

6153 is almost the same
uses wooden cabinet
" variable tone control

CROMWELL
MODEL 6152

" Newark

TECHNICAL INFORMATION

COVERING

DUAL WAVE RECEIVER TYPE 6152

COLLIER & BEALE Ltd. WELLINGTON.

TYPE SET—A.C. Superheterodyne. Moulded Bakelite Cabinet.

TUBES (six)—6BA6 R.F. Amp., ECH21 Converter, 6BA6 I.F. Amp., 6AV6 Det.-A.F., 6AQ5 Power Output, 6X4 Rectifier.

POWER SUPPLY—230 v. A.C. Rating, 40 watts.

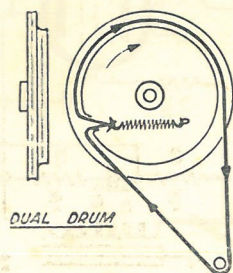
TUNING RANGE—Broadcast, 535-1530 kc.

ALIGNMENT INSTRUCTIONS

To set pointer, fully mesh variable 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 reading. Use insulated alignment tool for adjusting.

Dummy Antenna	Signal Generator Coupling	Sig. Gen. Frequency	Band Switch Position	Radio Dial Setting	Output Meter	Adjust	Remarks
0.1 μ fd.	High side to pin No. 6 grid, of ECH21.	455 Kc.		High freq. end	Across voice coil	A1, A2, A3, A4, C24	Adjust for maximum output
R.M.A.	High side to ant. term.	1400 Kc.		1400 Kc.	"	C25 & C26	" "
Standard	"	1400 Kc.		1400 Kc.	"	C18	" "
"	"	600 Kc.		600 Ks.	"		Rock variable and adjust for max. output. Recheck C24 at 1400 Kc. If C24 is changed recheck C25 and C26.

CAPACITORS			MISCELLANEOUS				RESISTORS		
Ref. No.	Cap.	Volts	Ref. No.	Res., Pri.	Res., Sec.	Use.	Ref. No.	Res.	Watts
C 1-2	40+40 μ fd.	450	784	20 ohm	2.7 ohm	BC	R 1	10 meg.	$\frac{1}{2}$
C 3	25 "	25	489-1	64 "	2.5 "	BC	R 2	2 "	"
C 4	10 "	450	189	0.85 "	2.44 "	BC	R 3	500K ohm	"
C 5	0.1 "	500	PE 52	6.5 "	6.5 "	IF	R 4	500K "	Pot.
C 6	0.1 "	150	PE 52	6.5 "	6.5 "	IF	R 5	250K "	1
C 7-9	0.1 "	500					R 6	100K "	$\frac{1}{2}$
C10-11	0.05 "	500		Volts	Volts	Volts	R 7	75K "	"
C12	0.02 "	500	TR5561-1	230	250 aside	6.3	R 8-10	50K "	"
C13-15	0.01 "	500					R11	20K "	1
C16	0.002 "	Mica		Type	Transformer		R12	10K "	2
C17	0.001 "	"	SP1	6-9H	5000 ohm		R13	2K "	$\frac{1}{2}$
C18	600 μ fd.	Padder					R14	1500 "	5 wire
C19	500 "	Mica	SW1	S.P.S.T. switch attached to R4			R15	1000 "	$\frac{1}{2}$
C20	500 "	"	SW2	S.P.D.T. slide switch			R16	500 "	"
C21	100 "	"	CV	Polar C90-03/1 (swing 351 μ fd.)			R17	500 "	"
C22	100 "	"					R18	300 "	"
C23	50 "	"					R19	300 "	1
C24-26	3.30 "	Trimmer	PL	6.5 v., 0.3 amp tub. M.E.S. lamp			R20	150 "	$\frac{1}{2}$
C27-29	5 "	Ceramic					R21	75 "	"

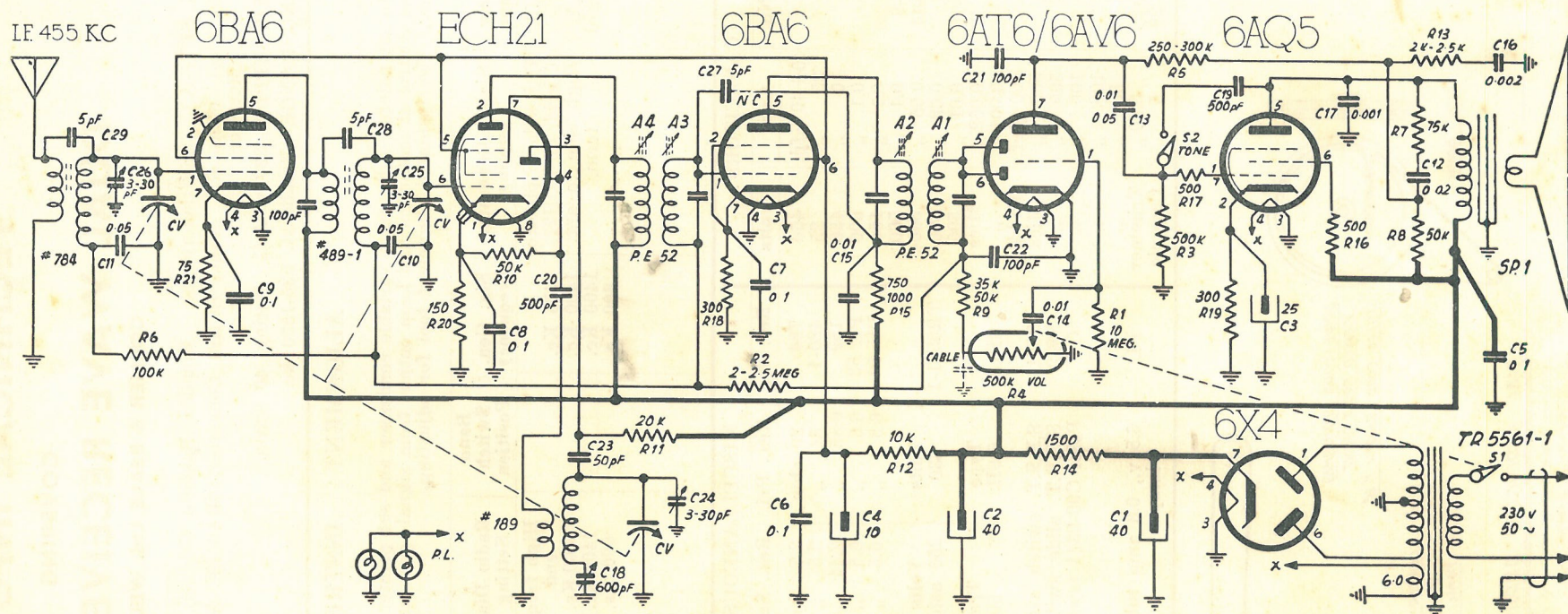


DRIVE-CORD STRINGING
VIEWED FROM FRONT
TOTAL CORD LENGTH 1'-6"

CURSOR - CORD STRINGING
VIEWED FROM REAR
TOTAL CORD LENGTH 3'-1"

DIAL STRINGING ARRANGEMENT

With vee groove drive spindles, cord of the correct diameter is essential.
The recommended type is Finleyson nylon dial thread 0.035" diameter (20 sn6)



SCHEMATIC DIAGRAM MODEL 6152

VOLTAGE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
R.F.	6BA6	0	—	—	6.3 ac	157	75	0.6	—
Conv.	ECH21	6.3 ac	160	55	—5	75	0	—5	—
I.F.	6BA6	0	1.5	6.3 ac	—	155	75	1.5	—
Det.-A.F.	6AV6	0	—	—	6.3 ac	0	0	75	—
Output	6AQ5	0	8V	—	6.3 ac	145	157	0	—
Rect.	6X4	225 ac	—	—	6.3 ac	—	225 ac	240	—

RESISTANCE READINGS

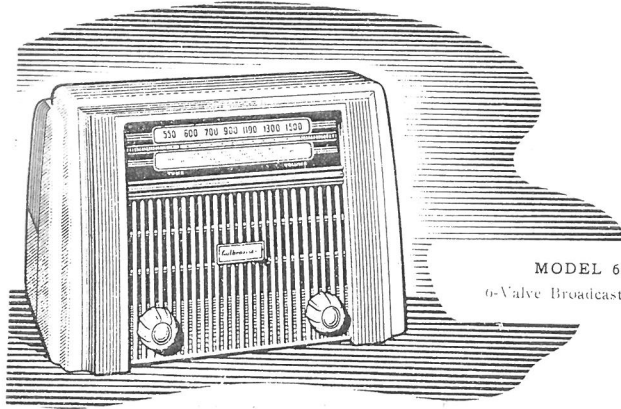
Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
R.F.	6BA6	2.6meg.	—	—	—	500K	510K	75	—
Conv.	ECH21	20K	500K	520K	50K	510K	2.5meg	50K	—
I.F.	6BA6	2.5meg	300	—	—	500K	510K	300	—
Det.-A.F.	6AV6	10meg.	—	—	—	550K	550K	800K	—
Output	6AQ5	500K	300	—	—	500K	500K	500K	—
Rect.	6X4	475	—	—	—	—	475	500K	—

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 the condition of filter capacitors.

6152

July 1952



MODEL 6152 *WARNER*
6-Valve Broadcast Receiver