

ADVANCE TECHNICAL INFORMATION.

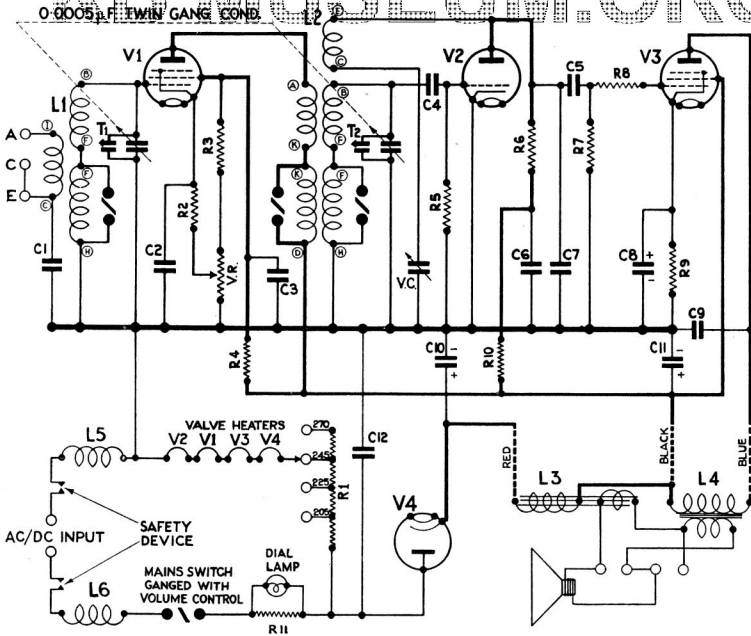
K.B. 520 3 VALVE T.R.F. A.C./D.C. RECEIVER.

KB520

1. GENERAL.

This receiver is designed to operate on mains supplies between 195 and 280 volts, either A.C. or D.C.
The power consumption is approximately 67 watts.

2. CIRCUIT DIAGRAM



FOR KEY TO LETTERING OF COIL TAGS (P) ETC. SEE PAGE A.3, PARA. 3 OF SERVICE MANUAL.

ALL WAVE CHANGE SWITCHES CLOSED ON MEDIUM AND OPEN ON LONG WAVES.

3. KEY TO

CIRCUIT DIAGRAM

Condensers.

C 1.	0.01	microfarad
C 2.	0.1	"
C 3.	0.1	"
C 4.	0.0001	"
C 5.	0.05	"
C 6.	2	" (Elect.)
C 7.	0.001	"
C 8.	25	" (Elect.)
C 9.	0.003	"
C10.	8	" (Elect.)
C11.	8	" (Elect.)
C12.	0.01	"
V.C.	0.0003	"

Resistances.

R1.	...	850 ohms.
R2.	...	300 ohms.
R3.	...	15,000 ohms.
R4.	...	15,000 ohms.
R5.	...	2 megohms.
R6.	...	25,000 ohms.
R7.	...	250,000 ohms.
R8.	...	100,000 ohms.
R9.	...	150 ohms.
R10.	...	10,000 ohms.
R11.	...	36 ohms.

Note—C4 and R5 are built into coil assembly L2.

C2 and C3 are supplied as a single block. C6, C8, C10 and C11 are supplied as a single block.

R11 is wound on R1 former.

4. APPROVED VALVES

	Type	Brimar	Mullard
V1	H.F. Pentode	9D2	
V2	Triode Det.	4D1*	HL 13C (met)
V3	Output Pentode	7D6	—
V4	Rectifier	1D5	—

*This valve may only be used where a valve screen is provided.

5. VOLTAGE AND CURRENTS

Voltages measured with 1,000 ohms per volt instrument. 225 volts A.C. applied to the 225 volt tapping with volume control in its maximum position.

	Voltage between chassis and :			Current in m.a.	
	Anode	Priming Grid	Cathode	Anode	Priming Grid
V1	170v	70v	1.8v	4.6	1.4
V2	75v	—	0v	3.2	—
V3	160v	175v	4.0v	22.5	4.0
V4	—	—	—	40.0	—

6. COIL RESISTANCES

Coil	Winding	Tags	Resistances
L1	Aerial coupling	I.C.	11 ohms
	M.W.	B.F.	3 ohms
	L.W.	F.H.	10 ohms
L2	Anode M.W.	A.K.	7 ohms
	„ L.W.	K.D.	16 ohms
	Grid M.W.	B.F.	4 ohms
	„ L.W.	F.H.	10 ohms
L3	Reaction	E.C.	4 ohms
			1,700 ohms
L4	Primary		400 ohms

7. ALIGNMENT OF CIRCUITS

If necessary, adjust the pointer on the gang condenser spindle to line up with the datum mark (horizontally) when the condenser is fully closed.

Then turn the condenser until the pointer indicates 214 metres (1,400 Kc/s.)

With the aid of a signal generator adjusted to the above frequency, and an output meter, trim T1 and T2 trimmers until maximum output is indicated.

The volume control should be turned fully clockwise and the reaction condenser fully counter-clockwise.

When trimmed in the above manner the calibration is correct for both wavebands.