

Mantle

MURPHY SERVICE INFORMATION

MURPHY "MINX" MODEL MD54 SERVICE INFORMATION:

REFERENCE LIST FOR CIRCUIT DIAGRAM:

Abbreviations:

cer. - ceramic
 p.s.m. - protected silver mica
 tub. - paper tubular
 m.tub. - metallised paper tubular
 p.f. - plastic film

elect. - electrolytic
 v.d.c. - d.c. voltage rating
 W. - wattage rating
 lin. - linear law
 log. - logarithmic law.

PART NO.	CIRCUIT NO.	VALUE	TOLERANCE & REMARKS
56325	C1	2.5 - 15 pf	Trimmer
66775	C2	10 pf	10% cer. 750 v.d.c.
	C3		Trimmer, with VC1
66177	C4	470 pf	20% cer. 750 v.d.c.
49454	C5	.04 mf	25% m.tub. 150 v.d.c.
28156	C6	100 pf	5% p.s.m. 350 v.d.c.
28172	C7	68 pf	5% p.s.m. 350 v.d.c.
	C8		Trimmer, with VC2
52630	C9	100 pf	5% p.s.m. 350 v.d.c.
66292	or C9 may be	220 pf	5% p.f. 350 v.d.c.
49454	C10	.04 mf	25% m.tub. 150 v.d.c.
28288	C11	520 pf	1% p.s.m. 350 v.d.c.
56325	C12	2.5 - 15 pf	Trimmer
52630	C13	100 pf	5% p.s.m. 350 v.d.c.
66292	or C13 may be	220 pf	5% p.f. 350 v.d.c.
RP2403	C14	6300 pf	5% p.s.m. 350 v.d.c.
52630	C15	100 pf	5% p.s.m. 350 v.d.c.
66292	or C15 may be	220 pf	5% p.f. 350 v.d.c.
54080	C16	270 pf	20% cer. 500 v.d.c.
41403	C17	.05 mf	20% tub. 350 v.d.c.
28205	C18	390 pf	5% p.s.m. 350 v.d.c.
66298	or C18 may be	390 pf	5% p.f. 350 v.d.c.
49447	C19	.01 mf	25% m.tub. 150 v.d.c.
49441	C20	.1 mf	25% m.tub. 150 v.d.c.
41411	C21	.02 mf	20% tub. 500 v.d.c.
49450	C22	.001 mf	25% tub. 350 v.d.c.
51551	C23	.005 mf	25% tub. 500 v.d.c.
41418	C24	.005 mf	25% tub. 1000 v.d.c.
46532	C25	32 mf	{ + 50% - 20% electro 350 v.d.c.
	C26	32 mf	{ + 50% - 20% electro 350 v.d.c.
27461	R1	1M ohm	20% .4 w
25485	R2	27K ohm	10% .5 w

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PART NO.	CIRCUIT NO.	VALUE	TOLERANCE & REMARKS
25445	R3	22K ohm	10% .4 w
25445	R4	22K ohm	10% .4 w
27085	R5	10K ohm	20% .5 w
24613	R6	150 ohm	10% .4 w
24229	R7	15 ohm	10% .4 w
27237	R8	68K ohm	20% .4 w
27493	R9	1.5M ohm	20% .4 w
26789	R10	330 ohm	20% .4 w
27653	R11	10M ohm	20% .4 w
27333	R12	220K ohm	20% .4 w
27397	R13	470K ohm	20% .4 w
27269	R14	100K ohm	20% .4 w
26949	R15	2.2K ohm	20% .4 w
24653	R16	180 ohm	10% .5 w
25023	R17	1.5K ohm	10% 1 w
24703	R18	220 ohm	10% 1 w
74796	(VC1		
	(VC2		
RP2003	VR1 & S2	500K ohm	Linear var. resistor
RP2014	VR2	250K ohm	Log. var. resistor
RP2642	S1		Switch, 4 pole, 2 pos.
RW1016	(L1	53 ohm	M.W. Aerial Coil
	(L2	2.3 ohm	
RW3348	(L3		S.W. Aerial Coil
	(L4		
RW1017	(L5	1.6 ohm	M.W. Osc. Coil
	(L6		
RW3349	(L7		S.W. Osc. Coil
	(L8		
67694 or	T1	14.5/14.5 ohm	1st I.F.T.
RA2560		5.6/ 5.6 ohm	1st I.F.T.
67695 or	T2	14.5/ 5.5 ohm	2nd I.F.T.
RA2561		5.6/ 4.1 ohm	2nd I.F.T.
RW1015	T3	(5.3 ohm -- anti-hum)	Output Transformer
		(315 ohm -- prim.)	
RW1003	T4	(220 ohm -- H.T.sec.)	Mains Transformer
		(235 ohm --)	
		(53 ohm -- Prim.)	

MURPHY "MINX" MODEL MD54 CIRCUIT ALIGNMENT TABLE:

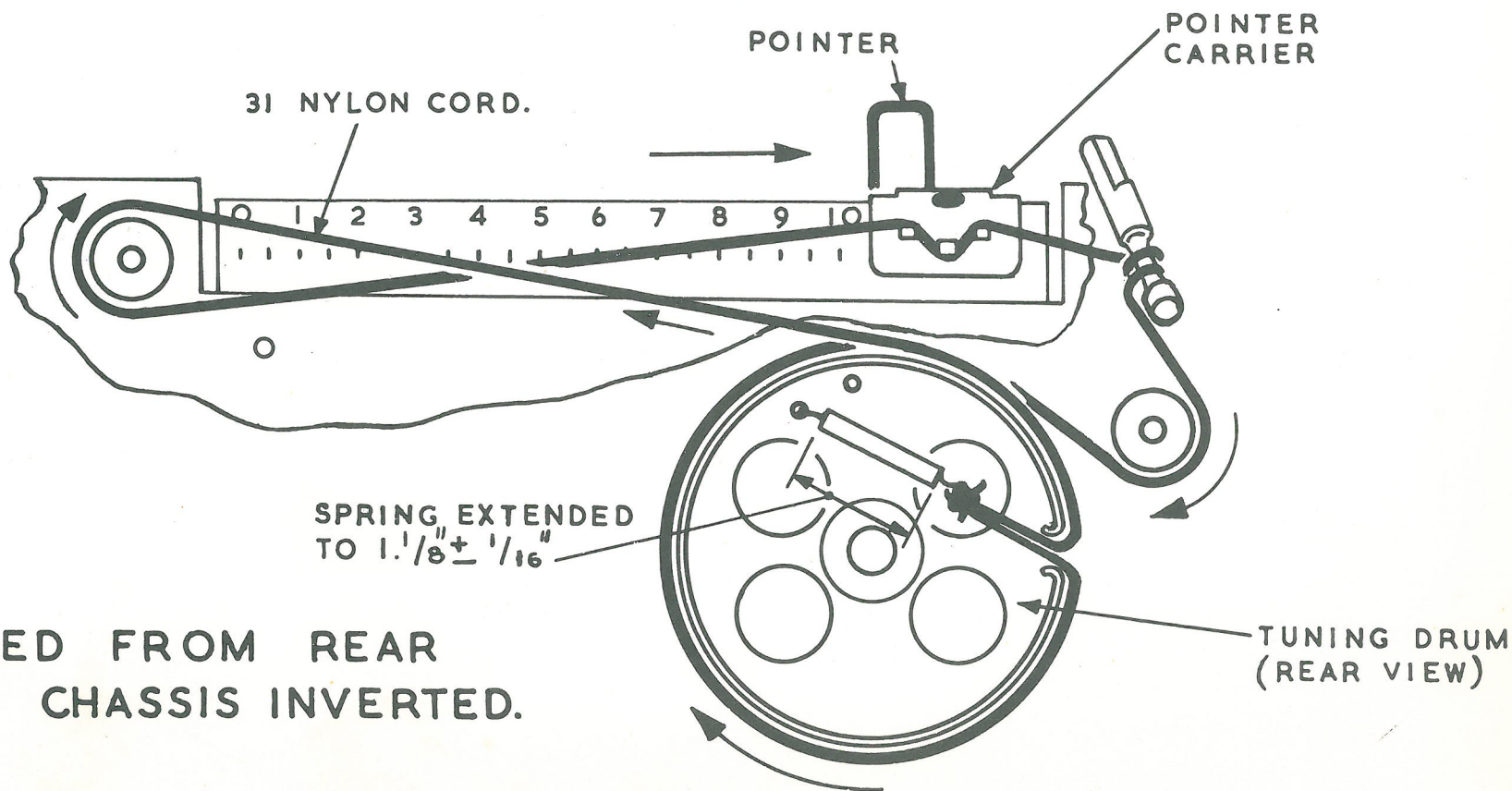
NB: S.W. ADJUSTMENTS TO BE MADE BEFORE M.W. - IF S.W. READJUSTED, M.W. MUST BE READJUSTED

CIRCUIT:	NOTES:	SIG. GEN. FREQUENCY:	SIG. GEN. TERMINATION:	CONNECT SIG. GEN. TO:	RECEIVER SETTING:	ADJUSTMENTS:
2nd IFT	Unscrew sec. core (top of can) before starting adjustments	470 Kc/s	Via 0.01 mf capacitor	V2 grid 1 (Pin 6)	10.5 cm.	T1 (prim.) below chassis T1 (sec.) top of can. Do not readjust Prim. Core.
1st IFT	As above	470 Kc/s	As above	V1 grid 1 (Pin 6)	10.5 cm.	T2 (prim.) below chassis T2 (sec.) top of can. Do not readjust Prim. Core.
S.W.		7.25 Mc/s	Dummy Aerial	Aerial Lead	7.62 cm.	L8 (adjust above chassis) L4 (adjust below chassis)
		17.8 Mc/s	As above	As above	1.06 cm.	C8 (undergang) C3 (condenser)
Medium Wave		1364 Kc/s	Dummy Aerial	Aerial Lead	2.32 cm.	Osc. Trimmer C12 on back of chassis; Aerial Trimmer C1 on top of chassis.
		600 Kc/s	As above	As above	8.65 cm.	Iron core of L6 (above chassis). Iron core of L2 (below chassis). Repeat this and previous adjustments if necessary.

MD 54 CORD DRIVE DIAGRAM.

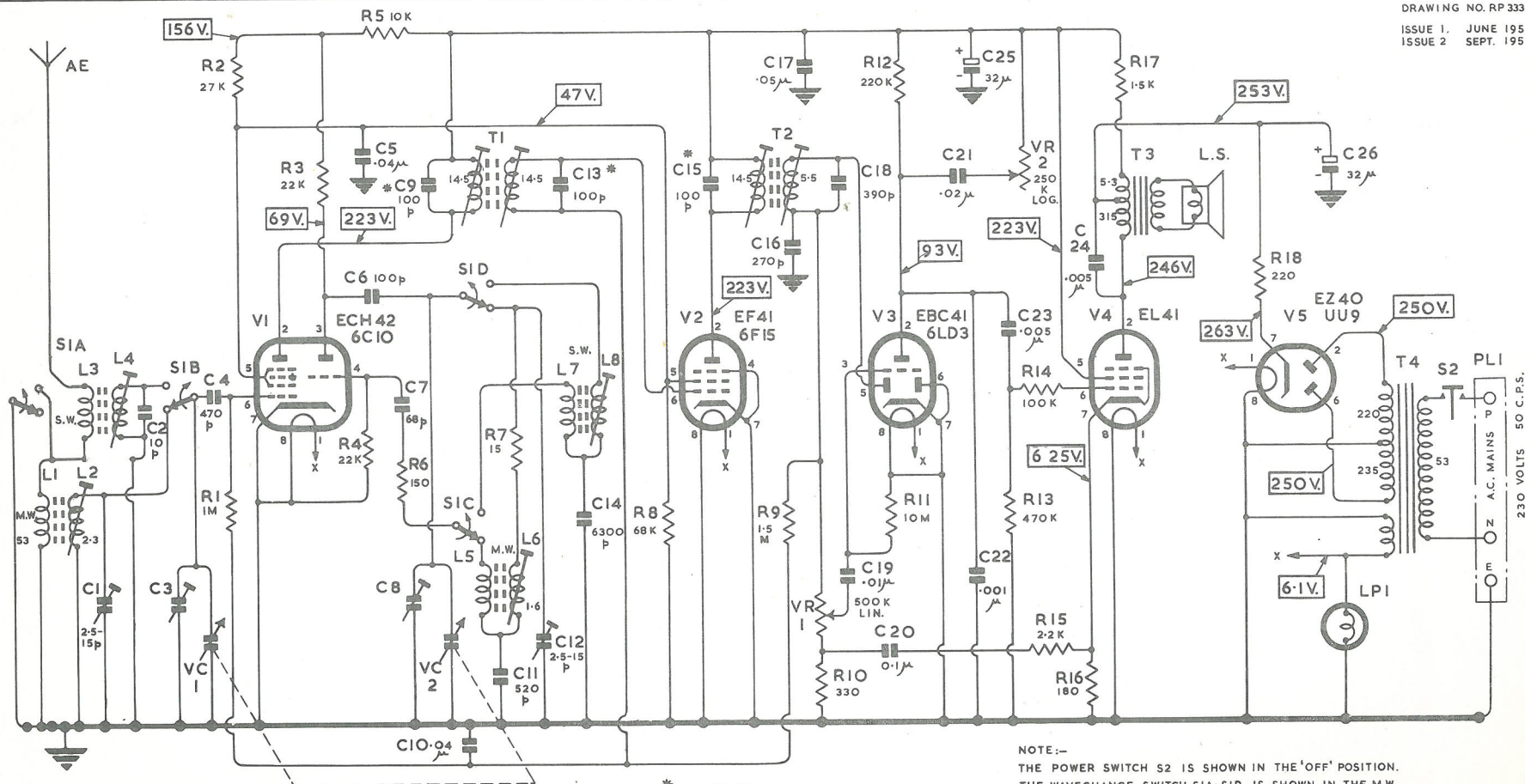
WITH GANGED CONDENSER AT MAXIMUM CAPACITANCE
(NOT NECESSARILY AGAINST STOP.)

CURSOR MUST REGISTER WITH
RIGHT HAND EDGE OF SCALE.



CAP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	26	CAPACITORS				
RESISTORS		1	2	3	4	5	6				7															RESISTORS				
MISC.	SI	L3	L4	SI	VI			SI	SI	TI	L7	L8			V2	T2			V3						V4	T3	L.S.	V5	LPI	MISCELLANEOUS
	L1	L2		VCI				L5	L6																	T4	S2	PLI		

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REFER TO PARTS LIST FOR PART NUMBERS AND COMPLETE DESCRIPTIONS OF ELECTRICAL COMPONENTS. ORDER ALL REPLACEMENTS BY PART NUMBER AND LIST DESCRIPTION.

* SPECIAL NOTE:-
 THE VALUE OF C9 C13 & C15 MAY BE CHANGED TO 220 PF ON ALL RECEIVERS BEARING SERIAL NUMBER 908026 & ONWARD.

NOTE:-
 THE POWER SWITCH S2 IS SHOWN IN THE 'OFF' POSITION.
 THE WAVECHANGE SWITCH SIA-SID IS SHOWN IN THE M.W. POSITION WITH ARROWS INDICATING CLOCKWISE ROTATION OF SWITCH SPINDLE.
 CIRCUIT VOLTAGES ARE SHOWN ARROWED WITHIN RECTANGLES AND WERE MEASURED UNDER NO-SIGNAL CONDITIONS WITH THE RECEIVER SWITCHED TO M.W. AND USING A 20KA/VOLT METER.
 RESISTANCES ARE QUOTED IN OHMS CAPACITANCES IN PARTS OF A FARAD. WHERE THE RESISTANCE OF A WINDING IS LESS THAN ONE OHM THE VALUE IS OMITTED FROM THE CIRCUIT DIAGRAM.
 VALVE PIN NUMBERS ARE SHOWN ADJACENT TO ELECTRODES.

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CIRCUIT DIAGRAM · MURPHY MODEL MD 54
 MINX MANTEL RECEIVER.