**Resistors**

R1	15k Ω	B1
R2	4.7k Ω	B1
R3	2.7k Ω	B1
R4	100 Ω	B1
R5	120k Ω	B2
R6	1k Ω	B2
R7	5.6k Ω	B2
R8	3.3k Ω	B2
R9	56k Ω	B2
R10	220 Ω	B2
R11	2.7k Ω	C2
R12	6.8k Ω	C2
R13	68k Ω	C2
R14	1k Ω	C2
R15	1.8k Ω	C2
R16	6.8k Ω	C2
R17	33k Ω	C2
R18	270 Ω	C2
R19	200 Ω	C2
R20	2.2k Ω	C1
R21	100 Ω	C1
R22	1 Ω	B2
R23	33k Ω	C2
VR1	5k Ω	A2

Capacitors

C1	18pF	B2
C2	3,300pF	B1
C3	6,800pF	B1
C4	6,800pF	B1
C5	80pF	A2
C6	150pF	A1
C7	250pF	B2
C8	5pF	A2
C9	10 μ F	B1
C10	12pF	B2
C11	0.02 μ F	B2
C12	0.01 μ F	B2
C13	0.02 μ F	B2
C14	8pF	B2

C15	50 μ F	C2
C16	0.01 μ F	C2
C17	0.01 μ F	B2
C18	5 μ F	A2
C19	10 μ F	C2
C20	5 μ F	C2
C21	30 μ F	C2
C22	2,000pF	C2
C23	120 μ F	C1
C24	0.015 μ F	B1
C25	0.015 μ F	C1
C26	120 μ F	B1
CT1	—	B2
CT2	—	B2
CT3	—	A2
CT4	—	A2
CV1	—	A2
CV2	—	A2

Coils and transformers

L1	—	A1
L2a	—	C1
L2b	—	B1
L3	—	A1
L4	—	B2
L5	7 Ω	†
T1	—	B2
T2	—	B2
T3	—	B2
T4	—	C1
T5	—	B1

Miscellaneous

D1	1S188	B2
S1-S5	—	A1
S6	—	A2
VA1	SDT-20	C2

† Loudspeaker.

Transistor analysis

Transistor voltages quoted in the table below were obtained from information supplied by the manufacturers. They are all negative with respect to the positive line and were measured under quiescent conditions with a model 8 Avometer.

Transistor table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 2SA202	1.0	1.0	4.2
TR2 2SA202	0.15	0.25	4.2
TR3 2SA202	0.5	0.2	4.3
TR4 2SB185	0.25	0.35	3.6
TR5 2SB185	0.35	0.5	3.7
TR6 2SB187	—	0.15	4.5
TR7 2SB187	—	0.15	4.5

Quiescent current 12mA
Maximum current 115mA

Circuit alignment

Equipment required. — An r.f. signal generator amplitude modulated 30 per cent at 400c/s; an audio output meter of 7 Ω impedance terminated in a miniature jack plug and an r.f. coupling loop

Preset volume control to maximum and connect the output meter to the receiver via the earphone jack. Loosely couple the signal generator with the r.f. coupling loop to the ferrite rod aerial assembly, all i.f. and r.f. signals are fed in via this source. As the receiver sensitivity increases attenuate input signal so that the receiver output does not exceed 50mW thereby preventing a.g.c. action from masking the alignment peaks.

1. — Switch receiver to m.w., tune to 550m. and feed in a 470kc/s a.m. signal. Adjust **T3**, **T2** and **T1** for maximum output. Repeat these adjustments in the same order for optimum results.

2. — Switch receiver to l.w., tune to 2,000m. and feed in a 150kc/s a.m. signal. Adjust **L3** and **L1** for maximum output.

3. — Tune receiver to 850m. and feed in a 353kc/s a.m. signal. Adjust **CT3** and **CT1** for maximum output.

4. — Repeat operations 2 and 3 for optimum results.

5. — Switch receiver to m.w., tune to 500m. and feed in a 600kc/s a.m. signal. Adjust **L4** and **L2a** for maximum output.

6. — Tune receiver to 199m. and feed in a 1,580kc/s a.m. signal. Adjust **CT4** and **CT2** for maximum output.

7. — Repeat operations 5 and 6 for optimum results.

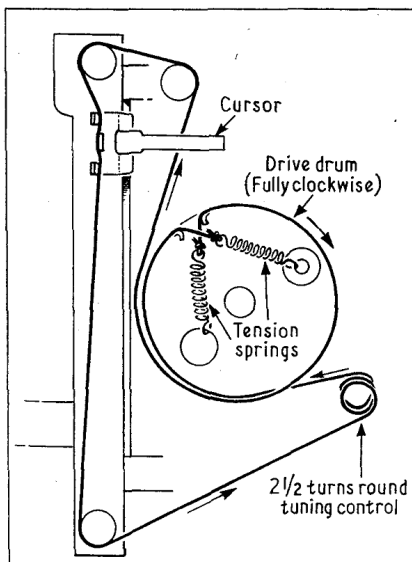


Illustration of the drive cord assembly, shown with the tuning gang at maximum capacitance.