

**TECHNICAL INFORMATION****COVERING****PACEMAKER TRANSISTOR BROADCAST RECEIVER**

Manufactured by COLLIER &amp; BEALE Ltd. WELLINGTON.

TYPE SET - Battery, Superhetrodyne, Portable Self Contained Ferrite Rod Antenna.

TRANSISTORS (Seven) - 2N247 RF. Amp., 2N247 Mixer.

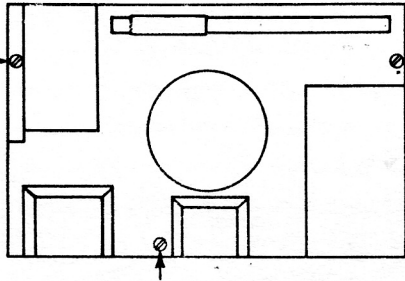
2N219 I.F. Amp., 0A85 Detector, OC71 1st A.F. Amplifier

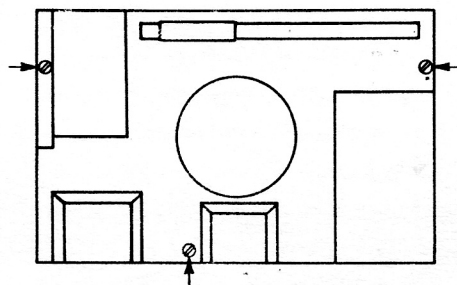
OC71 Driver, 2-OC72 Output.

POWER SUPPLY - Self Contained 6 volt Lantern Battery ER509 and in sets produced after August 1958 ER 744 6 volt.

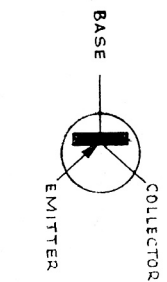
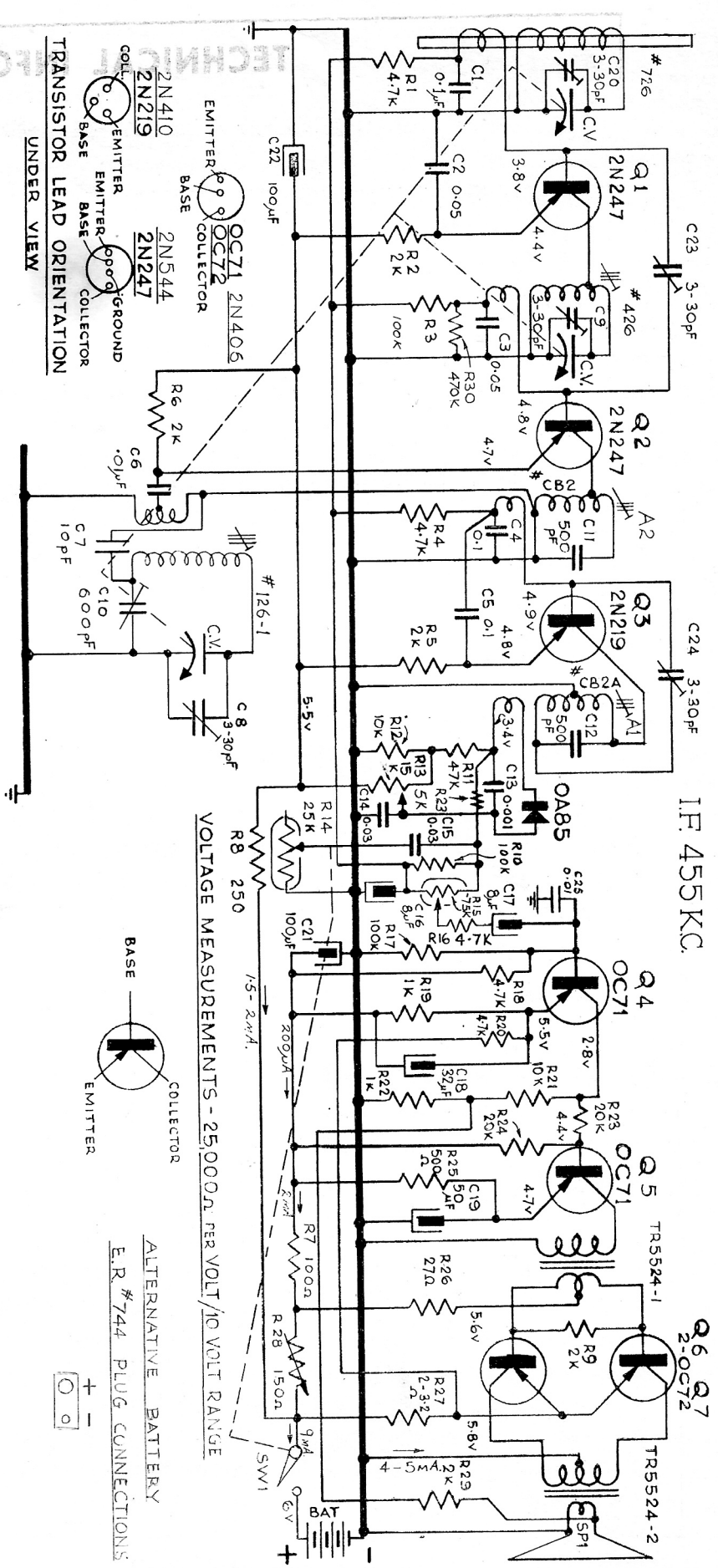
BATTERY DRAIN - Total Quiescent Battery Drain 9mA, at 65°F

TUNING RANGE - Broadcast 530-1600 Kc.

CAPACITORS			MISCELLANEOUS				RESISTORS																																															
Ref. No.	Cap.	Volts					Ref. No.	Res.	Watts																																													
C1	0.1 $\mu$ fd.	100	COIL WINDING RESISTANCES <table><tr><th>Ref.No.</th><th>Tuned</th><th>Base</th><th>In jection</th><th></th></tr><tr><td>726</td><td>0.3 ohm</td><td>0.2 ohm</td><td></td><td>B.C.</td></tr><tr><td>426</td><td>1.4 "</td><td>0.25 "</td><td></td><td>"</td></tr><tr><td>126-1</td><td>3.5 "</td><td></td><td>0.27 ohm</td><td>"</td></tr><tr><td>CB2</td><td>1.35 "</td><td>0.25 "</td><td></td><td>I.F.</td></tr><tr><td>CB2A</td><td>1.3 "</td><td>1.1 "</td><td></td><td>I.F.</td></tr><tr><td></td><td>Res.Pri.</td><td>Res.Sec.</td><td></td><td></td></tr><tr><td>TR5524-1</td><td>290 ohm</td><td>56 ohm</td><td></td><td></td></tr><tr><td>TR5524-2</td><td>14.5 "</td><td>0.35 "</td><td></td><td></td></tr></table>				Ref.No.	Tuned	Base	In jection		726	0.3 ohm	0.2 ohm		B.C.	426	1.4 "	0.25 "		"	126-1	3.5 "		0.27 ohm	"	CB2	1.35 "	0.25 "		I.F.	CB2A	1.3 "	1.1 "		I.F.		Res.Pri.	Res.Sec.			TR5524-1	290 ohm	56 ohm			TR5524-2	14.5 "	0.35 "			R1	4.7K ohm	$\frac{1}{2}$
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C2	0.05 "	"	R2	2K "	"																																																	
C3	0.05 "	"	R3	100K "	"																																																	
C4	0.1 "	"	R4	4.7K "	"																																																	
C5	0.05 "	"	R5-6	2K "	"																																																	
C6	0.01 "	"	R7	100 "	"																																																	
C7	10 $\mu$ uf	Ceramic	R8	250 "	"																																																	
C8	3-30 "	Trimmer	R9	2K "	"																																																	
C9	3-30 "	"	R10	100K "	"																																																	
C10	600 $\mu$ uf	Padder	R11	47K "	"																																																	
C11	500 "	Sil.Mica	R12	10K "	"																																																	
C12	500 "	"	R13	15K "	Pre-Set																																																	
C13	0.001 $\mu$ fd	Ceramic	R14	25K "	Pot																																																	
C14	0.03 "	150	SP1	4x6 Rola Speaker. F83 Cone Type H Magnet on/off Switch actuated by R14 Polar Gang (351 $\mu$ ufd.swing) Battery 6 volt LANTERN BATTERY ER 509 or EQUIVALENT and sets produced after August 1958 will use ER744. 				R15	75K "	"																																												
C15	0.03 "	150	SW1					R16	4.7K "	$\frac{1}{2}$																																												
C16	8 "	25	CV					R17	100K "	"																																												
C17	8 "	"						R18	4.7K "	"																																												
C18	32 "	3.5						R19	1K "	"																																												
C19	50 "	12.5						R20	4.7K "	"																																												
C20	3-30 $\mu$ uf	Trimmer						R21	10K "	"																																												
C21	100 $\mu$ fd	12.5						R22	1K "	"																																												
C22	100 "	"						R23-24	20K "	"																																												
C23	3-30 $\mu$ uf	Trimmer						R25	500K "	"																																												
C24	3-30 "	"						R26	27 "	"																																												
C25	0.01 $\mu$ f	Ceramic						R27	1.5 "	"																																												
								R28	150 "	Pre-Set																																												
								R29	2K "	$\frac{1}{2}$																																												
				R30	470K "	"																																																
				R31	2K "	"																																																



I.F. 455KC.



# SCHEMATIC DIAGRAM MODEL 'TRANS-PORTABLE 58'

## ALIGNMENT INSTRUCTIONS

1. All voltage measurements shown are from points to chassis, with a battery terminal voltage of 6 volts.
2. All voltage checks should be made with a voltmeter of 10 V. full scale reading and having a total resistance of 250,000 ohm (25,000 ohm/V)
3. When making resistance checks, disconnect battery and observe the polarity of electrolytic condenser, where such appear.
4. Nominal tolerance on components makes possible a variation + 10% in voltage and resistance readings.
5. Avoid operations on the receiver with battery connected. Always, re-check total battery current before permanently re-connecting battery. Never reverse the battery polarity.
6. To remove transistors, disconnect battery and free projecting leads of transistor from socket tags. A miniature soldering iron is essential to avoid overheating.

VOLTAGE MEASUREMENTS - 25,000 ohm per volt / 10 VOLT RANGE

ALTERNATIVE BATTERY  
E.R. #744 PLUG CONNECTIONS

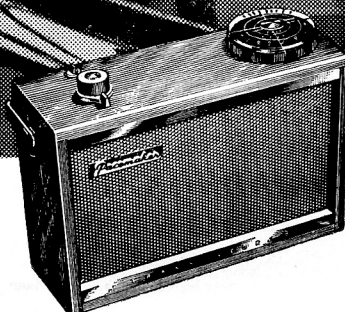
To Adjust Diode Bias  
Clip D.C. Voltmeter (1-3 volts full scale and 10-20,000 ohms per volt) across OA85 and adjust R13 for zero volts.

To align I.F. Amplifier  
Fully unmesh variable condenser feed 455Kc/s generator through .1 mfd condenser to base of converter (Q2). Adjust A1, A2 and C24 for max. output. As the adjustment of C24 is critical A1 and A2 may need re-adjustment with change of C24.

Adjust RF Trimmers C9 and C20 for max. output at 1400Kc/s and adjust padding condenser (C10) for max. output at 600 Kc/s.

Pacemaker dealer blocks . . .

*Bound to go places in your car!*



**PACEMAKER  
ALL-PURPOSE**

## **TRANS-PORTABLE**

*The only Transistor-Portable in the world with an R.F. Stage.*

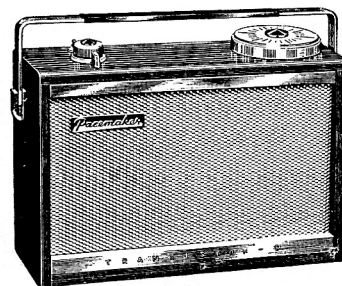
- ★ hear it while you travel—take it with you when you arrive! No valves—no power lead!
- ★ plays for 800 hours on an ordinary 7/9d. battery!
- ★ no installation costs—no servicing!
- ★ no exterior car aerial. Special micro-iron interior aerial rejects interference.
- ★ No loss when you sell the car. Keep the radio!
- ★ At home—astonishing performance, beautiful appearance!

only **£37-10-0** *Easy terms arranged.*

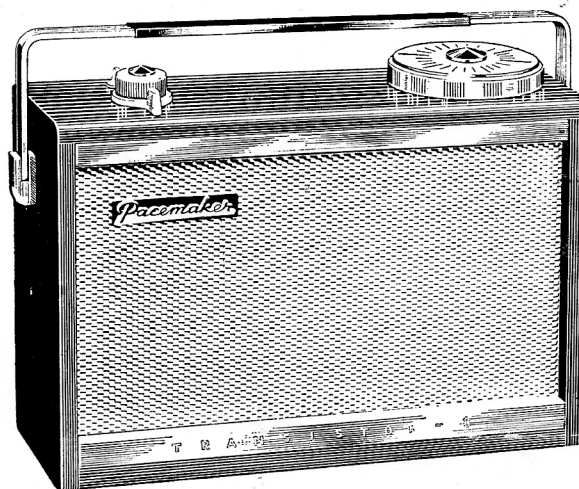
**(YOUR NAME)**

8x2 Column Advertisement

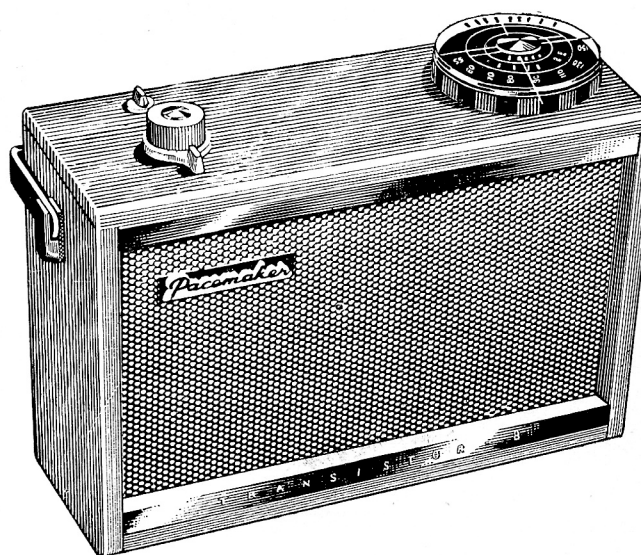
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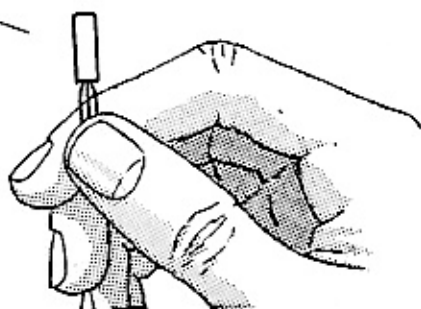
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Pacemaker dealer blocks . . .

G.9530

ITS IRRESISTIBLE  
THE TRANSISTORISED

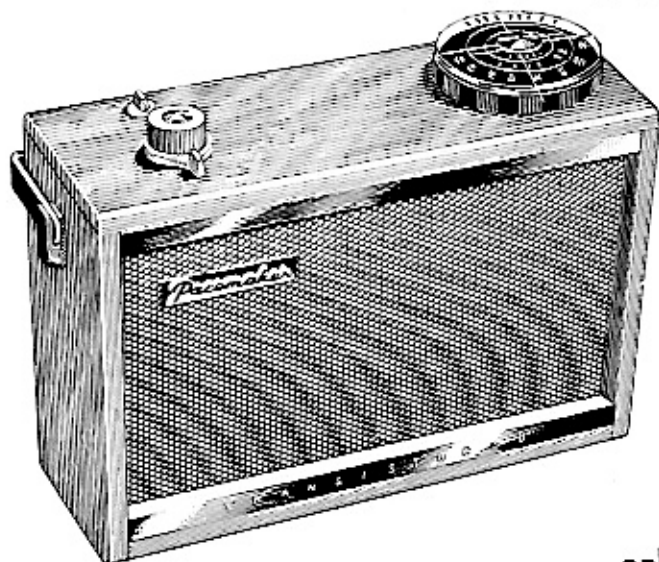


# PACEMAKER

All-purpose

## TRANS-PORTABLE

CORDLESS RADIO



Once you see and hear this new Pacemaker you'll want to own it. It outperforms the best valve sets . . . costs about 4d. for 40 hours playing! At home, out driving, in bach or boat, you get broadcast performance second to none in a 7½ lb. carry-anywhere radio. Pacemaker's Transistorised 'circuit secret' makes possible such fabulous performance. Come along and see the handsome polished wood Pacemaker with its sparkling gold trim . . . hear the clear, rich tone you never thought possible in a set of its size. Don't wait . . . see us now!

only **£37-10-0**  
easy credit terms arranged

(YOUR NAME)

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8X3 Column Advertisement

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