

TECHNICAL INFORMATION
COVERING
PACEMAKER TRANSISTOR BROADCAST RECEIVER

Manufactured by **COLLIER & BEALE Ltd. WELLINGTON.**

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

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

2N219 I.F. Amp., OA85 Detector, OC71 1st A.F. Amplifier

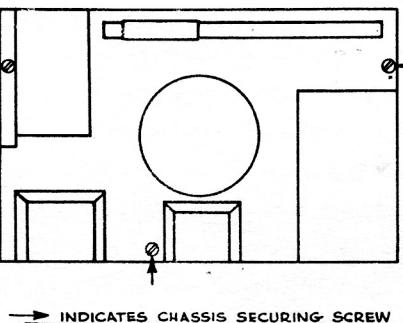
OC71 Driver, 2-OC72 Output.

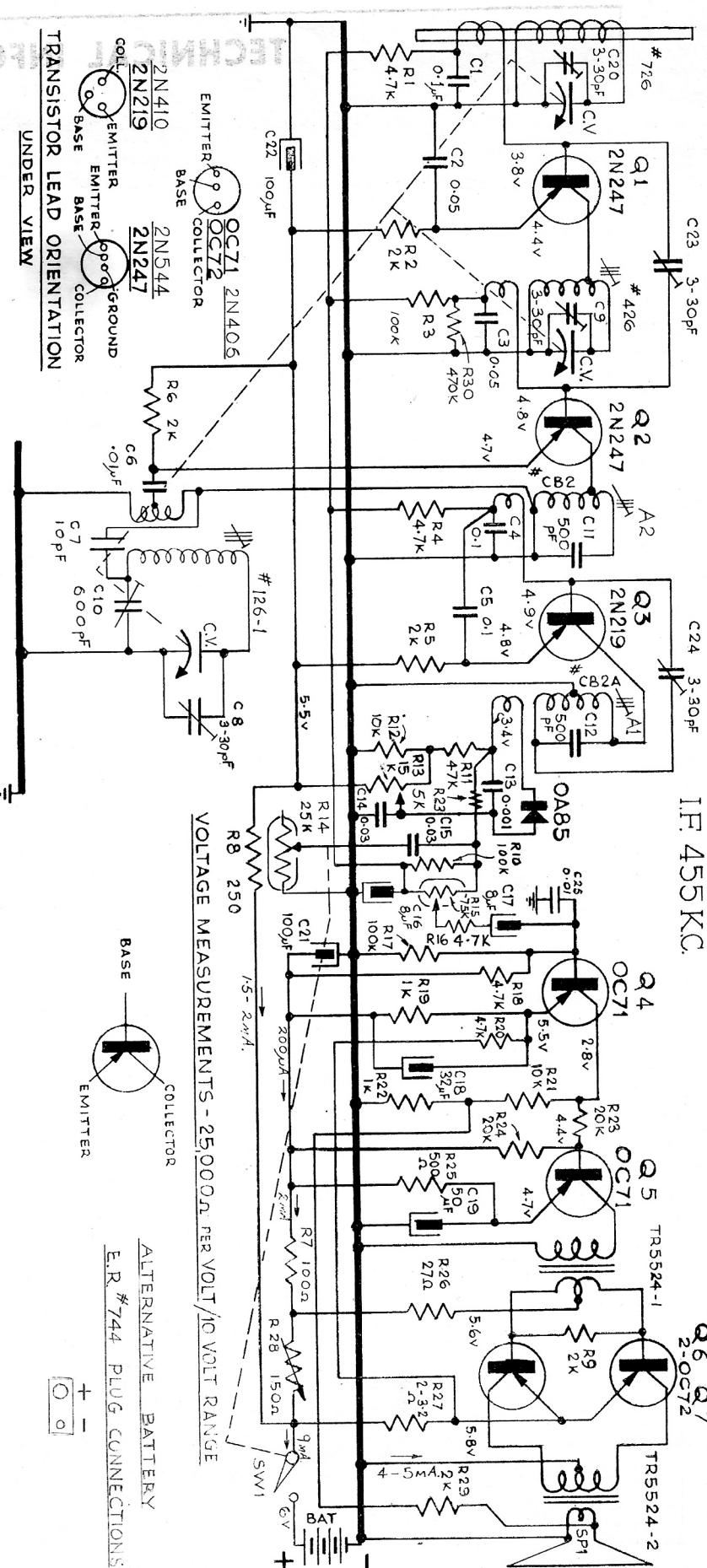
POWER SUPPLY - Self Contained 6 volt Lantern Battery ER509 and in sets produced after August 1958 ER 744 6 volt.

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

TUNING RANGE - Broadcast 530-1600 Kc.

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





SCHEMATIC DIAGRAM MODEL 'TRANS-PORTABLE' 58'

ALIGNMENT INSTRUCTIONS

To Adjust Diode Bias

Clip D.C. Voltmeter (1-3 volts full scale and 10-20,000 ohms per volt) across Q4 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.

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.

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.

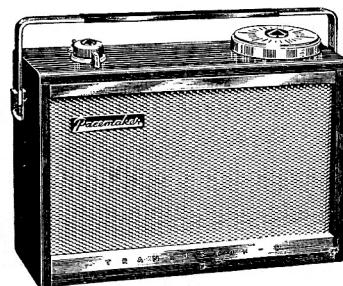
- ★ hear it while you travel—take it with you when you arrive! No valves—no power lead!
- ★ plays for 800 hours on an ordinary 7/9d. battery!
- ★ no installation costs—no servicing!
- ★ no exterior car aerial. Special micro-iron interior aerial rejects interference.
- ★ No loss when you sell the car.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

only £ 37-10-0 Easy terms arranged.

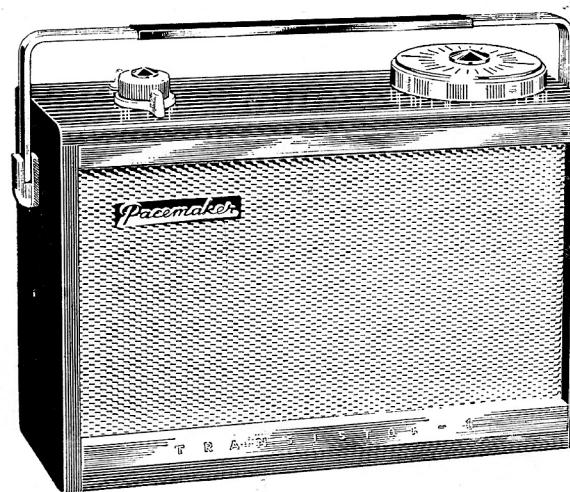
(YOUR NAME)

8x2 Column Advertisement

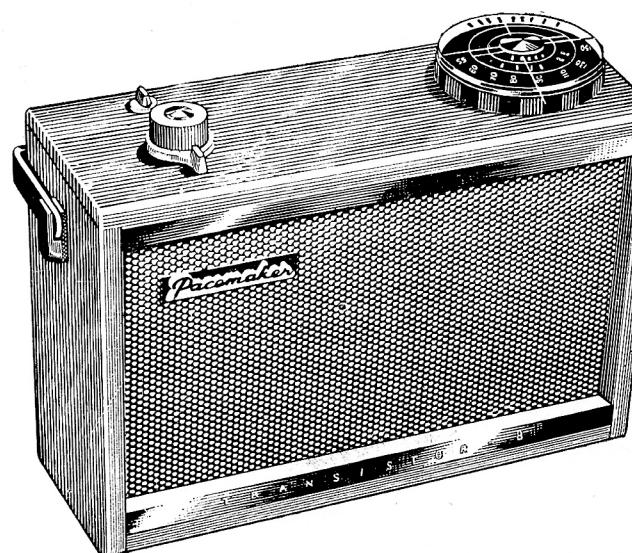
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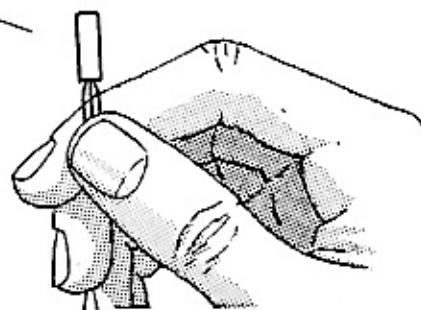
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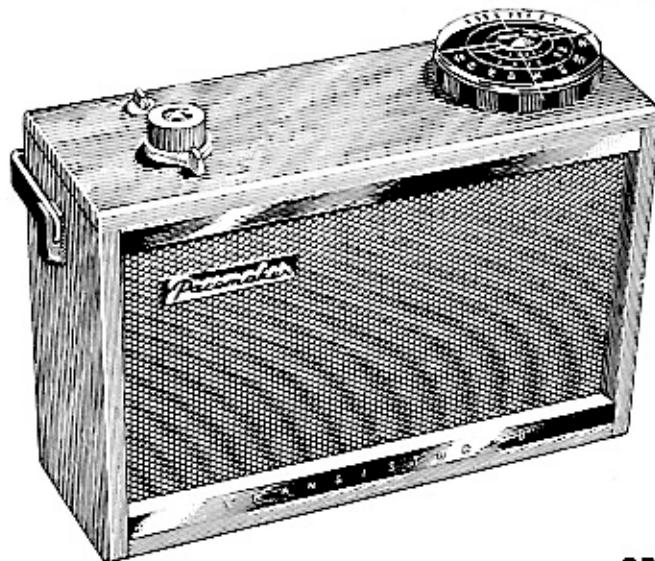
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THE TRANSISTORISED

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TRANS-PORTABLE
CORDLESS RADIO



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