

TECHNICAL SERVICE INFORMATION

ISSUED BY

KRIESLER AUSTRALASIA PTY. LIMITED

43 ALICE ST. NEWTOWN. Phone: LA 0400

SERIES 'A' RADIO HANDBOOK

DESCRIPTION. Eight transistor battery operated portable receiver for B/C reception.

MODEL 41-22

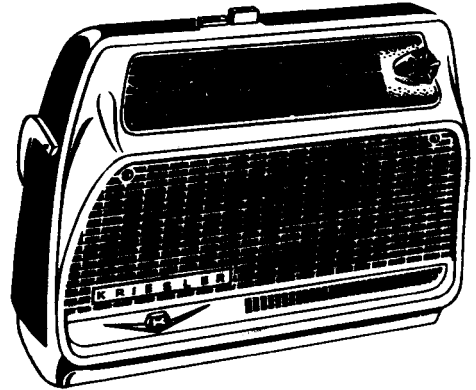
WEIGHT. Packed: 7 lbs. Nett: 4½ lbs.

BATTERY. Eveready type 2364 (9 volt) or equivalent.

AERIAL. Inbuilt ferrite-rod with provision for external aerial and earth on rear of cabinet. A - Aerial, E - Earth. Connecting leads are provided (On detachable base plate.).

CHASSIS REMOVAL. To gain access to the component side of the chassis, switch receiver OFF, pull off tuning knob and remove four gold-plated screws on front of cabinet. The cabinet front, complete with loudspeaker is now removable to the limit of the speaker leads.

To remove the rear shell of the cabinet, remove the two screws marked 'X' on the layout diagram. The chassis can now be withdrawn from the rear shell to the limit of the extension aerial and earth leads.



TUNING RANGE. 535-1650 Kc/s.

INTERMEDIATE FREQUENCY. 455 Kc/s.

BATTERY CONSUMPTION. Min. Volume (no signal) 12 mA.)
Max. Volume100 mA.) These will vary from set to set.

TRANSISTOR COMPLEMENT.

TR.1 OC 170. R.F. Amplifier.

TR.5 OC 71. 1st. A.F. Amplifier.

TR.2 OC 44 Mixer-oscillator.

TR.6 OC 75. 2nd. A.F. Amplifier.

TR.3 OC 45 1st. I.F. Amplifier.

TR.7 OC 74.) A.F. Output Push/Pull.

TR.4 OC 45 2nd. I.F. Amplifier.

TR.8 OC 74.)

NOTE. In some sets, 2N 218 transistors may be used in lieu of type OC 45.

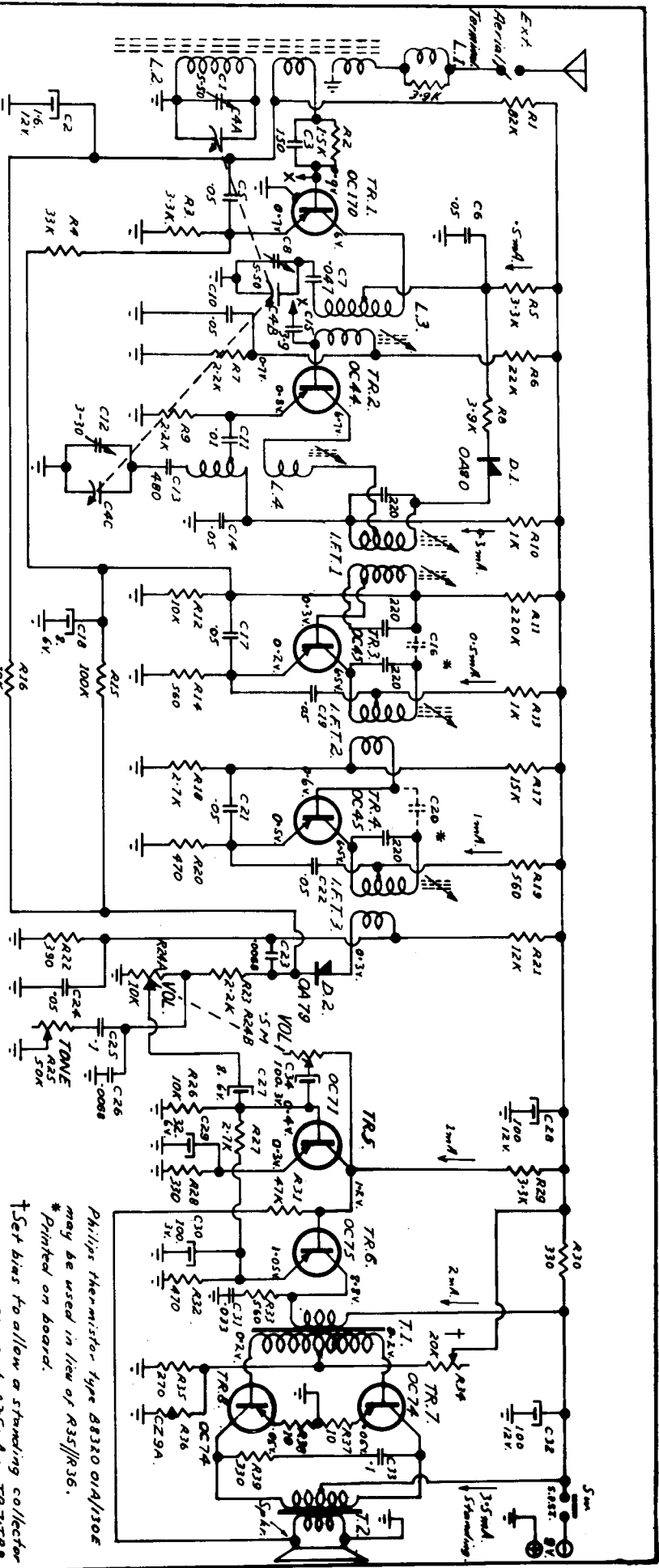
GERMANIUM DIODE COMPLEMENT.

D.1. OA 70 or OA 80. A.G.C. Limiter.

D.2. OA 79. Detector/ A.G.C.

REPLACEMENT PARTS

Identity	Part No.	Identity	Part No.
Tuning knob	90-678	Dial cord assembly	90-755 & 90-756
Volume knob	20-1394	Screws, cabinet frontNo.6 self-tapping (Phillips Hd., Gold-plated. 1 x ¾" and 3 x 1".)	
Tone knob	20-1336	Cabinet, Front assembly ...	90-2171
Switch Assembly	90-675	Rear shell	90-2172



CODE	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY
R1	82K. 1/2W. B.T.S. 510%	1	R.C.	R20	3.3K. 1/2W. B.T.S. 510%	1
R2	15K. " " " "	1	"	R21	100K. " " " "	1
R3	15K. " " " "	1	"	R22	100K. " " " "	1
R4	33K. " " " "	1	"	R23	100K. " " " "	1
R5	33K. " " " "	1	"	R24	100K. " " " "	1
R6	33K. " " " "	1	"	R25	100K. " " " "	1
R7	33K. " " " "	1	"	R26	100K. " " " "	1
R8	33K. " " " "	1	"	R27	100K. " " " "	1
R9	33K. " " " "	1	"	R28	100K. " " " "	1
R10	33K. " " " "	1	"	R29	100K. " " " "	1
R11	33K. " " " "	1	"	R30	100K. " " " "	1
R12	33K. " " " "	1	"			
R13	33K. " " " "	1	"			
R14	33K. " " " "	1	"			
R15	33K. " " " "	1	"			
R16	33K. " " " "	1	"			
R17	33K. " " " "	1	"			
R18	33K. " " " "	1	"			
R19	33K. " " " "	1	"			
R20	33K. " " " "	1	"			
R21	33K. " " " "	1	"			
R22	33K. " " " "	1	"			
R23	33K. " " " "	1	"			
R24	33K. " " " "	1	"			
R25	33K. " " " "	1	"			
R26	33K. " " " "	1	"			
R27	33K. " " " "	1	"			
R28	33K. " " " "	1	"			
R29	33K. " " " "	1	"			
R30	33K. " " " "	1	"			

CODE	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION	QTY
C1	100K. " " " "	1	"	C17	100K. " " " "	1
C2	100K. " " " "	1	"	C18	100K. " " " "	1
C3	100K. " " " "	1	"	C19	100K. " " " "	1
C4	100K. " " " "	1	"	C20	100K. " " " "	1
C5	100K. " " " "	1	"	C21	100K. " " " "	1
C6	100K. " " " "	1	"	C22	100K. " " " "	1
C7	100K. " " " "	1	"	C23	100K. " " " "	1
C8	100K. " " " "	1	"	C24	100K. " " " "	1
C9	100K. " " " "	1	"	C25	100K. " " " "	1
C10	100K. " " " "	1	"	C26	100K. " " " "	1
C11	100K. " " " "	1	"			
C12	100K. " " " "	1	"			
C13	100K. " " " "	1	"			
C14	100K. " " " "	1	"			
C15	100K. " " " "	1	"			
C16	100K. " " " "	1	"			
C17	100K. " " " "	1	"			
C18	100K. " " " "	1	"			
C19	100K. " " " "	1	"			
C20	100K. " " " "	1	"			
C21	100K. " " " "	1	"			
C22	100K. " " " "	1	"			
C23	100K. " " " "	1	"			
C24	100K. " " " "	1	"			
C25	100K. " " " "	1	"			
C26	100K. " " " "	1	"			

All voltages measured in respect to earth with a 20,000Ω/Volt meter.
 Battery type Eveready 2564 (9V) or equivalent.
 Tuning Range 535-1650 Kc/s. I.F. Freq. 455 Kc/s.
 Battery Consumption: Min - 12 mA (no-sound)
 Max - 100 mA (no-sound)

Philips transistor type 88350 01A/306
 may be used in lieu of R35/1036.
 * Printed on board.
 † Set bias to allow a stranding collector current of 35mA on TR.3/7R.8

ISSUE	CHANGE	DATE	SIGN'D
ORIGINAL			

MATERIAL	DRAWN	PROJECT QTY	PROJECT QTY	PROJECT QTY
8 TRANSISTOR PORTABLE				

Before production is commenced 2 samples must be submitted to Drawing Office for approval.
 This Drawing must be referred to: ROBERTSON AUSTRALASIA PTY. LTD., 43 ALBERT STREET, HAWTHORN, VIC. 3122

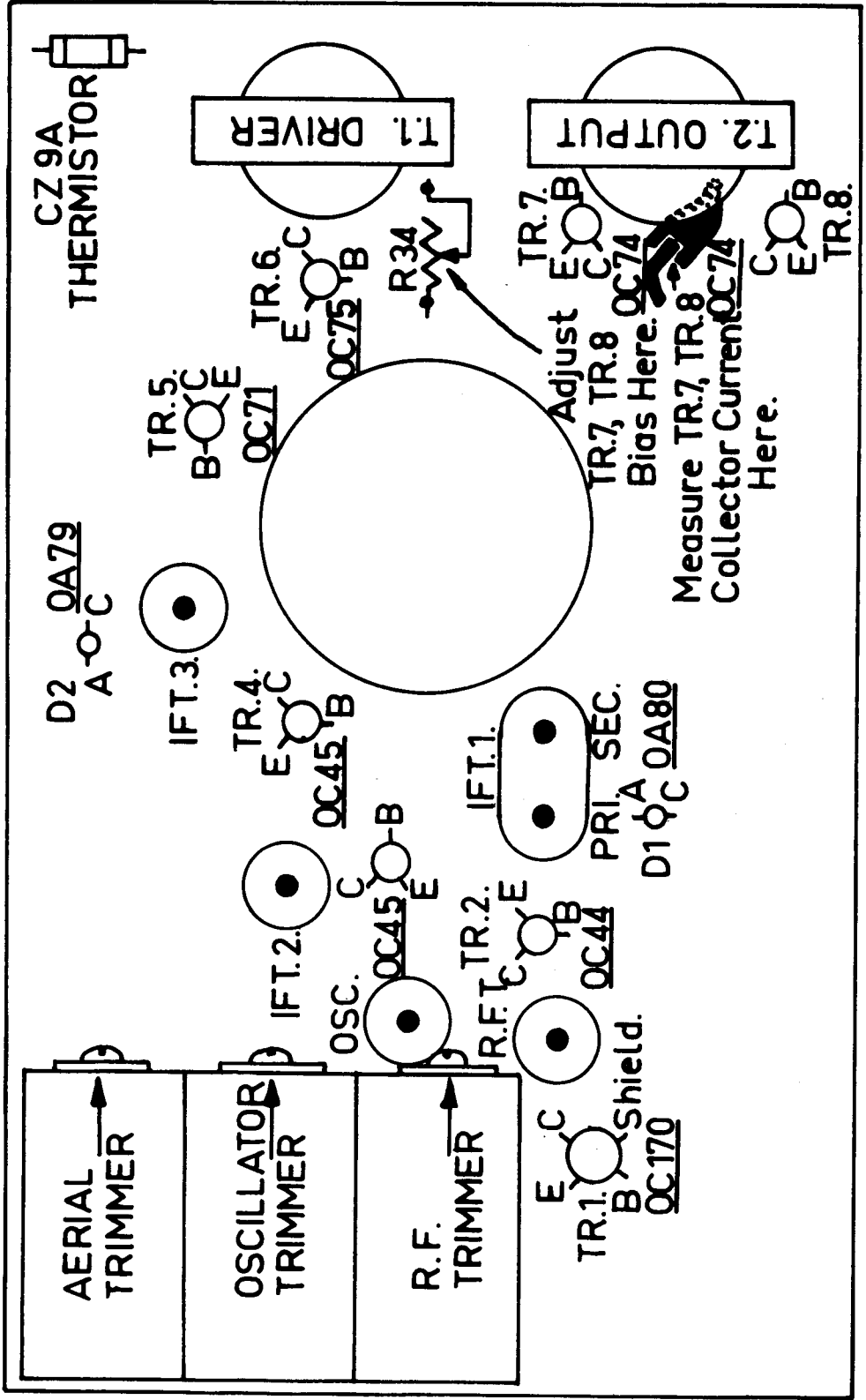
ALIGNMENT INSTRUCTIONS.

	Step.	Signal Gen. Frequency -	Connect Signal Generator to -	With Tuning Gang -	Proceed as follows -
I.F.	1.	455 Kc/s.	Base of TR.2	Closed	Peak core IFT.3
	2.	" "	" "	"	" " IFT.2
	3.	" "	" "	"	" " IFT.1 Primary.
	4.	" "	" "	"	" " IFT.1 Secondary
	5.	-----	-----	-----	Repeat until no further gain is obtainable.
OSCILLATOR	6.	-----	-----	Closed	Set dial pointer to correspond to mark on top of dial scale near 'D' of QLD.
	7.	550 Kc/s.	Base of TR.2	at 550 Kc/S.	Peak Oscillator core.
	8.	15500 Kc/S.	" "	" 1500 Kc/s.	Peak Oscillator trimmer.
	9.	-----	-----	-----	Repeat until calibration is correct at both ends of scale and intermediate points.
R.F.	10.	1500 Kc/s.	Base of TR.1	at 1500 Kc/s.	Peak R.F. trimmer.
	11.	600 Kc/s.	" "	" 600 Kc/s.	Peak R.F. core.
	12.	-----	-----	-----	Repeat until no further gain is obtainable.
AERIAL	13.	1500 Kc/s.	Radiate into Aerial.	at 1500 Kc/s.	Peak aerial trimmer.
	14.	550 Kc/s.	Radiate into Aerial.	" 550 Kc/s.	Peak aerial coil by sliding coil along ferrite-rod.
	15.	-----	-----	-----	Repeat until no further gain is obtainable. Re-check R.F. alignment.

NOTE. 1. During alignment, the cores should be set to the peak which occurs with the cores nearest the printed board.

2. Whilst aligning transistor receivers, it is a good procedure to 'rock' the tuning gang when adjusting the Aerial and R.F. trimmers.

MODEL 41-22 LAYOUT DIAGRAM



VIEWED FROM COMPONENT SIDE