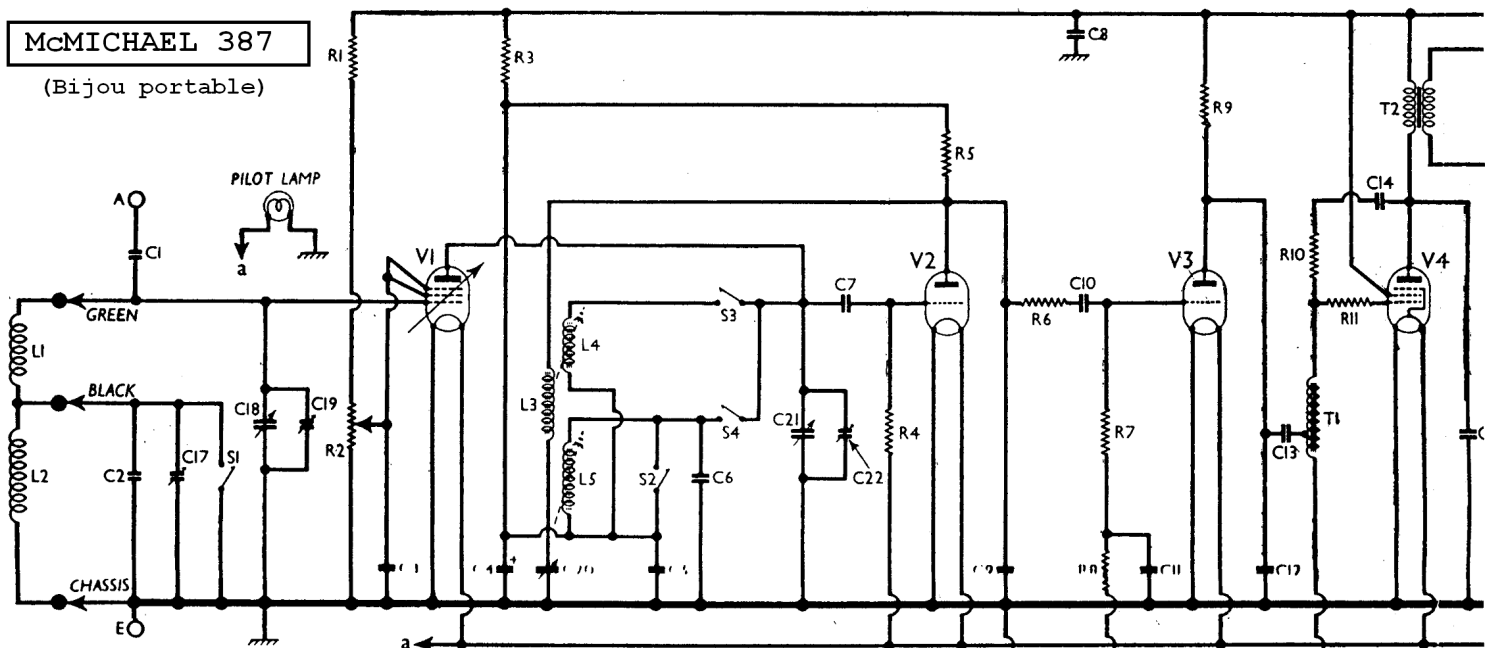


McMICHAEL 387

(Bijou portable)



RESISTANCES		Values (ohms)
R1	V1 SG voltage limiter ...	150,000
R2	V1 gain control ...	500,000
R3	V1, V2 anodes HT feed...	5,000
R4	V2 grid leak ...	6,000,000
R5	V2 anode load resistance	80,000
R6	Part of RF filter ...	50,000
R7	V3 CG resistance...	1,000,000
R8	V3 CG decoupling ...	1,000,000
R9	V3 anode load resistance	50,000
R10	Part of feed-back filter...	5,000,000
R11	V4 grid stopper ...	200,000
R12	V3, V4 auto GB potential	100
R13	divider ...	250

CONDENSERS		Values (μF)
C1	External aerial series ...	0.00001
C2	LW frame aerial fixed trimmer...	0.000075
C3	V1 SG decoupling ...	0.1
C4*	V1, V2 anodes decoupling	8.0
C5	V1, V2 anodes RF by-pass	0.1
C6	V1 anode LW trimmer ...	0.0001
C7	V2 CG condenser...	0.0001
C8	HT circuit RF by-pass ...	0.1
C9	Part of RF filter ...	0.0001
C10	V3 CG condenser...	0.0003
C11	V3 CG decoupling ...	0.1
C12	RF by-pass ...	0.0003
C13	AF coupling to T1 ...	0.1
C14	Part of feed-back filter ...	0.01
C15	Fixed tone corrector ...	0.01
C16*	Auto GB circuit by-pass...	50.0
C17†	LW frame aerial trimmer	0.00005
C18†	Frame aerial tuning ...	—
C19†	MW frame aerial trimmer	—
C20†	Reaction control ...	0.00035
C21†	V1 anode circuit tuning...	—
C22†	V1 anode MW trimmer ...	—

* Electrolytic. † Variable. ‡ Pre-set.

OTHER COMPONENTS		Approx. Values (ohms)
L1	Frame aerial windings ...	1.2
L2		19.0
L3		2.5
L4		1.4
L5		17.0
L6	Speaker speech coil ...	2.5
T1	Intervalve auto-trans-	2,700.0
	former, total ...	
T2	Speaker input (Pri. trans. Sec.)	900.0
		0.25
S1-S4	Waveband switches ...	—
S5	HT circuit switch ...	—
S6	LT circuit switch...	—

VALVE ANALYSIS

Valve voltages and currents given in the table (col. 5) are those measured in our receiver when it was operating with a new HT battery reading 89 V on load. The receiver was tuned to the lowest

wavelength on the medium wave band, and the volume control was adjusted to a point just short of where oscillation commenced. The frame aerial was disconnected and the frame aerial leads on the chassis were joined together, so that there was no signal input.

Voltages were measured on the 400 V scale of a model 7 Universal Avometer, the negative lead of which was connected to chassis.

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 VP23	80	0.9	30	0.3
V2 11L22	41	0.45	—	—
V3 11L22	51	0.7	—	—
V4 Pen 25	84	4.3	86	1.0

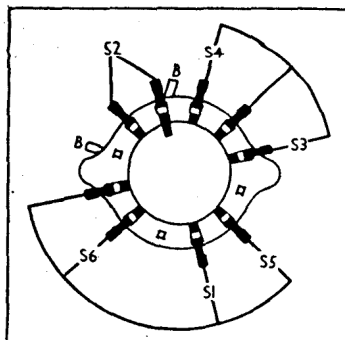


Diagram of the switch unit, drawn as seen when looking in the direction of the arrow in the under-chassis view.

Switch Table

Switch	Off	MW	LW
S1	C	C	—
S2	—	C	—
S3	—	C	—
S4	—	C	—
S5	—	C	—
S6	—	C	—

