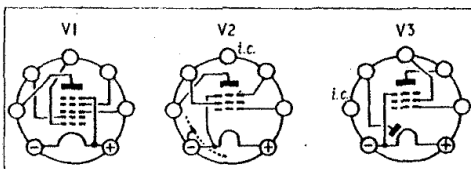


MARCONI PHONE BP60

Intermediate frequency 470 kc/s.



Resistors

R1	100kΩ	B2
R2	27kΩ	A1
R3	18kΩ	A1
R4	10MΩ	A2
R5	15kΩ	A2
R6	4.7MΩ	B2
R7	100kΩ	C2
R8	1MΩ	C1
R9	10MΩ	B1
R10	470Ω	A2
R11	270kΩ	B1
R12	15Ω	C1
R13	3.9Ω	C1

Capacitors

C1	120pF	A1
C2	—	E3
C3	—	B1
C4	100pF	A2
C5	100pF	A2

C6	100pF	A1
C7	330pF	A1
C8	—	B2
C9	—	E3
C10	0.01μF	A1
C11	0.01μF	A2
C12	100pF	B2
C13	100pF	B2
C14	0.03μF	B1
C15	100pF	B2
C16	100pF	C1
C17	0.01μF	B1
C18	0.01μF	C1
C19	0.03μF	A2
C20	50μF	D3
C21	8μF	E3

Coils*

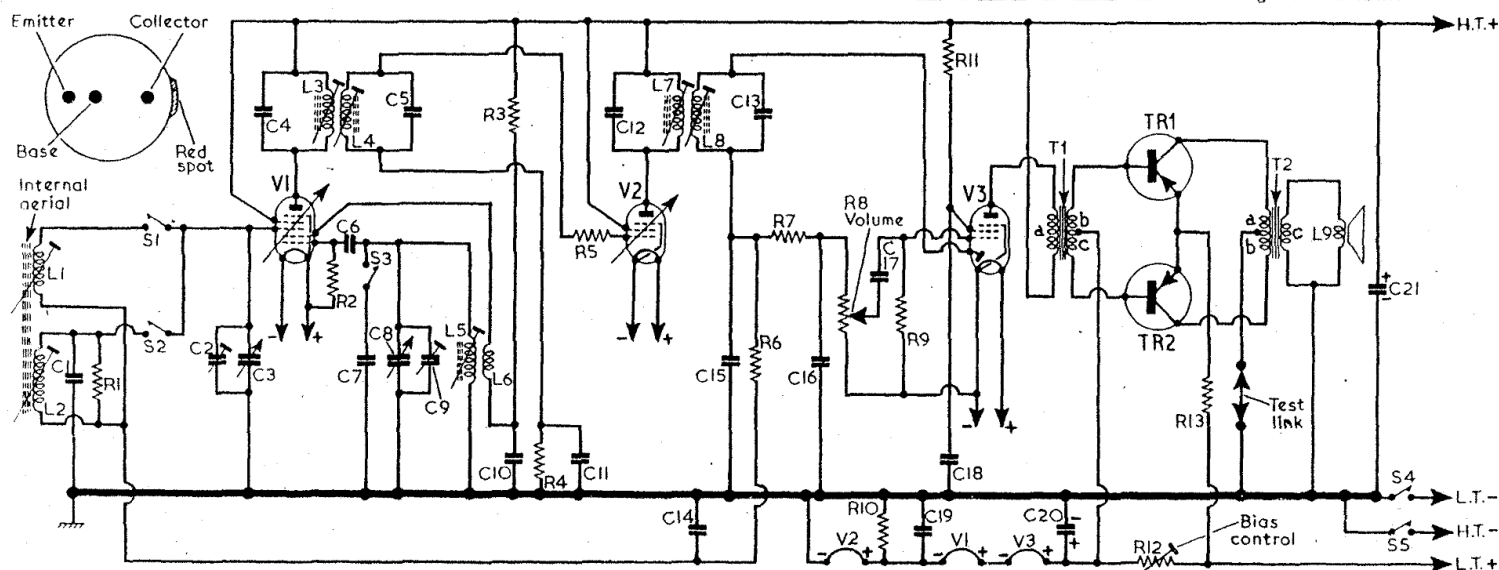
L1	1.0	A2
L2	7.0	C2
L3	10.0	A2

L4	10.0	A2
L5	5.0	A1
L6	5.0	A1
L7	10.0	B2
L8	10.0	B2
L9	3.0	—

Miscellaneous*

T1	{ a 7,000.0 b 5,000.0 c 5,000.0 }	C2
T2	{ a 4.0 b 4.0 c — }	C1
S1-S3	—	A1
S4, S5	—	C1

*Approximate D.C. resistance in ohms. Read "Warning" under "General Notes" before making measurements.



CIRCUIT ALIGNMENT

Equipment Required.—An accurately calibrated signal generator; an audio output meter; a non-metallic trimming tool.

L1 and L2 are ferrite rod tuned and should be adjusted for maximum output by sliding their formers along the ferrite rod and securing them to the rod with an adhesive.

- 1.—Switch the receiver to M.W. and turn the tuning gang to minimum and the volume control to maximum. Connect the audio output meter across T2 secondary winding. Connect signal generator between the control grid (pin 6) of V1 and chassis.
- 2.—Feed in a 470 kc/s signal and adjust the cores of L8 (B2), L7 (D3), L4 (A2) and L3 (E3) in that order for maximum output.
- 3.—Connect a few turns of wire to the signal generator output and inductively couple the turns to the ferrite rod aerial coils L1 and L2. Switch the receiver to M.W. and turn the gang to maximum. Feed in a

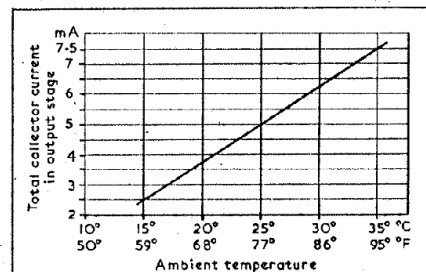
522 kc/s signal and adjust the core of L5 (A1) for maximum output.

- 4.—Turn the gang to minimum. Feed in a 1,602 kc/s signal and adjust C9 (E3) for maximum output.
- 5.—Repeat operations 3 and 4.
- 6.—Feed in a 588 kc/s signal, tune it in on the receiver and adjust L1 (A2) for maximum output.
- 7.—Feed in a 1,427 kc/s signal, tune it in on the receiver and adjust C2 (E3) for maximum output.
- 8.—Repeat operations 6 and 7.
- 9.—Switch the receiver to L.W. Feed in a 162 kc/s signal, tune it in on the receiver and adjust L2 (C2) for maximum output.

Valve	Anode	Screen
V1 DK96 { mixer	67V	67.5V
osc.	30V	—
V2 DF96	67V	67.5V
V3 DAF96	65V	50.0V

Pre-set bias control R12.—This control is adjusted at the factory and should not normally require re-adjustment, unless the transistors TR1 and TR2 are replaced. To adjust R12, proceed as follows.

Unsolder one side of the "test link" (location reference D3) and insert a 0-10mA meter. Switch the receiver on and tune it for no signal. Turn the volume control to minimum. Measure the ambient temperature and adjust R12 (C1) for a current reading



corresponding to the ambient temperature as shown on the transistor bias chart below, e.g., if the ambient temperature is 20° centigrade the corresponding current reading for correct quiescent bias is 3.75mA.