instructions exactly, if a mistake is made all the valves are liable to be burned out.



1. Make sure the receiver is switched off and the power cord is withdrawn from the recessed socket at the rear of the cabinet.
2. Remove the rear section of the cabinet by unscrewing the two screws through the top ridge of the cabinet.
3. Lay the receiver, speaker grille downwards on a flat surface then withdraw the plugs from the batteries.
4. Fit the new batteries using strips of cardboard as packers to overcome any looseness.
5. Insert the small plugs into the sockets in the new batteries, then refit the rear section of the cabinet.



#### PORTABLE OPERATION

##### CONTROLS:

**ON/OFF Switch:** To switch the receiver 'ON' turn the knob on the right to the position marked 'BATT.' To switch the receiver 'OFF' turn the knob to the position marked 'OFF.'

**Warning:** When operating from batteries, always switch the receiver off when not in use, so as to conserve the batteries.

**Volume Control:** The knob at the left is the volume control.

**Tuning Control:** The pointer in the centre of the dial is the tuning control, which, when turned selects the desired station. The station letters on the dial provide an indication of where the stations may be tuned in.

When operating the receiver as a portable no external connections are necessary as a built-in aerial is incorporated in the carrying case. Should the receiver be required to operate in localities where the signal pick-up by the built-in aerial is not sufficient to provide reasonable volume, an external aerial and earth may be connected to the two small sockets on the rear of the receiver to increase the signal pick-up.

A detachable power cord is supplied with the receiver for connecting it to the AC or DC supply mains.

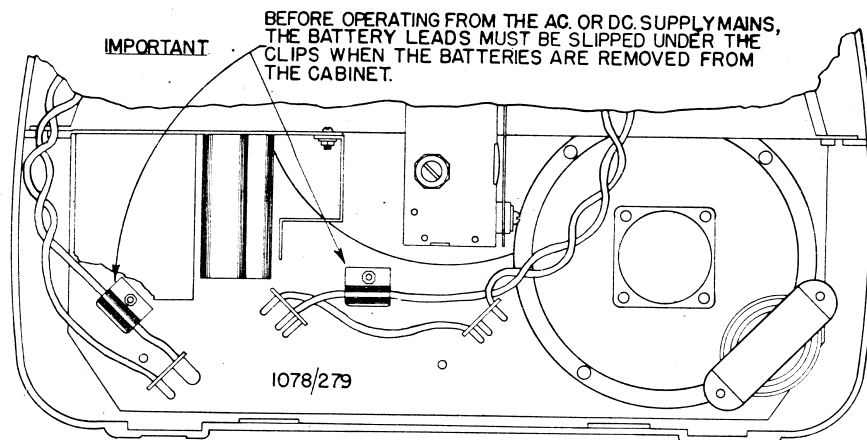
#### CHASSIS SERIAL NUMBER

The serial number is stamped on the left hand end of the metal chassis, and is visible when the rear of the cabinet is removed by unscrewing the two screws through the top ridge of the cabinet.

#### AC. OR DC. MAINS OPERATION

**IMPORTANT:** Before operating from the AC or DC supply mains: If it is intended to operate the receiver from the AC or DC supply mains with the batteries removed from the receiver case, the battery leads **MUST** be slipped under the clips to avoid damage to the receiver. Refer diagram.

10.



**IMPORTANT:** To avoid damage to the receiver valves: Before connecting the receiver to the AC or DC mains power point always make sure that the AC or DC supply mains from which the receiver is to be operated does not exceed the mains voltage for which the receiver is adjusted. Mains voltage adjustments are detailed in the "Mains Voltage Adjustment" section of this Bulletin.

1. To operate the receiver from the AC or DC supply mains, plug one end of the detachable power cord into the two pin socket in the rear of the cabinet and the other end of the cord into the supply mains power point socket.
2. To switch the receiver "ON" turn the knob on the right to the position marked "MAINS." To switch the receiver "OFF" turn the knob to the position marked "OFF."
3. Should the receiver fail to operate when first plugged into a DC mains socket, remove and reverse the mains power cord plug.
4. The volume and tuning controls function in the same manner as on portable operation.

#### MAINS VOLTAGE ADJUSTMENT

It is not necessary to remove the receiver chassis from the cabinet for this adjustment. DISCONNECT POWER CORD PLUG from MAINS POWER POINT SOCKET. Turn receiver function switch to the "Off" position. Withdraw the power cord plug from recessed socket at the rear of the cabinet. Remove rear section of cabinet by unscrewing the two screws through the top ridge of the cabinet. The mains adjustment tap is at the left hand end of the chassis. Loosen off the screw in the adjustable clip on the mains resistor and adjust it so that the tail of the clip is alongside the mark corresponding to the supply mains voltage on which the receiver is to be operated. Securely re-tighten the screw.

#### STORAGE WHEN OUT OF USE

It is not advisable to leave an exhausted battery in the receiver. If the receiver is stored away or not required for long periods, even partly-used batteries should be removed and stored in a dry, cool place. This is a precautionary measure against the swelling and corroding action of worn-out batteries, which applies to all battery-operated devices, such as torches, etc. When the batteries are left in the receiver for frequent use as a portable and from the supply mains, it is advisable to check them about every three months for swelling and corrosion.

#### CLEANING AGENT FOR PLASTIC CARRYING CASE

**WARNING:** The plastic sections of the carrying case should not be cleaned with benzol, petrol or similar cleaning liquids, as these are solvents for the plastic materials.

If the case becomes dirty a piece of cloth dampened with water should be used.

Scratches may be removed with fine steel wool and then polished with Car-Pol or Embex car polish.

### EXTERNAL AERIAL

On the rear of the receiver cabinet at the right is a small recess in which are two holes.

Insert the end of the aerial lead into the hole marked "'A'" and the end of the earth lead into the hole marked "'E'".

Two small plugs are supplied with each receiver. These plugs when connected (soldered) to the ends of the aerial and earth leads, provide an easy and mechanically sound connection to the sockets for the external aerial and earth.

An aerial lead approx. 50 ft. long as high as possible from the ground, is recommended.

An earth lead is essential to obtain maximum results from the external aerial.

Should an earth connection not be obtainable, place the receiver close to the ground and connect to the earth socket approx. 50 ft. of wire laid along the ground and directly beneath the aerial lead.

Viewing the receiver from the rear with the handle uppermost the small socket hole at the right is for the external aerial and the small socket hole at the left is for the external earth connection.

### SUBSTITUTE METAL RECTIFIER

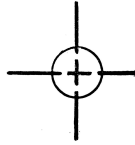
In place of the metal rectifier part No. M230 (type 14B261) a substitute rectifier part No. M321 (type MU70) has been used on 2000 receivers.

### DIAL READING

Supplied with each receiver are four dial readings and for safe keeping are fastened behind the dial on the front of the cabinet. These dial readings show the major stations in each State in large letters and other stations within a reasonable reception distance in small letters.

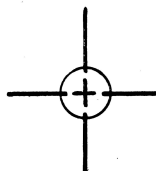
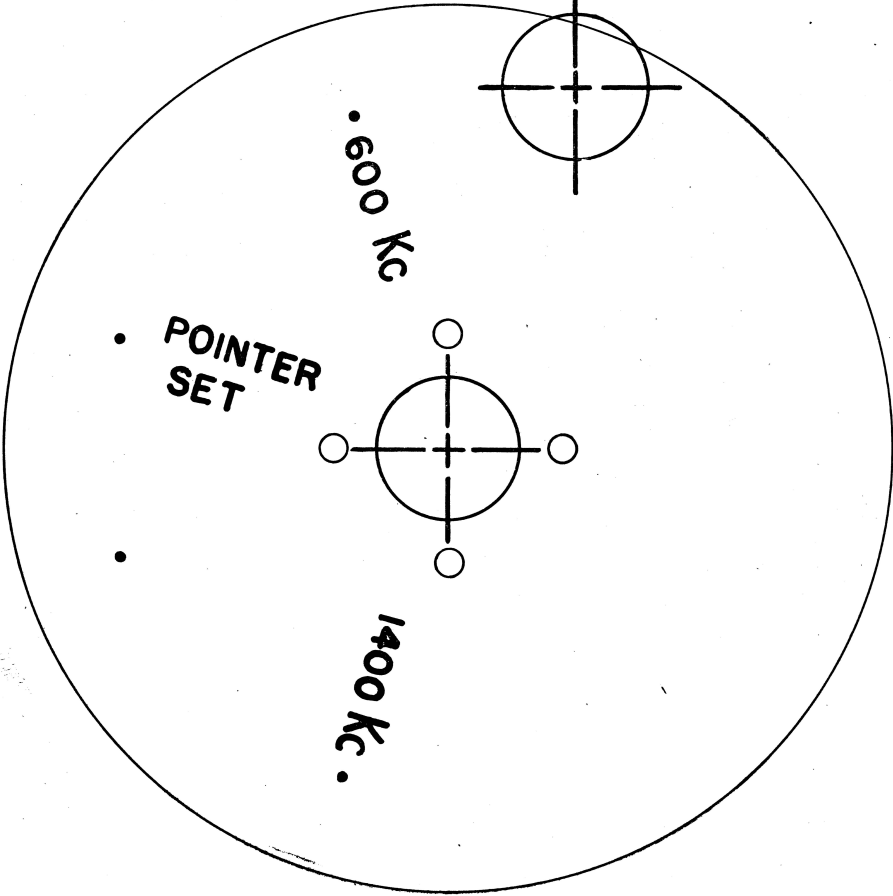
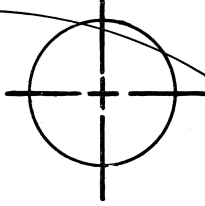
Should the receiver be taken to another State the dial may be easily changed as detailed below.

1. Make sure receiver is switched "'OFF'" and AC mains lead is disconnected from receiver.
2. Pull pointer tuning knob straight off tuning spindle.
3. Unscrew two screws near centre of clear dial cover, then remove clear dial cover and dial readings behind it.
4. On to small pegs on rear of clear dial cover, fit required dial reading, then fit surplus dial readings.
5. Refit screws through clear dial cover and dial readings, then fasten them on to the receiver.
6. Refit pointer tuning knob.



VOLUME  
CONTROL

R.F. TRANS.  
IRON CORE  
TRIM HOLE



ON / OFF  
SWITCH

ALIGNMENT TEMPLATE PART NO. PB758