

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

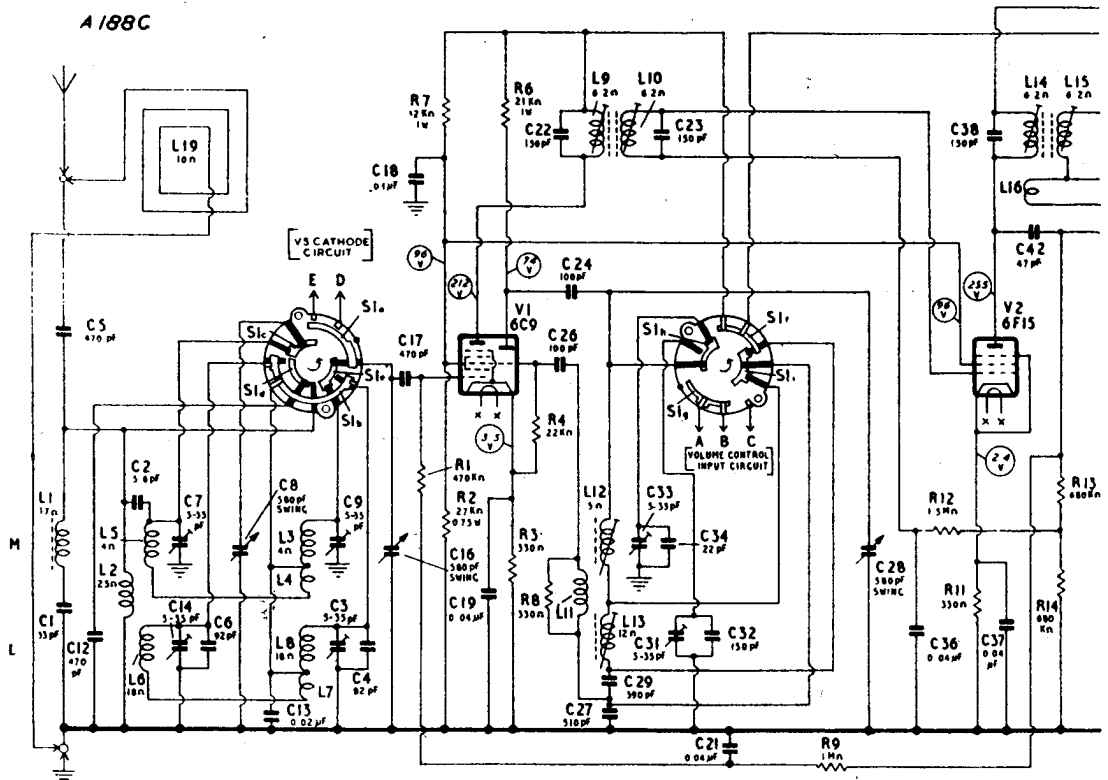
General Notes : Eight-valve (including rectifier and tuning indicator), two-waveband superheterodyne receiver using floor-type baffle construction for operation from A.C. mains.

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.

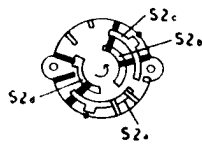
Pilot Lamps : Two 6.5 volts, 0.3 amp.

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. L1-C1 form a series-tuned I.F. filter.

Intermediate Frequency : 470 kc/s.



TONE/SELECTIVITY SWITCH (S2a - S2c)



6C9 (BBA)



V1

6F15 (BBA)



V2, V5

6LD20 (BBA)



V3

CIRCUIT DIAGRAM—MURPHY

Component Values :

Capacitors.

C1	33 pF.
C2	5.6 pF.
C3	5-35 pF.
C4	82 pF.
C5	470
C6	92 pF.
C7	5-35 pF.
C8	580 pF. Swing
C9	5-35 pF.
C12	470 pF.
C13	0.02
C14	5-35 pF.
C16	580 pF. Swing
C17	470 pF.
C18	0.1
C19	0.04
C21	0.04
C22	150 pF.
C23	150 pF.
C24	100 pF.
C26	100 pF.
C27	510 pF.
C28	580 pF. Swing
C29	390 pF.

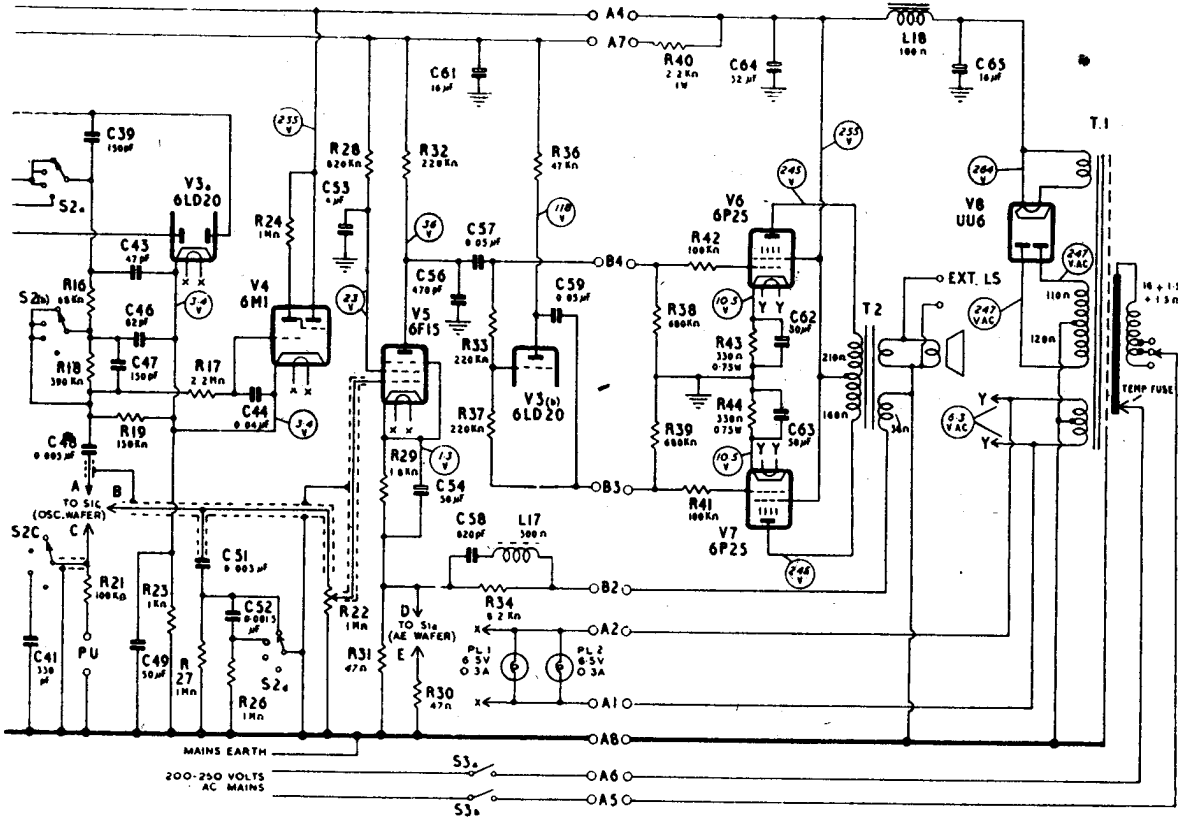
C31	5-35 pF.
C32	150 pF.
C33	5-35 pF.
C34	22 pF.
C36	0.04
C37	0.04
C38	150 pF.
C39	150 pF.
C41	330 pF.
C42	47 pF.
C43	47 pF.
C44	0.04
C46	82 pF.
C47	150 pF.
C48	0.005
C49	50
C51	0.003
C52	0.0015
C53	4
C54	50
C56	470 pF.
C57	0.05
C58	820 pF.
C59	0.05

C61	16
C62	50
C63	50
C64	32
C65	16

Resistors.

R1	470k
R2	27k (0.75 W.)
R3	330
R4	22k
R6	27k (1 W.)
R7	12k (1 W.)
R8	330
R9	1M
R11	330
R12	1.5M
R13	680k
R14	680k
R16	68k
R17	2.2M
R18	390k
R19	150k

R21	100k
R22	1M
R23	1k
R24	1M
R26	1M
R27	1M
R28	820k
R29	1.8k
R30	47
R31	47
R32	220k
R33	220k
R34	8.2k
R36	47k
R37	220k
R38	680k
R39	680k
R40	2.2k (1 W.)
R41	100k
R42	100k
R43	330 (0.75 W.)
R44	330 (0.75 W.)



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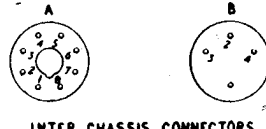
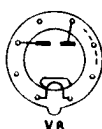
6M1 (10)



6P25 (10)



UU.6 (B 0.)



INTER CHASSIS CONNECTORS (LOOKING AT PINS)

MODEL A188C

D.C. Resistance of Coils (ohms).

Values under 1 ohm omitted.

L1	17	L6	18	L12	5	L17	300
L2	25	L8	18	L13	12	L18	100
L3	4	L9	6.2	L14	6.2	L19	10
L5	4	L10	6.2	L15	6.2		

T1 (primary) 16 + 1.5 + 1.5
T2 (primary) 210 + 160

T1 (H.T. secondary) 110 + 120
T2 (neg. feedback winding) 38

The waveband switch (S1a-S1i) is shown in position "M"; rotate anti-clockwise for the "L" and "G" positions. The tone-selectivity switch (S2a-S2d) is shown in position "1"; 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.