

TECHNICAL INFORMATION

COVERING

ALL WAVE RECEIVER TYPE 10351 & 11351 *3-bands*

COLLIER & BEALE Ltd. WELLINGTON.

TYPE SET—A.C. Superhetrodyne. Five-position Tone Control.

TUBES (Ten)—7B7 R.F. Amp., 7S7 Converter, 7B7 I.F. Amp., 7C6 Det.-A.F., EF22 A.F. Equalizer, EF22 Phase Inv., 7C5 Power Output, 7C5 Power Output, 5Y3 Rectifier, 6U5 Tuning Indicator.

POWER SUPPLY—230 v. A.C. Rating, 75 watts.

TUNING RANGE—Broadcast, 535-1630 K.C., Medium Wave, 3.2-8.2 Mc., Shortwave, 7.5-22.3 Mc.

ALIGNMENT INSTRUCTIONS

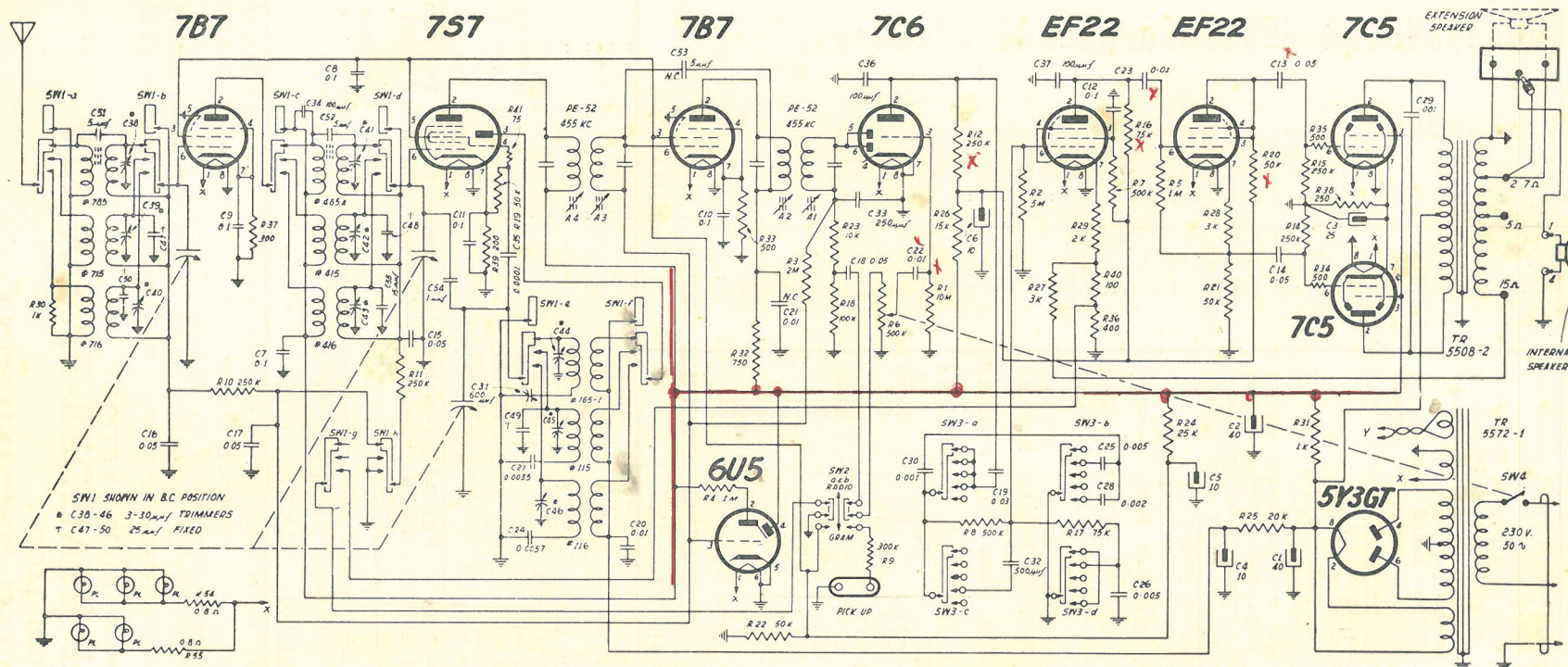
To set pointer, fully mesh variable condenser and set pointer at last reference mark at left end of dial. Set volume control at maximum and keep output from signal generator no higher than necessary to obtain output readings.

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 7S7	455 Kc.	B.C.	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.	"	C44	"
"	"	1400 Kc.	"	1400 Kc.	"	C41 & 38	"
"	"	600 Kc.	"	Rock Variable	"	C31	"
"	"	7.5 Mc.	M.W.	7.5 Mc.	"	C45	"
"	"	7.5 Mc.	"	7.5 Mc.	"	C42 & 39	"
"	"	20 Mc.	S.W.	20 Mc.	"	C46	"
"	"	20 Mc.	"	20 Mc.	"	C43 & 40	"

CAPACITORS			MISCELLANEOUS				RESISTORS		
Ref. No.	Cap.	Volts	Ref. No.	Res., Pri.	Res., Sec.	Use	Ref. No.	Res.	Watts
C1-2	40 μ fd.	450	785	17.5 ohm	2.57 ohm	Broadcast	R 1	10 meg.	$\frac{1}{2}$
C3	25 "	35	485A	69 "	2.4 "	"	R 2	5 "	"
C4-6	10 "	450	185-1	2.1 "	2.5 "	"	R 3	2 "	"
C7-12	0.1 "	600	716	0.23 "	0.028 "	Short Wave	R 4-5	1 "	"
C13-18	0.05 "	"	416	0.44 "	0.028 "	"	R 6-8	500K ohm	"
C19	0.03 "	"	116	0.47 "	0.025 "	"	R 9	300K "	"
C20	0.01 "	"	715	0.63 "	0.14 "	Med. " Wave	R10-15	250K "	"
C21	0.01 "	"	415	1 "	0.14 "	"	R16-17	75K "	"
C22	0.01 "	"	115	0.58 "	0.14 "	"	R18	100K "	"
C23	0.01 "	"	PE-52	6.5 "	6.5 "	I.F.T.	R19	50K "	"
C24	0.0057 "	Mica		volts	volts	volts	R20	50K "	"
C25	0.005 "	"	TR5572-1	230	290 a side	5 - 6.3 - 6.3	R21	50K "	"
C26	0.005 "	"					R22	50K "	1
C27	0.0035 "	"	TR5508-2	O.P. trans. 10,000 ohm-15, 5, 2.7 ohm.			R23	10K "	$\frac{1}{2}$
C28	0.002 "	"					R24	25K "	4
C29	0.001 "	"	SW1A-H	3 pos. 8-pole band switch.			R25	20K "	1
C30	0.001 "	"	SW2A-B	2 pos. 2-pole radio-gram. switch.			R26	15K "	$\frac{1}{2}$
C31	600 μ fd.	Padder	SW3A-D	5 pos. 4-pole tone switch.			R27	3K "	"
C32	0.0005 μ fd.	Mica	SW4	S.P.S.T. switch attached to R6.			R28	3K "	"
C33	0.00025 "	"					R29	2K "	"
C34	0.0001 "	"					R30	1K "	"
C35	0.0001 "	"					R31	1K "	1
C36	0.0001 "	"					R32	750 "	$\frac{1}{2}$
C37	0.0001 "	"					R33	500 "	"
C38	3-30 μ fd.	Trimmer					R34	500 "	"
C39	3-30 "	"					R35	500 "	"
C40	3-30 "	"					R36	400 "	"
C41	3-30 "	"					R37	300 "	"
C42	3-30 "	"					R38	250 "	2
C43	3-30 "	"					R39	200 "	$\frac{1}{2}$
C44	3-30 "	"					R40	100 "	"
C45	3-30 "	"					R41	75 "	"
C46	3-30 "	"					R42	3 meg.	"
C47	25 "	Ceramic					R43	1 "	"
C48	25 "	"					R44	200K ohm	"
C49	25 "	"					R45	68K "	"
C50	25 "	"					R46	68K "	"
C51	5 "	"					R47	35K "	"
C52	5 "	"					R48	35K "	"
C53	5 "	"					R49	27K "	"
C54	1 "	Gimmick					R50	4.7K "	"
C55	15 "	Ceramic					R51	2500 "	"
C55A	25 μ fd	35					R52	47 "	"
C56	10 "	450					R53	47 "	"
C57	10 "	"					R54	0.8 "	1
C58	0.05 "	600					R55	0.8 "	"
C59	0.02 "	"							
C60	0.02 "	"							

June 1952

10351
11351



SCHEMATIC DIAGRAM MODEL 10351 & 11351

VOLTAGE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
R.F.	7B7	6.3A.C.	225	80	2.6	—	0	2.6	—
Conv.	7S7	6.3A.C.	225	145	—5	80	0	1.8	—
I.F.	7B7	6.3A.C.	225	80	3.2	—	0	3.2	—
Det.-A.F.	7C6	6.3A.C.	115	0	—	0	0	—	—
Eq'izer	EF22	6.3A.C.	110	55	4.4	—	0	4.4	—
Inv.	EF22	6.3A.C.	125	125	125	—	15	82	—
Output	7C5	6.3A.C.	250	225	0	—	0	14	—
Output	7C5	6.3A.C.	250	225	0	—	0	14	—
Rect.	5Y3	150	250	—	270A.C.	—	270A.C.	—	250
Eye	6U5	6.3A.C.	20	0	225	—	—	—	—

RESISTANCE READINGS

Use	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
R.F.	7B7	—	250K	50K	300ohm	—	2.4meg.	300ohm	—
Conv.	7S7	—	250K	250K	50K	50K	2.4meg.	200ohm	—
I.F.	7B7	—	250K	50K	600ohm	—	2.1meg.	600ohm	—
Det.-A.F.	7C6	—	500K	10meg.	—	100K	100K	—	—
Eq'izer	EF22	—	250K	250K	2.5K	—	5meg.	2.5K	—
Inv.	EF22	—	250K	250K	250K	—	1meg.	53K	—
Output	7C5	—	250K	250K	250K	—	250K	250K	—
Output	7C5	—	250K	250K	250K	—	250K	250K	—
Rect.	5Y3	250K	250K	—	65ohm	—	65ohm	—	250K
Eye	6U5	—	250K	2.1meg.	1.25meg.	—	—	—	—

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 common negative. Bandswitch in B.C. position.

4. Nominal tolerance on component values make possible a variation of $\pm 10\%$ 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.

TECHNICAL INFORMATION

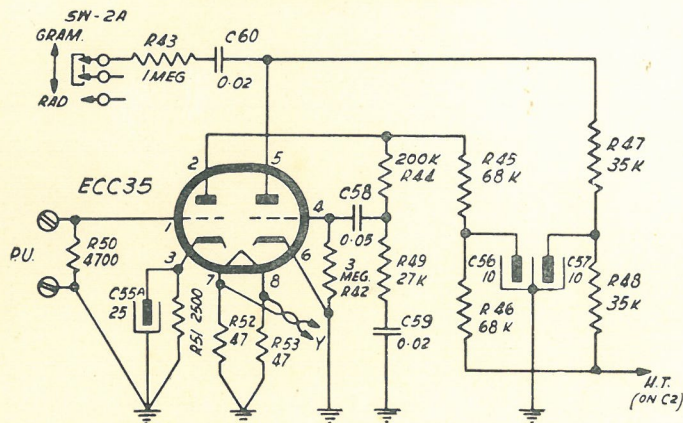
COVERING
ALL WAVE RECEIVER TYPE 10351 & 11351

COLLIER & BEALE Ltd. WELLINGTON.

11.36.51

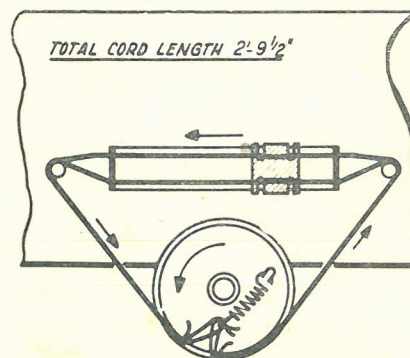
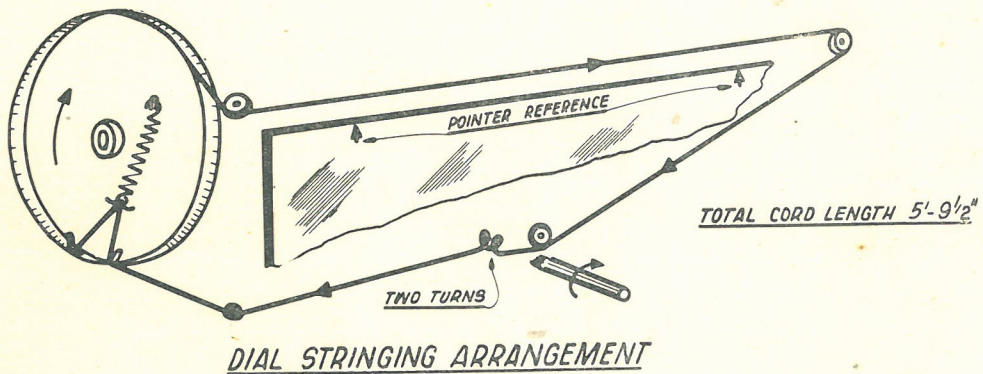
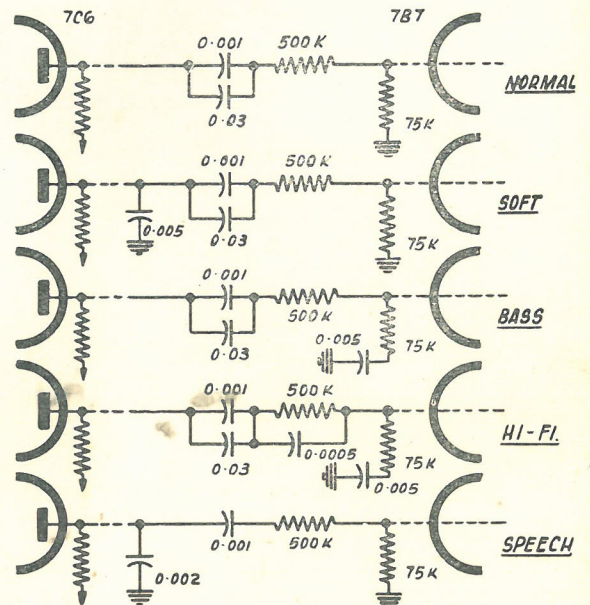
MODEL 11351

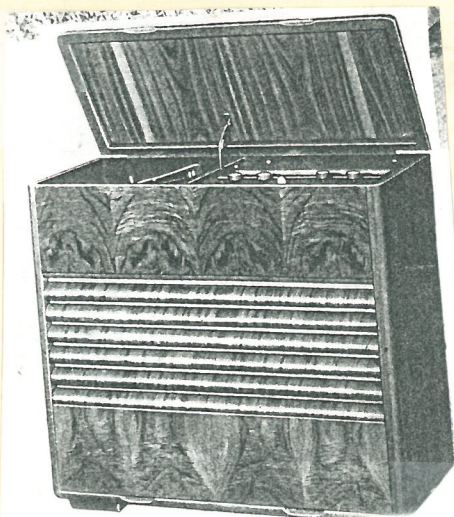
SCHEMATIC OF PRE-AMPLIFIER
DESIGNED FOR USE WITH "G.E."
VARIABLE RELUCTANCE PICK UP



TONE SELECTOR SWITCHING

CIRCUIT CONDITION IN EACH SETTING





10351 & 11351