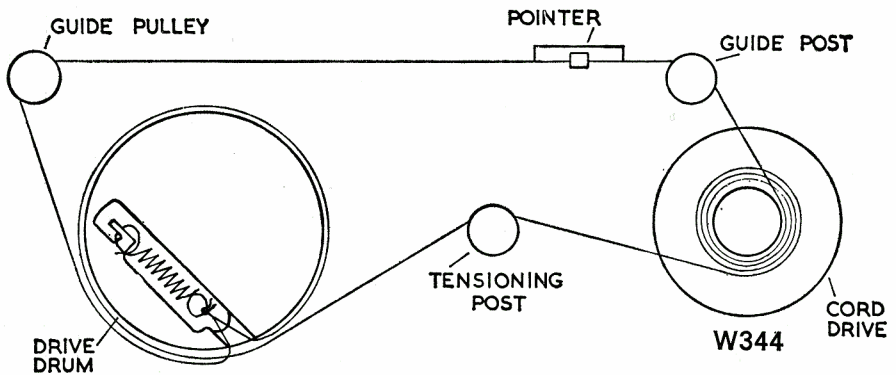


R.G.D.

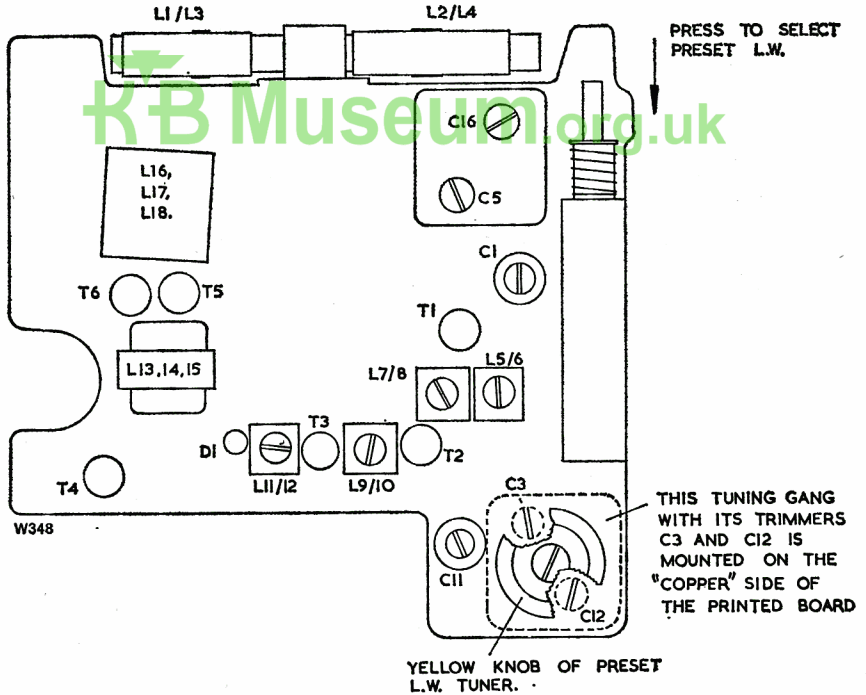
## Model R75 'Flirt'

**General Description:** A portable transistor radio for the reception of Long and Medium wavebands. A socket is fitted for the connection of an earphone.



(W344) DRIVE CORD—MODEL R75

## RADIO SERVICING



(W348) ADJUSTMENTS—MODEL R75

**Wavebands:** L.W. 172–210kHz (preset); M.W. 510–1610kHz.

**Battery:** 9 volts (PP<sub>3</sub> or equivalent).

**Quiescent Current:** 8mA.

**Loudspeaker:** 8 ohms impedance.

**Dismantling:** Take out battery and depress L.W. preset button. Remove screw from back of case and ease the back off, noting the way in which the back half of the case is open hinged to the front at one edge. Remove the small screw which is located close to the long wave tuning capacitor; this screw may be hidden by the folded cardboard which forms the battery compartment.

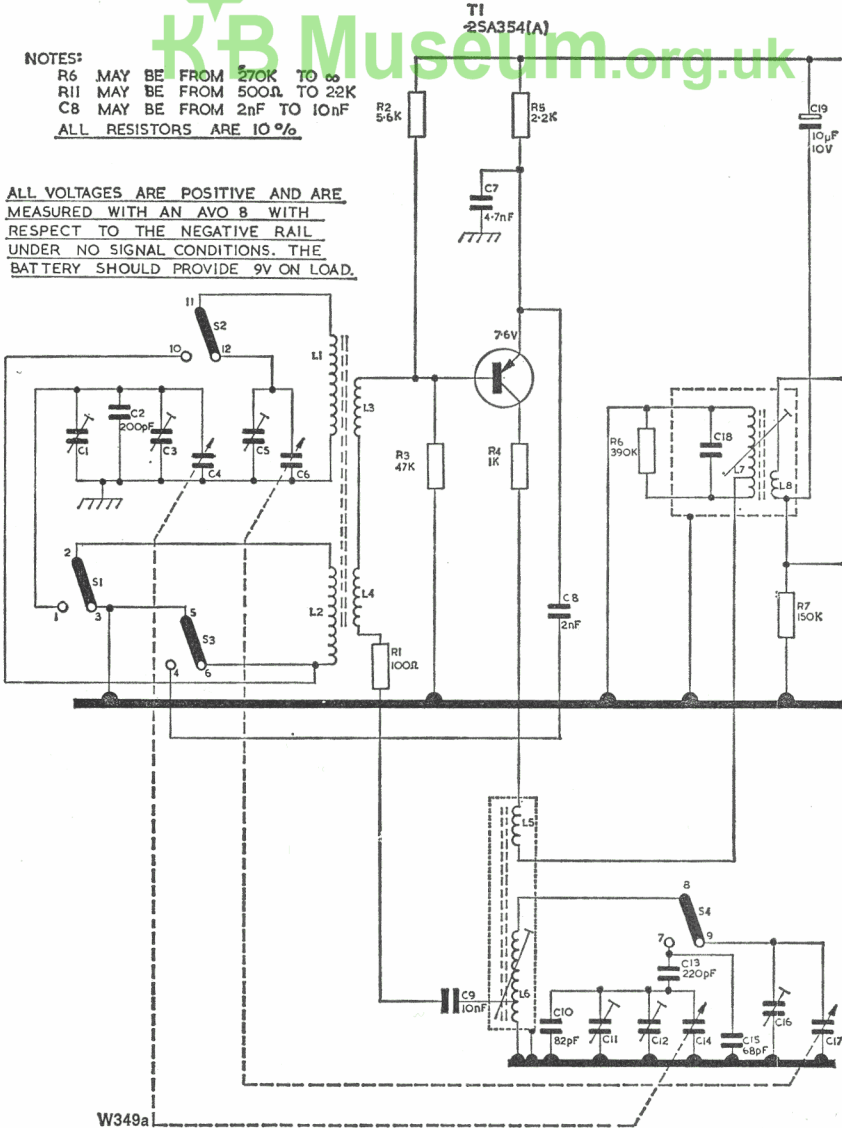
Pull the cranked yellow push button off of the wavechange switch and then withdraw it from the hole in the fascia and out of the radio. The chassis is now free to be taken from the case as far as the speaker leads will allow.



NOTES:

- R6 MAY BE FROM 270K TO 330K
- R11 MAY BE FROM 500Ω TO 22K
- C8 MAY BE FROM 2nF TO 10nF
- ALL RESISTORS ARE 10% $\pm$

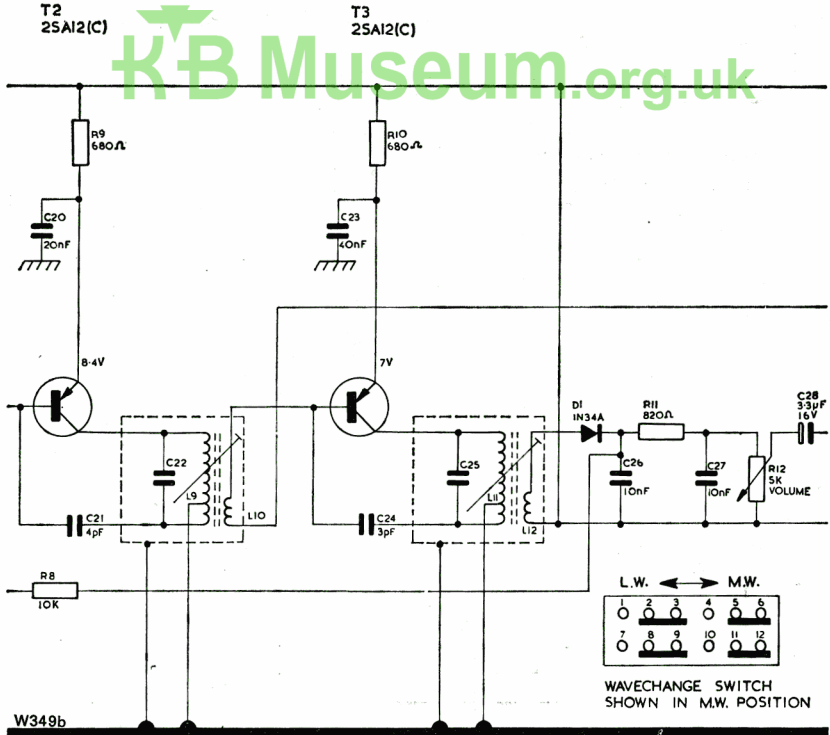
ALL VOLTAGES ARE POSITIVE AND ARE MEASURED WITH AN AVO 8 WITH RESPECT TO THE NEGATIVE RAIL UNDER NO SIGNAL CONDITIONS. THE BATTERY SHOULD PROVIDE 9V ON LOAD.



(W349a) CIRCUIT DIAGRAM—MODEL R75 (Part)

**Drive Cord Fitting:** Remove chassis from case. Turn the drive drum fully clockwise so that it appears as shown in Fig. W344.

Form a loop and knot it on to the spring as shown. The length of cord that forms the loop is 13 $\frac{5}{8}$  in. (347mm) but extra cord must be allowed to make the knot.



(W349b) CIRCUIT DIAGRAM—MODEL R75 (Part)

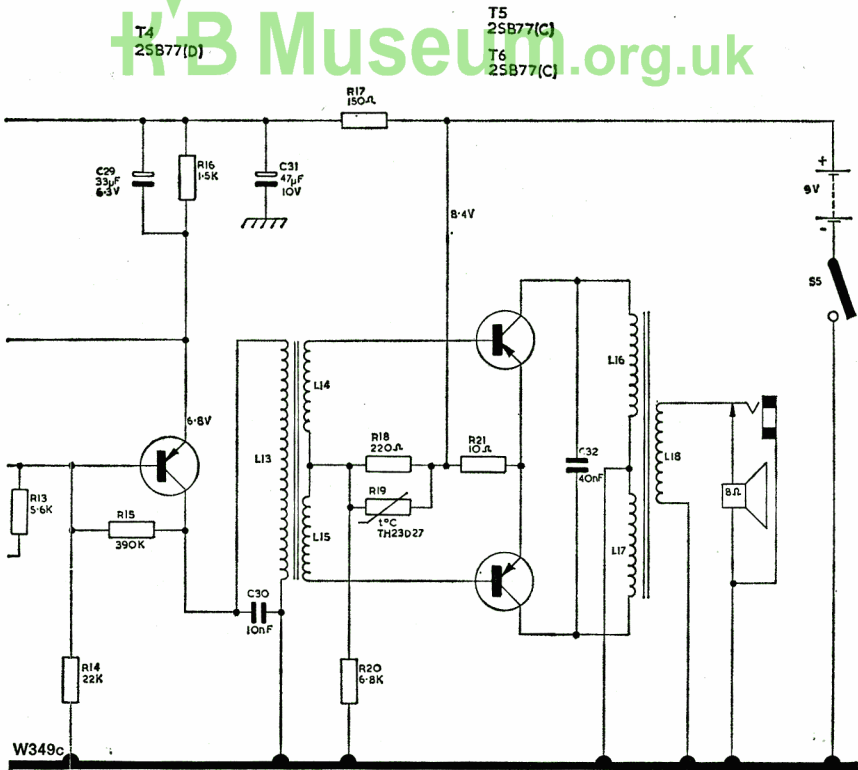
Pass the loop between the rod aerial and the scale reflector plate. Hook the spring on to the drive drum.

Take the cord one anticlockwise turn around the drive drum and then straight across to the cord drive, bypassing the tensioning post.

Wind three and a half turns in an anticlockwise direction on to the cord drive.

Continue on to the guide post and guide pulley. Before slipping the final quarter turn on to the rim of the drive drum, ensure that it has not moved from the fully clockwise position because this would make the operation harder.

See that the turns on the cord drive and drive drum are not binding or crossed. With the drive drum still turned fully clockwise, fit the pointer so that it will line up against the 200m calibration and seal it in position on the cord with wax or glue.



(W349c) CIRCUIT DIAGRAM—MODEL R75 (Continued)

Route the cord behind the tensioning post thereby making it taut, and check that the drive works freely.

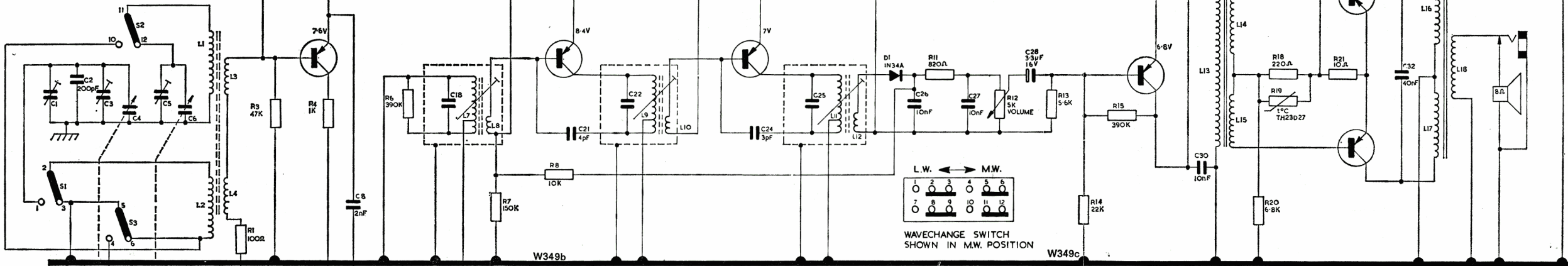
**Alignment:** Connect a signal generator, modulated at 1 kHz to a depth of 30 per cent, to a shielded test coil (eighty-five turns of enamel covered wire on a 2-in. diameter former). Position the test coil so that it is coaxially in line with, and a few inches from the M.W. end of, the ferrite rod aerial.

Connect a valve voltmeter, set to a suitable A.C. range, across the loud-speaker voice coil. Ensure that the L.W. preset button is released and that the battery in the receiver is fresh. Set the volume control to maximum.

Follow the procedure given, keeping the signal generator output to a minimum so that A.G.C. action does not produce misalignment. A non-metallic alignment tool should be used to adjust the oscillator coil L5/6.

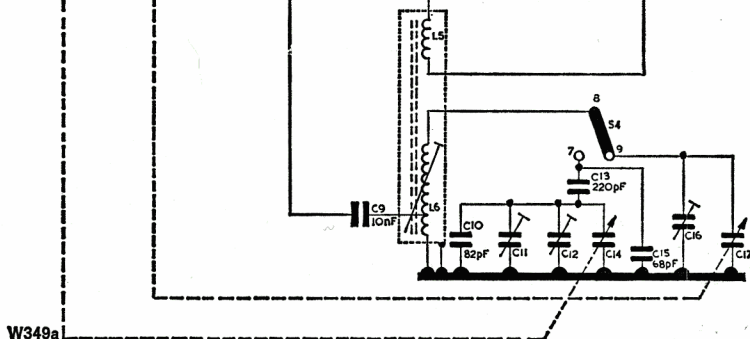
NOTES:  
 R6 MAY BE FROM 270K TO ∞  
 R11 MAY BE FROM 500Ω TO 22K  
 C8 MAY BE FROM 2nF TO 10nF  
 ALL RESISTORS ARE 10%

ALL VOLTAGES ARE POSITIVE AND ARE MEASURED WITH AN AVO 8 WITH RESPECT TO THE NEGATIVE RAIL UNDER NO SIGNAL CONDITIONS. THE BATTERY SHOULD PROVIDE 9V ON LOAD.



(W349b) CIRCUIT DIAGRAM—MODEL R75 (Part)

(W349c) CIRCUIT DIAGRAM—MODEL R75 (Continued)



(W349a) CIRCUIT DIAGRAM—MODEL R75 (Part)

## RADIO SERVICING

<i>Operation</i>	<i>Signal Generator</i>	<i>Frequency Scale Pointer</i>	<i>Adjust for Maximum</i>
1	470kHz	Low frequency limit of waveband	L7/L8, L9/L10, L11/L12. (I.F.T.s)
2	505kHz	Low frequency limit of waveband	L5/L6 (Osc. coil)
3	1650kHz	High frequency limit of waveband	C16 (Osc. trimmer)
4	Repeat operations 2 and 3		
5	600kHz	Tune for signal	L1/L3 (Aerial coil)
6	1400kHz	Tune for signal	C5 (Aerial trimmer)
7	Repeat operations 5 and 6		
8	Select long wave by pressing the long wave preset button 215kHz	Turn l.w. preset tuning control fully clockwise	C11, C12 (Osc. trimmers)
9	200kHz	Tune for signal	C1, C3 (Aerial trimmers)
10	180kHz	Tune for signal	L2/L4 (Aerial coil)