

Capacitors

C1	50pF
C2	0.01μF
C3	300pF
C4	0.022μF
C5	380pF
C7	560pF
C8	560pF
C9	10μF
C10	0.047μF
C11	2μF
C12	270pF
C13	0.022μF
C14	270pF
C15	0.022μF
C16	250pF
C17	0.022μF
C18	100μF
C19	0.01μF
C20	0.022μF
C21	0.22μF
C22	100μF
C23	2μF
C24	1,000pF
C25	200μF
C26	100μF
C27	100μF
C28	350μF
CV1	—

Resistors

CV2	80pF
CV3	40pF
CV4	80pF
CV5	40pF
CV6	—
R1	33kΩ
R2	6.8kΩ
R3	1kΩ
R4	180kΩ
R5	68kΩ
R6	1kΩ
R7	2.2kΩ
R8	560Ω
R9	22kΩ
R10	4.7kΩ
R11	1kΩ
R12	330Ω
R13	10kΩ
R14	2.2kΩ
R15	2.2kΩ
R16	10kΩ
R17	22kΩ
R18	3kΩ
R19	560Ω
R20	10Ω
R21	1.5kΩ
R22	56Ω
R23	1.5kΩ

Coils & Transformers

R24	2.2Ω
R25	2.2Ω
R26	330Ω
RV1	5kΩ
RV2	10kΩ
RV3	200Ω
L1	—
L2	—
L3	—
L4	—
L5	—
L6	—
T1	—
T2	—
T3, T4	—
TR1	AF117
TR2	AF117
TR3	AF117
TR4	AC127
TR5	OC81D
TR6	AC127
TR7	OC81
MR1	OA79
MR2	OA90
MR3	BA114
S1-S8	—

ROBERTS - R404

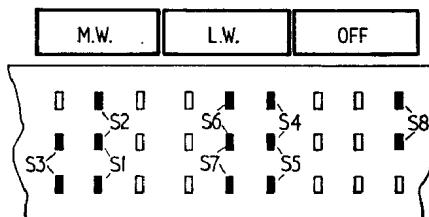


Diagram of the press-button switch unit

CIRCUIT ALIGNMENT

Equipment Required.—An a.m. signal generator; an audio output meter with an impedance of 25Ω, or alternatively an a.c. voltmeter; an r.f. coupling coil and a narrow-bladed trimming tool. During alignment the signal input level should be reduced to keep the receiver output as low as possible to prevent a.g.c. action.

The i.f. circuits should not normally require re-alignment unless it is known the cores have been disturbed. I.f. response may be checked for symmetry using a wobbulator and oscilloscope.

1.—Connect the audio output meter in place of the loudspeaker or connect the a.c. voltmeter across the loudspeaker terminals. Connect the signal generator to the r.f. coupling coil and loosely couple the coil to the ferrite rod aerial.

2.—Switch receiver to m.w. and tune to a quiet spot at the h.f. end of the band. Feed in a 470 kc/s modulated signal and adjust the cores of **T2**, **T3** and **T4** for maximum output.

3.—Check that with the tuning gang fully meshed, the cursor coincides with the high wavelength (l.f.) end of the scale apertures.

4.—Tune receiver to 200m (calibration notch under the first nought of "200"). Feed in a 1,500 kc/s signal and adjust **CV5** and **CV3** for maximum output.

5.—Tune receiver to 536m (calibration notch above the first n in "Vienna"). Feed in a 560 kc/s signal and adjust **T1** and **L1** for maximum output.

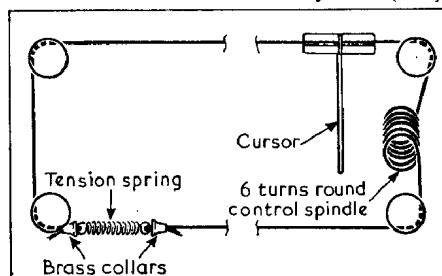
6.—Repeat operations 4 and 5 for optimum results.

157 kc/s signal and adjust **L2** for maximum output.

9.—Repeat operations 7 and 8 for optimum results.

Drive Cord Replacement.—To fit a replacement drive cord, route the cord as shown in the sketch below, where the drive assembly has been drawn with the tuning gang in the maximum capacitance position. Fit the cursor to conform with the requirements in operation 3 of "Circuit Alignment."

Batteries.—9V Ever Ready PP9 (two).



Sketch showing the tuning drive system