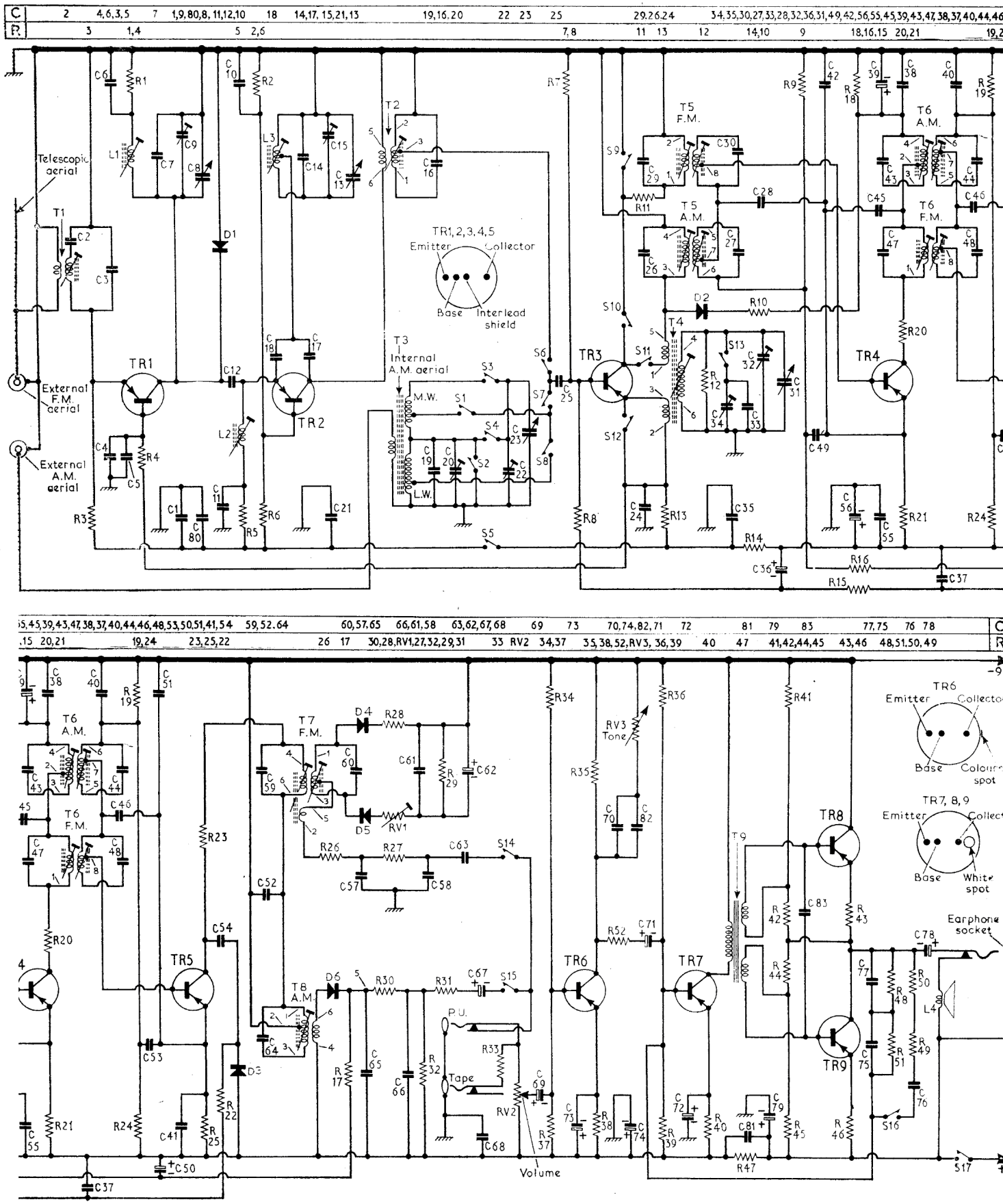


CIRCUIT ALIGNMENT

For correct alignment the receiver should be removed from its case (see "Dismantling").

F.M. Circuits

Equipment Required.—An f.m. signal generator capable of being switched to a.m.; a 0-1V a.c. voltmeter for use as an output meter; a 0.01μF capacitor and bladed type trimming tool.

1.—Connect the a.c. voltmeter across the loudspeaker. Connect the signal generator output between chassis and via the 0.01μF capacitor, **VT2** base. Switch receiver to f.m. and turn the tuning gang to maximum capacitance. Turn volume control to maximum.

2.—Feed in a 10.7Mc/s 22kc/s deviated signal and adjust the top and bottom cores of **T7, T6** (f.m.), **T5** (f.m.) and **T2** for maximum output. Adjust **L2** for minimum output.

3.—Switch the signal generator to a.m. and adjust **RV1** for minimum output, i.e., maximum a.m. rejection. Repeat.

4.—Transfer the signal generator to the f.m. external aerial socket. Tune receiver to 88Mc/s. Feed in an 88Mc/s signal deviation 22kc/s, and adjust **L3** and **L1** for maximum output.

Resistors

R1	120Ω	A2
R2	6·8kΩ	A2
R3	560Ω	A2
R4	1kΩ	A2
R5	650Ω	B3
R6	1·5kΩ	A3
R7	27kΩ	B2
R8	3·9kΩ	C2
R9	56kΩ	B2
R10	680Ω	B2
R11	220Ω	C2
R12	120kΩ	B1
R13	1kΩ	B2
R14	47kΩ	C2
R15	1kΩ	C2
R16	3·9kΩ	C2
R17	3·9kΩ	C2
R18	15kΩ	B2
R19	18kΩ	C3
R20	220Ω	C2
R21	470Ω	C2
R22	4·7kΩ	C2
R23	100Ω	C3
R24	5·7kΩ	C2
R25	470Ω	C2
R26	82Ω	D2
R27	1kΩ	D2
R28	1kΩ	D2
R29	22kΩ	D1
R30	390Ω	C2
R31	22kΩ	C2
R32	4·7kΩ	C2
R33	470kΩ	E1
R34	180kΩ	E2
R35	3·3kΩ	E2
R36	82kΩ	E2
R37	10kΩ	D2
R38	1kΩ	D2
R39	18kΩ	E2
R40	470Ω	D2
R41	2·2kΩ	E2
R42	100Ω	E2
R43	2·2Ω	E2
R44	2·2kΩ	E2
R45	100Ω	E2
R46	2·2Ω	E3
R47	100Ω	E2
R48	120kΩ	D2
R49	18kΩ	D2
R50	5·6kΩ	D2
R51	82kΩ	D2
R52	470Ω	E2
RV1	5kΩ	D2
RV2	5kΩ	D1
RV3	5kΩ	E1

Capacitors

C1	0·01μF	A2
C2	15pF	A1
C3	35pF	A1
C4	1,000pF	A2
C5	0·01μF	A2
C6	2,000pF	A2
C7	27pF	A2
C8	—	A2
C9	8pF	A2
C10	2,000pF	A3
C11	390pF	B2
C12	5pF	A3
C13	—	A2
C14	22pF	B2
C15	8pF	B3
C16	68pF	B2
C17	68pF	A2
C18	8·2pF	A3
C19	39pF	D1
C20	30pF	D1
C21	0·1μF	B3
C22	—	A2
C23	—	A2
C24	0·03μF	B1
C25	0·01μF	B2
C26	—	B3
C27	—	B3
C28	3,000pF	C2
C29	—	B3
C30	—	B3
C31	—	A2
C32	—	A2
C33	200pF	B1
C34	30pF	B1
C35	0·1μF	C2
C36	8μF	C2
C37	0·01μF	C1
C38	1,000pF	B3
C39	2μF	B2
C40	0·1μF	C3
C41	0·5μF	C2
C42	0·1μF	C3
C43	—	C3
C44	—	C3
C45	2,000pF	C3
C46	3,000pF	C2
C47	—	C3
C48	—	C3
C49	0·1μF	C2
C50	8μF	C2
C51	0·1μF	C2
C52	1,000pF	D3
C53	0·5μF	C2
C54	4pF	C3
C55	0·1μF	C2
C56	200pF	C2
C57	1,000pF	D2
C58	0·02μF	D2
C59	—	D3
C60	—	D3
C61	300pF	D2
C62	2μF	D1
C63	0·5μF	C2
C64	—	D3
C65	—	D3
C66	0·02μF	C2
C67	2μF	C1
C68	0·1μF	C1
C69	10μF	D2
C70	0·5μF	E2
C71	10μF	E2
C72	2,000μF	D2
C73	100μF	D2
C74	500μF	E2
C75	0·02μF	D2
C76	0·01μF	D2
C77	150pF	D2
C78	500μF	D3
C79	100μF	D1
C80	0·01μF	A3
C81	2,000pF	E2
C82	0·5μF	E2
C83	3,000pF	E3

Coils

L1	—	A2
L2	—	B3
L3	—	A3
L4	15Ω	C4

Transformers

T1	—	A1
T2	—	B2
T3	—	C1
T4	—	B2
T5	—	B2
T6	—	C2
T7	—	D2
T8	—	D2
T9	—	E2

Miscellaneous

D1	OA90	A2
D2	OA79	B2
D3	OA91	C2
D4	OA79	D2
D5	OA79	D2
D6	OA91	D3
S1-S17	—	C1

Transistor Table

Transistor		Emitter (V)	Base (V)	Collector (V)
TR1 AF114	†	6·0	5·6	0·2
TR2 AF115	†	6·0	5·8	—
TR3 AF116	*	5·8	5·4	—
	†	5·6	5·1	0·2
TR4 AF116	*	6·9	6·3	2·4
	†	6·5	6·0	2·3
TR5 AF116	*	6·3	7·4	0·2
	†	6·0	7·0	0·2
TR6 OC71	*	7·4	7·0	0·75
	†	7·0	6·6	0·7
TR7 OC81D	*	6·6	6·2	0·23
	†	6·3	5·9	0·2
TR8 OC81	..	4·6	4·4	—
TR9 OC81	..	8·8	8·5	4·5

†*Receiver switched to f.m.*
Receiver switched to a.m.

5.—Tune receiver to 100Mc/s. Feed in a 100Mc/s signal and adjust **C15** and **C9** for maximum output.
6.—Feed in a 95Mc/s signal. Tune receiver to this signal and adjust **T1** for maximum output.

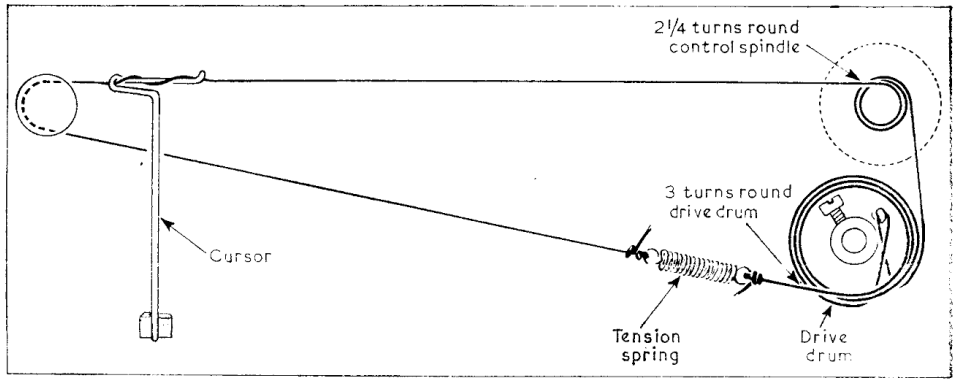
A.M. Circuits

Equipment Required.—An a.m. signal generator; a 0-1V a.c. voltmeter as used for f.m. alignment; a 1kΩ resistor and a bladed type trimming tool.

1.—Connect the a.c. voltmeter across the loudspeaker. Disconnect from the ferrite rod end, the lead connecting the m.w. aerial winding tap to **S1** on the printed panel. Connect the signal generator output between the free end of the lead and chassis.
2.—Switch receiver to m.w. and fully close the tuning gang. Rotate the volume control to maximum output.
3.—Feed in a 472kc/s modulated signal and adjust the top and bottom cores of **T5** (a.m.) and **T6** (a.m.) and the primary of **T8** for maximum output. Repeat.
4.—Remove the signal generator and re-connect the lead to the m.w. aerial winding. Connect the signal generator via the 1kΩ resistor to the a.m. external aerial socket.
5.—Tune receiver to 550m. Feed in a 545kc/s signal and adjust **T4** and the m.w. winding of **T3** for maximum output.
6.—Tune receiver to 200m. Feed in a 1,500kc/s signal and adjust **C32** and **C22** for maximum output.
7.—Repeat operations 5 and 6.
8.—Switch receiver to l.w. and tune to 1,200m. Feed in a 250kc/s signal and adjust **C34** and **C20** for maximum output.
9.—Tune receiver to 1,900m. Feed in a 158kc/s signal and adjust the l.w. winding of **T3** for maximum output.
10.—Repeat operations 8 and 9.

Switch Table

Switch			M.W.	L.W.	V.H.F
S1	..	..	C	—	—
S2	..	..	C	—	—
S3	..	..	C	—	—
S4	..	..	—	C	—
S5	..	..	—	—	C
S6	..	..	—	—	C
S7	..	..	C	C	—
S8	..	..	—	C	—
S9	..	..	C	C	—
S10	..	..	—	—	C
S11	..	..	C	C	—
S12	..	..	—	—	C
S13	..	..	—	C	—
S14	..	..	—	—	C
S15	..	..	C	C	—



Drive cord assembly illustrated with the tuning gang at maximum

DECCA - TP85