

CAB class coding  
first numeral = number of  
second - = glass  
42 second - = number of bands

5/6 similar with 65A7

RADIO AND ELECTRONICS.

5V 516A-57926 Rola F4B  
1946 23C7  
= 1947

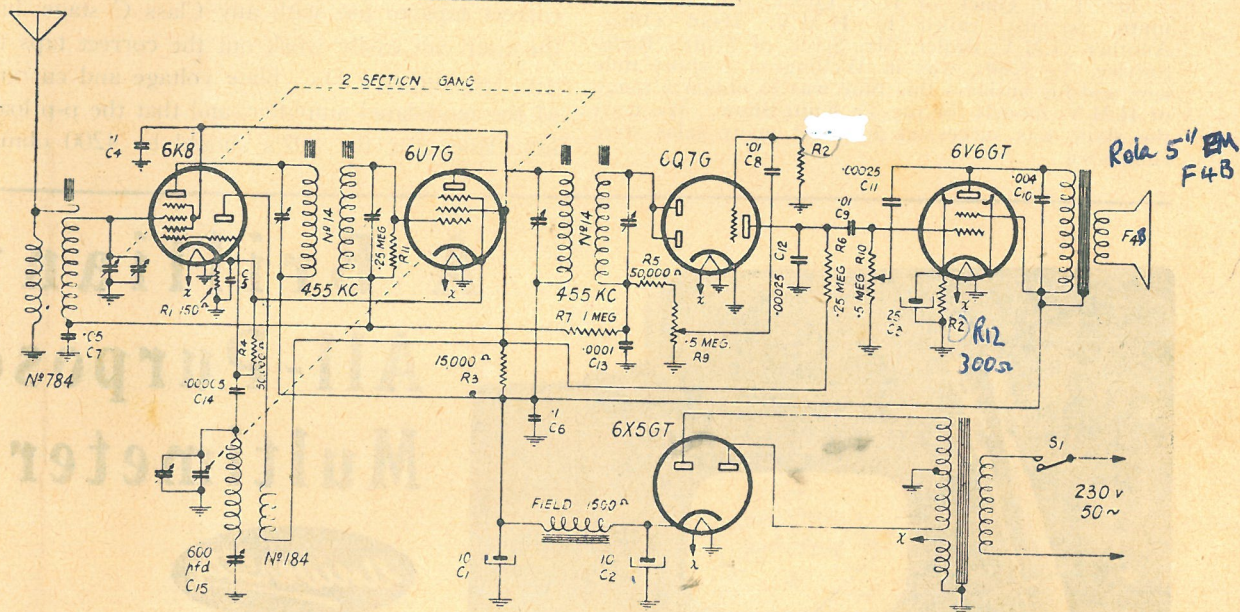
August 1, 1946.

# FOR THE SERVICEMAN

## 5V PACEMAKER RECEIVER MODEL 515D

SCHEMATIC DIAGRAM  
FREQ. RANGE 530-1720 KC

515/2 = 3 gang



The above diagram applies also to Model 515-2, which is identical with Model 515-D, except that 515-2 has a three-gang condenser, one section being unused.

### Alignment Sensitivity Figures:

Note.—The I.F. is 455 kc/sec., and both transformers should be adjusted for maximum output. Under no circumstances should a staggered adjustment be used, as this procedure reduces the sensitivity too much. Adjustment of the I.F. transformers should be made with the gang-condenser fully open. The second I.F. transformer should be aligned first. The figures given below are for a signal generator modulated 30 per cent. at 400 c/sec. Standard output is taken as 50 milliwatts at the 3-ohm voice-coil, being 0.385v. R.M.S.

Sig. Gen. Connection.	Sensitivity.
I.F. Grid	2,600 $\mu$ v
Mixer Grid	30-45 $\mu$ v
Aerial Term.	Approx. 6 $\mu$ v

### Alignment Frequencies:

Trimming should be carried out at a frequency between 1500 and 1600 kc/sec.

Padding adjustment should be carried out at 600 kc/sec.

Note.—Final adjustment of trimmer condensers should be made after the padder has been adjusted.

### Pointer Setting:

Fully mesh the tuning condenser and adjust the pointer to the datum line, which is the horizontal line bisecting the scale.

### Low Sensitivity:

If the sensitivity is much less than shown in the table attached, the following points should be checked:—

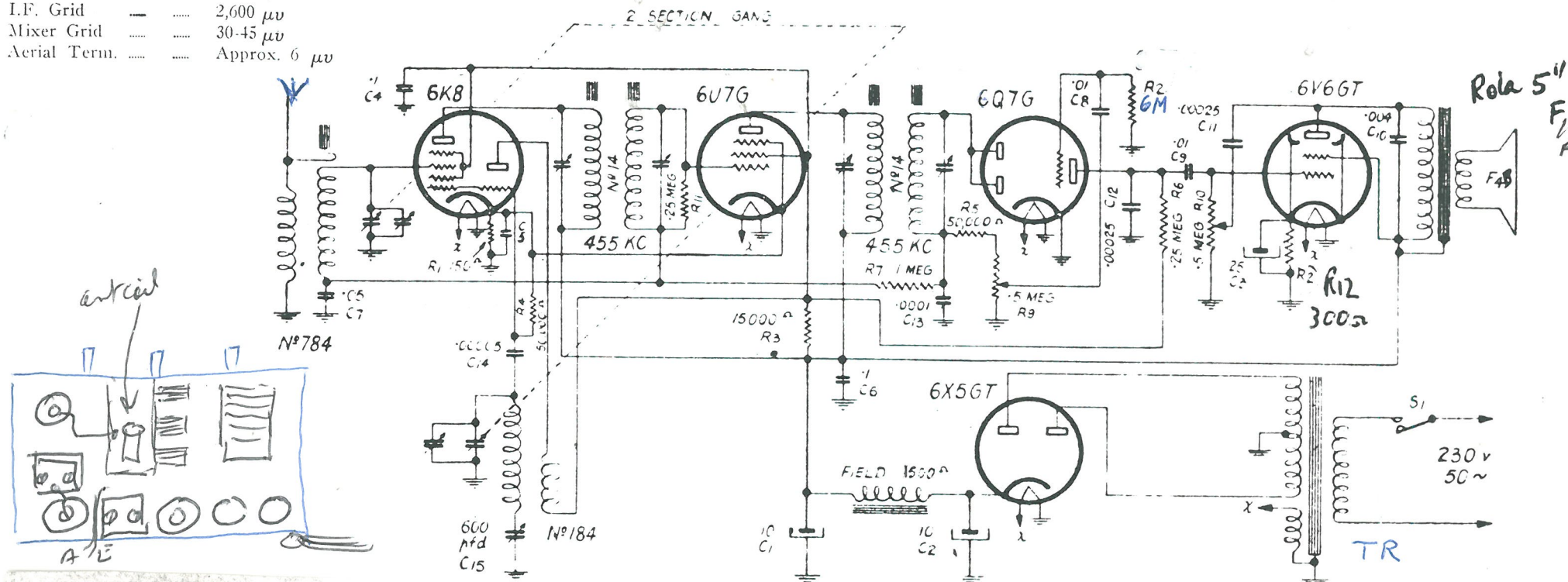
- (1) Low emission in mixer and I.F. amplifier tubes.
- (2) 6V6 Cathode bypass condenser, C<sub>3</sub>. 25 $\mu$ F 25V
- (3) Diode bypass condenser, C<sub>13</sub>.

Note error in drawing two R2's are shown Model-515D



FREQ. RANGE 530-1720 KC

Sig. Gen. Connection.		Sensi- tivity.
I.F. Grid	— .....	2,600 $\mu v$
Mixer Grid	.....	30-45 $\mu v$
Aerial Term.	.....	Approx. 6 $\mu v$


$$R_{12} = 300\Omega$$
$$R_2 = \dots 6M.$$


Sensitivity Figures:

**Alignment Frequencies:**

F. is 455 kc/sec., and both transformers

Trimming should be carried out at a frequency

SCHEDULE OF COMPONENTS FOR MODELS 515D AND 515-2 RECEIVERS.

CONDENSERS.

C 1 )			Power supply filter condensers; each 10 uF
C 2 )			in 515D and each 8 uF in 515-2.
C 3	25 uF		Output cathode bypass.
C 4	.1 "	paper.	Screens R.F. bypass.
C 5	.1 "	"	R.F. cathode bypass.
C 6	.1 "	"	High-tension bypass.
C 7	.05 "	"	A.V.C. bypass.
C 8	.01 "	"	Audio coupling.
C 9	.01 "	"	" "
C10	.004 mica		Tone correction.
C11	.00025 "		Tone control.
C12	" "		Detector plate R.F. bypass.
C13	.0001 silver mica		Diode load R.F. bypass.
C14	.00005 mica		Oscillator grid coupling.
C15	600 uF		Oscillator tank padder.

RESISTORS.

R 1	$\frac{1}{2}$ watt	150 ohms	R.F. and I.F. cathode bias.
R 2	1 watt	300 "	Output tube bias.
R 3	"	15,000 "	Screens dropper.
R 4	$\frac{1}{2}$ watt	50,000 "	Oscillator grid leak.
R 5	"	" "	R.F. filter for volume control.
R 6	"	250,000 "	Anode load.
R 7	"	1 megohm	A.V.C. decoupler.
R 8	1 watt	10 "	Detector grid bias.
R 9	pot, $\frac{1}{2}$ meg.		Volume control.
R10	"	"	Tone control, with switch.

R11, of  $\frac{1}{2}$  megohm value, is manufactured as part of the first-stage I.F. transformer.

COLLIER & BEALE LIMITED,  
66 GHUZNEE STREET,  
WELLINGTON, C.2.

October, 1945.