codeword ~~Coronet~~ AIRLINER

TECHNICAL INFORMATION

COVERING

BROADCAST RECEIVER TYPE 5153

COLLIER & BEALE Ltd. WELLINGTON.

TYPE SET—A.C. Superheterodyne. Moulded Bakelite Cabinet.
TUBES (Five)—ECH21 Converter, 6BA6 I.F. Amp., 6AV6 Det.-A.F., 6AQ5 Power Output, 6X4 Rectifier.
POWER SUPPLY—230 v. A.C. Rating 28 watts.
TUNING RANGE—Broadcast 535-1530 Kc/s.

ALIGNMENT INSTRUCTIONS

To set pointer, fully mesh condenser and set pointer at last reference mark at left end of dial. Set volume control at maximum and keep output from signal generator no higher than necessary to obtain output readings.

Dummy Antenna	Signal Generator Coupling	Sig. Gen. Frequency	Band Switch Position	Radio Dial Setting	Output Meter	Adjust	Remarks
0.1 μfd.	High Side to pin No. 6 (grid) of ECH21.	455 Kc.	BC	High freq. end	Across voice coil	A1, A2, A3, A4.	Adjust for maximum output
R.M.A. Standard	High Side to ant. Terminal	1400 Kc.	,,	1400 Kc.	,,	C18	,, ,,
,,	,,	1400 Kc.	,,	1400 Kc.	,,	C17	,, ,,
,,	,,	600 Kc.	,,	Rock Gang	,,	C13	,, ,,

CAPACITORS

Ref. No.	Cap.	Volts
C1	50 μfd.	275
C2	50 ,,	,,
C3	8 ,,	,,
C4	25 ,,	25
C5	0.25 ,,	500
C6	0.1 ,,	350
C7	0.05 ,,	500
C8	0.02 ,,	500
C9-11	0.01 ,,	500
C12	0.004 ,,	Mica
C13	600 μμfd.	Padder
C14	500 ,,	Mica
C15	250 ,,	,,
C16	100 ,,	,,
C17-18	3-30 ,,	Trimmer
C19-20	5 ,,	Ceramic

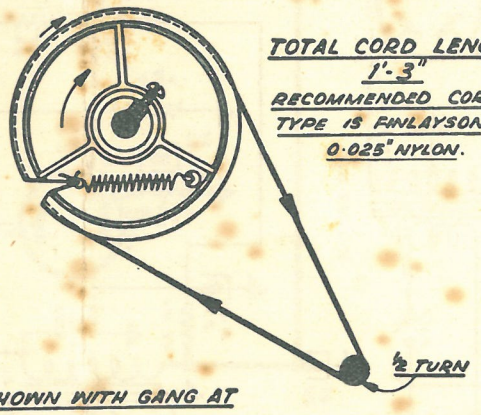
MISCELLANEOUS

Ref. No.	Res., Pri.	Res., Sec.	
PE52	6.5 ohm	6.5 ohm	IF
PE52	6.5 ,,	6.5 ,,	,,
784	20 ,,	2.7 ,,	BC
189	0.82 ,,	2.7 ,,	,,
	Volts	**Volts**	**Volts**
TR5571-2	230	175/175	6.3

	Type	Transformer
SP1	4" x 6" PM	5000 ohm
SW1	S.P.S.T. attached to R3	
SW2	S.P.S.T. slide switch	
CV	Polar C90-02/1 (swing 351 μμf.)	
P.L.	6.5v., 0.3 amp. M.E.S. tub. lamp	

RESISTORS

Ref. No.	Res.	Watts
R1	10 meg.	½
R2	2 ,,	,,
R3	500K ohm	Pot
R4	500K ,,	½
R5	100K ,,	,,
R6-8	50K ,,	,,
R9	15K ,,	,,
R10	5K ,,	,,
R11	3K ,,	1
R12	500 ,,	½
R13	300 ,,	1
R14	50 ,,	½
R15	1.7 ,,	1



DRUM SHOWN WITH GANG AT MAX. CAP.

DIAL STRINGING ARRANGEMENT

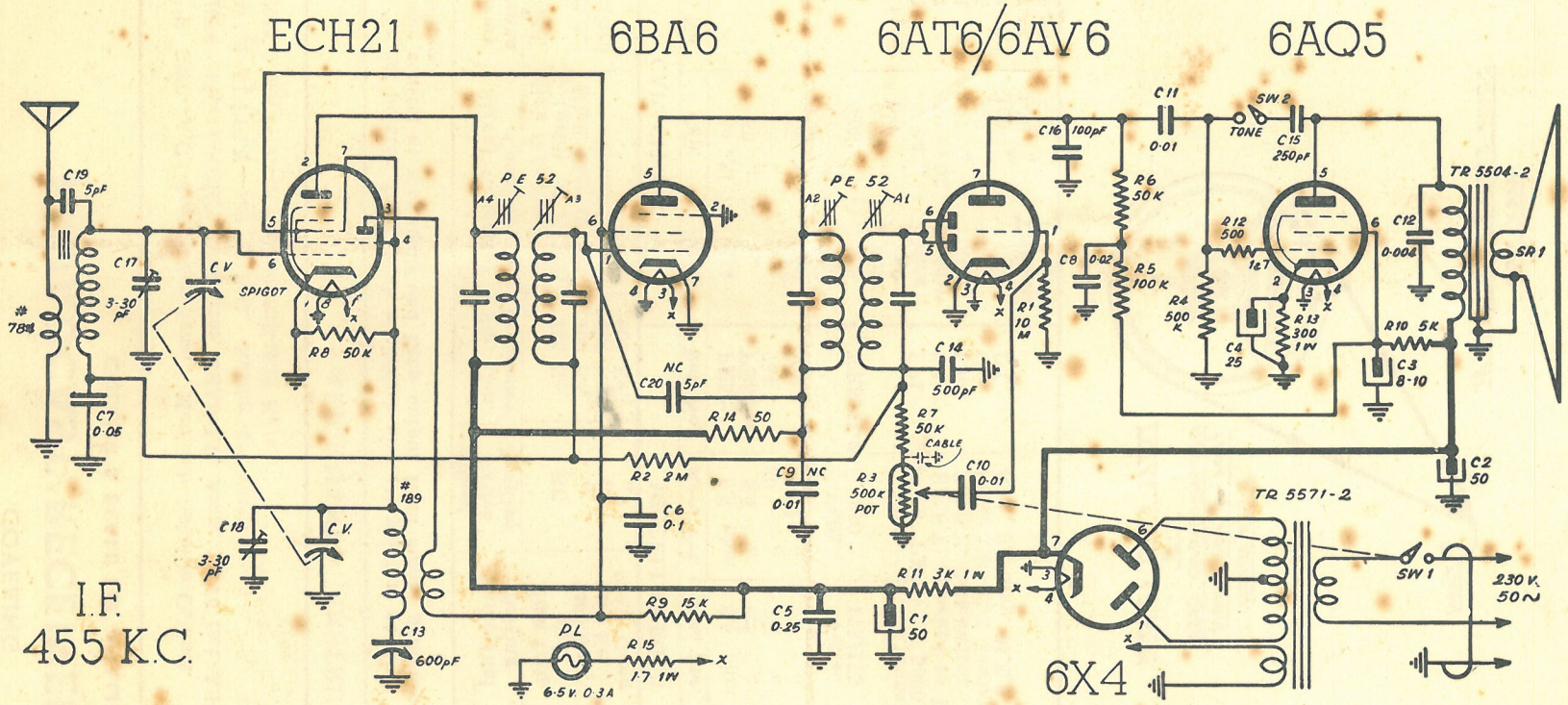
BASS COMPENSATION

Bass compensation has been achieved by the combination of values chosen for the plate feed circuit (R5, R6, C8) of the 6AV6 stage.

The change of reactance of C8, with frequency, modifies the effective plate load impedance presented to the tube.

This results in a greater gain as the frequency is reduced.

6153 similar but has RF stage + continously-variable tone control



SCHEMATIC DIAGRAM MODEL 5153

VOLTAGE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
Conv.	ECH21	5.9 ac	120	40	—3.4	40	—0.5	—3.4	—
I.F.	6BA6	—0.5	—	5.9 ac	—	120	40	—	
Det-A.F.	6AV6	—0.4	—	—	5.9 ac	—0.4	—0.4	75	
Output	6AQ5	0	7.2	—	5.9 ac	138	140	0	
Rect.	6X4	142	—	—	5.9 ac	—	142	150	

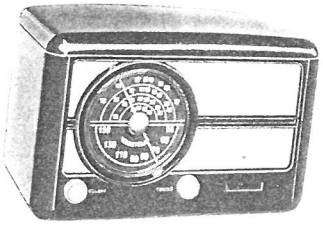
RESISTANCE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
Conv.	ECH21	—	503K	518K	50K	518K	2.5M	50K	—
I.F.	6BA6	2.5 meg	—	—	—	500K	518K	—	
Det-A.F.	6AV6	10 ,,	—	—	—	550K	550K	500K	
Output	6AQ5	500K	300 Ω	—	—	500K	500K	500K	
Rect.	6X4	250 Ω	—	—	—	—	250Ω	500K	

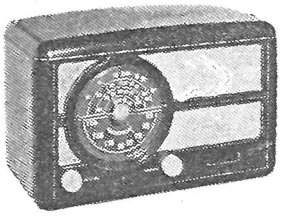
1. D.C. voltage measurements are at 2,000 ohms per volt—A.C. voltage measurements at 1,000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to chassis.
4. Nominal tolerance on component values make possible a variation of ± 10% in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.
6. Resistance readings in B+ circuits may vary widely according to condition of filter capacitors.

5153 No 1953

Codeword : "CORONET"



MODEL 5153 IN BAKELITE CABINET



"PACEMAKER"
MODEL 5153

R.....—5-valve model with 6" x 4" Elliptical speaker, Hi Lo Tone control at rear and large round dial for easy tuning. Housed in attractive cabinet 12¾" wide, 8½" high and 6¼" deep.

Cash Price—**£21/17/6**

Or No Deposit and 5/- Weekly