MURPHY RECEIVERS

INTRODUCTORY NOTES

DETAILED technical information on the servicing of Murphy receivers is supplied only to accredited agents, and purchasers of this Company's products are advised, at the time of purchase, to have their receivers serviced only by such dealers. In the following pages, however, will be found diagrams of typical circuits which have been used in the main classes of post-war models manufactured by this Company and which illustrate the circuit features employed in this range of broadcast receivers.

It should be noted that several of the chassis have been modified at various times in production, so that the exact circuit details and component values found in any particular model may differ slightly from those shown.

The check voltages indicated on the circuit diagrams were normally measured with a 20,000- or 500-ohms/volt meter (as indicated) while the receiver was operating on the medium-wave band under no-signal conditions.

MODEL A188C

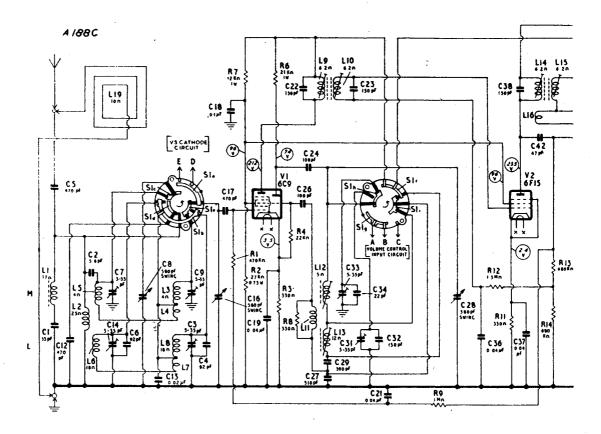
General Notes: Eight-valve (including rectifier and tuning indicator), two-waveband superheterodyne receiver using floor-type baffle construction for operation from A.C. mains.

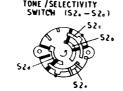
Valves: (V1) 6C9, frequency changer; (V2) 6F15, I.F. amplifier; (V3) 6LD20, demodulator, A.V.C. and phase reverser; (V4) 6M1, tuning indicator; (V5) 6F15, A.F. amplifier; (V6 and V7) 6P25, push-pull power amplifier; (V8) UU6, full-wave rectifier.

Pilot Lamps: Two 6.5 volts, 0.3 amp.

Circuit Notes: The four-position tone-control switching arrangement includes variation of the I.F. selectivity to increase top response on powerful stations. An internal frame aerial is provided for local station reception. The receiver is accommodated on two separate chassis, the push-pull output stage and power supply being connected to the main receiver chassis by two multi-cored cables. A negative feedback loop derives from a separate winding on the output transformer. Li-Ci form a series-tuned I.F. filter.

Intermediate Frequency: 470 kc/s.







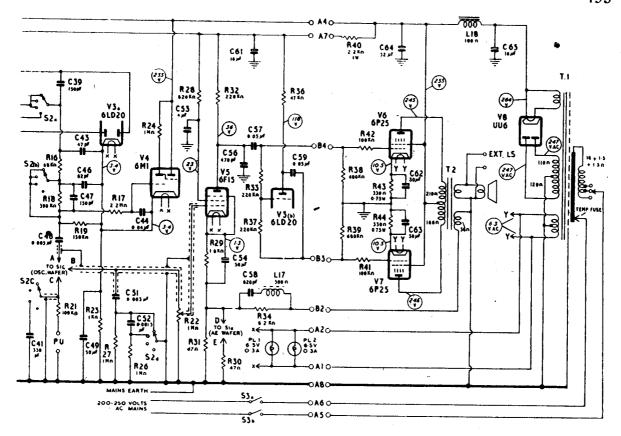




CIRCUIT DIAGRAM—MURPHY

Component Values:

Cat	acitors.						
Cı	33 pF	C31	5-3 <u>5</u> pF.	C61	16	R21	100k
C2	5.6 pF.	C32	150 př.	C62	50	R22	ıM
C3	5-35 pF.	C33	5-35 pF.	C63	50	R23	ık
Čá	82 pF.	C34	22 pF.	C64	32	R24	1M
C ₃ C ₄ C ₅ C ₆	470	C36	0.04	C65	16	R26	ıM
ČĞ	92 pF	C37	0.04	4-5		R27	ıM
Č7	5-35 pF.	C38	150 pF.			R28	820k
Č8	580 pF. Swing	C39	150 pF.	Resi	stors.	R29	1.8k
Č9	5-35 pF.	C41	330 pF.	Ri	470k	R30	47
Č12	5-35 pF. 470 pF.	C42	47 pF.	R ₂	27k (0.75 W.)	R31	47
C13	0.02	C43	47 pF.	R ₃	330	R32	220k
C14	5-35 pF.	C44	0.04	R ₄	22k	R33	220k
C16	5-35 pF. 580 pF. Swing	C46	82 pF.	R6	27k (1 W.)	R34	8-2k
C17	470 pF.	C47	150 pF.	R ₇	12k (1 W.)	R36	47k
Č18	0.I	Č48	υ·005	R8	330	R37	220k
C19	0.04	C49	50	Rg	1M	R38	680k
C21	0.04	C51	0.003	Rii	330	R39	680k
C22	150 pF.	C52	0.0012	R12	1.2 M	R40	2·2k (1 W.)
C23	150 pF.	C53	4	R13	68ok	R41	Iook
Č24	100 pF.	C54	50	R14	680k	R42	rook
C26	100 pF.	C56	470 pF.	R16	68k	R43	330 (0·75 W.)
C27	510 pF.	C57	0.05	R17	2·2M	R44	330 (0·75 W.)
C28	580 pF. Swing	C58	820 pF.	Ri8	390k	-144	330 (0 /3 111)
C29	390 pF.	C59	0.05	Rig	150k		
C49	230 br.	~59	0 03	11.19	1 JOR		



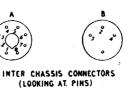
SUBJECT TO ALTERATION WITHOUT NOTICE











MODEL A188C

D.C. Resistance of Coils (ohms).

Values under 1 ohm omitted.

L1 L2 L3 L5	17 25 4 4	L6 L8 L9 L10	18 18 6·2 6·2	L12 L13 L14 L15	5 12 6·2 6·2	L17 L18 L19	300 100 10	
	T ₁ T ₂	(primary) 16 + (primary) 210 -	1·5 + 1·5 + 160	T1 (H.T. secondary) 110 + 120 T2 (neg. feedback winding) 38				

The waveband switch (Sra-Sri) is shown in position "M"; rotate anti-clockwise for the "L" and "G" positions. The tone-selectivity switch (Sza-Szd) is shown in position "I"; rotate anti-clockwise for positions "2", "3" and "4". The switch wafers are viewed from the rear, the black contacts and inner rotors being on the hidden side. Blank positions and anchoring tags are indicated by a spot. All voltages were measured with a 500-ohms/volt meter under no-signal conditions on the medium waveband.

Voltages measured to chassis: Main H.T. line (A4) 255 v.

Secondary H.T. line (A7) 212 v.