

**SIX VALVE AM/FM table radio** in moulded plastic case, released April 1958 at 22gns.  
**Mains.** 200-250V AC (50-60c/s) or DC.  
**Consumption.** 50W.  
**Wavebands.** LW, 1160-1940m; MW, 188-545m; VHF/FM, 88-101mc/s.  
**Valves.** UCC85, UCH81, UF89, UABC80, UM80, UL84.  
**Rectifier.** One HT rectifier type W1.  
**Pilot lights.** Two, 12V 0.1A.  
**IF frequencies.** AM, 470kc/s; FM, 10.7mc/s.  
**Speaker.** 6½in. diameter, 3ohm.  
**Output.** 3W.  
**Aerial.** Internal aerials are fitted, with sockets for external connections where necessary.  
**Manufacturer.** Ferguson Radio Corporation Ltd.  
**Service departments.** London, Kynoch Road, Eley's Estate, Edmonton; Birmingham, 24 Sheepcote Street, 15; Manchester, Derby Street, Cheetham, 8; Glasgow, 160/162 Battlefields Road, S.2.

### DRIVE CORD REPLACEMENT

**AM drive.** Commence with tuning gang fully open and 4ft. 3in. of braided nylon cord. Knot one end of cord and fix in drive drum slot nearest gang, then wind and fit cord as shown in diagram. Ensure that cord is properly tensioned before winding final five turns on drum; anchor end of cord to peg in top of drum and cellulose into position.

Cursor should be fitted so that it aligns with right-hand markers when gang is fully closed and its tip should be on outside of guide loop.

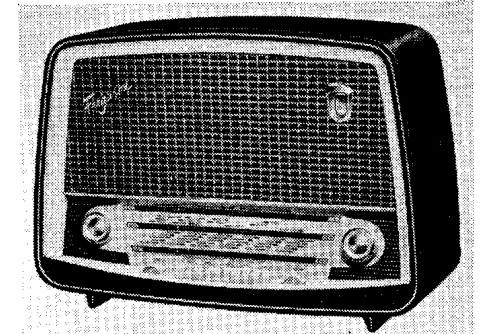
**FM drive, cursor.** Use same length of cord as for AM drive, tie end to self-tapping screw in FM drive drum and arrange as shown in second diagram. Final end attaches to tension spring which fits to moulded peg in drum. With tuning spindle fully anti-clockwise cursor is positioned to align with left-hand scale marker; its tip should ride within guide loop.

**FM drive, tuner.** Arrange tuner cord as shown in second diagram, using replacement cord Z17223 with tuning slugs already fitted. Thread cord "A" through spindle, pull cord "B" to its limit and knot "A" 1in. beyond the spindle. Slacken drum locking screw to allow separate movement of spindle and rotate clockwise to pull knot against spindle and take up slack.

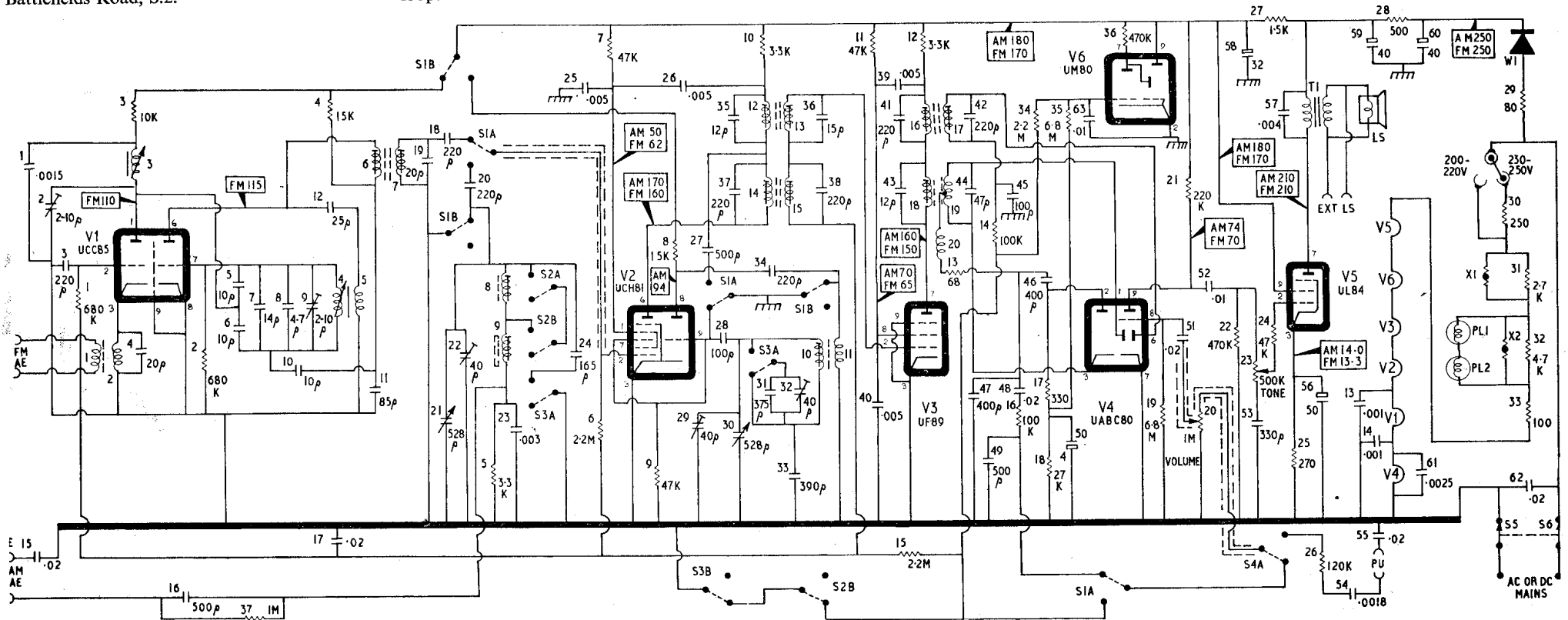
Fix tension spring to cord "B" 4in. from tuner unit pulley, tighten drum locking screws and rotate tuning control one turn clockwise. Then wind cord "B" in anti-clockwise direction around tuner drive spindle and anchor tension spring in spindle slot. Finally re-align tuner as in FM, RF alignment instructions and check that at extremes of cursor sweep at least one turn of cord remains round spindle.

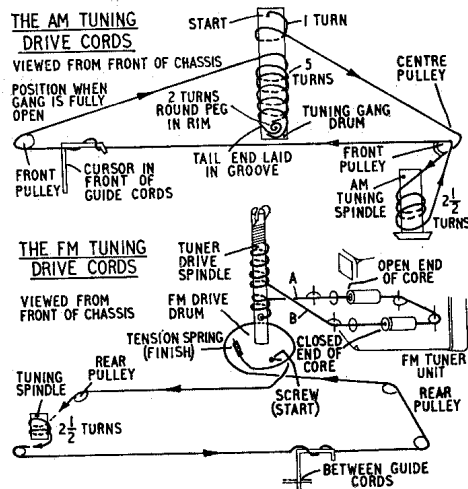
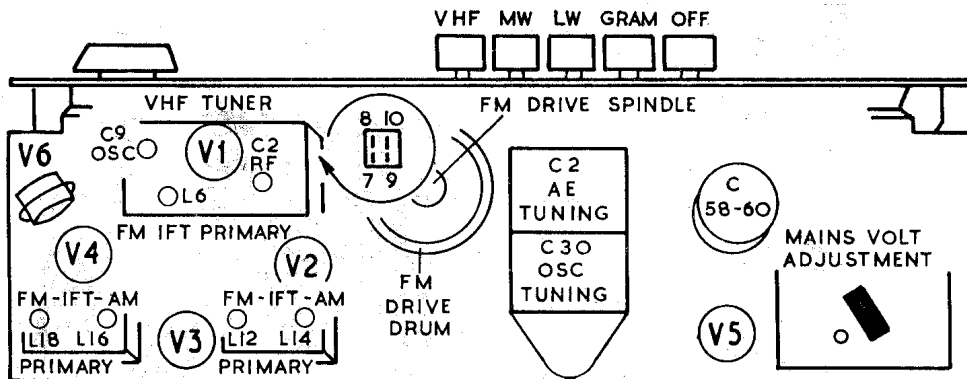
### CIRCUIT DIFFERENCES

Circuit depicts schedule "B" production models, and on earlier versions R37 was



omitted. Push-button wavechange is fitted and single pole changeover switches represent sections of wafer contacts on key switch unit. Circuit is shown switched to VHF/FM position.





**COMPONENT RATINGS**

- Capacitors.**  
 750V: C1 3 5 6 7 8 10  
 18 20 28 34 45 55  
 500V: C16 27 49  
 350V AC: C15 54 57  
 62  
 150V: C17 48 51 52 63  
 Electrolytic 275V: C58  
 S9 60  
 Electrolytic 100V: C50  
 Electrolytic 25V: C56  
 All others 350V wkg.
- Inductors.**  
 L8 15ohm  
 L10 2  
 L14 5.5  
 L15 5.5  
 L16 5.5  
 L17 5.5  
 T1 150  
 All others less than 1 ohm.
- Resistors.**  
 6W: R28 29 30  
 1W: R27 31 33  
 1/2W: R25 32  
 All others 1/2W.

Switch to LW, tune to marker near 1300m and inject 223kc/s. Adjust C32 and L8 until no further improvement results.

**FM, IF.** Switch to VHF and allow at least ten minutes warming up period. Throughout FM alignment an output of 100mW should be maintained. Apply input of 10.7mc/s, FM modulated, to pin 2 of V3 (via 0.01mF), adjust input to 20mV and tune L19 and L18 for maximum audio output, which should be approximately 100mW.

Transfer input to pin 2 of V2 and adjust L13 and L12 for maximum. Transfer again to junction R3/L3 (via 500pF) and adjust L7 and L6 for maximum output.

**FM, RF.** Check that cursor coincides with left-hand scale marker when tuner is rotated to its limit. Tune to 91mc/s on scale, slacken drive drum locking screws and, without altering cursor position, rotate drum spindle in anti-clockwise direction until tuner reaches its internal stop. Retighten spindle and tune to 99mc/s on scale.

Inject 91mc/s, FM modulated, at aerial sockets and adjust C9 for maximum output. Slacken drive drum screws, hold drum to keep tuner at 91mc/s and rotate tuning control to bring cursor to 91mc/s on scale; retighten. Adjust C2 for maximum output, check calibration and repeat operations if necessary.

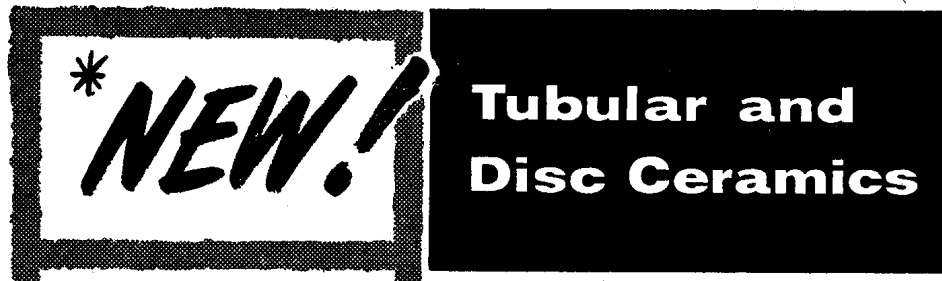
**ALIGNMENT**

**Equipment required.** Signal generator with both AM and FM modulation ( $\pm 25$ kc/s), covering LW, MW, 10.7mc/s and Band 2, with 75ohms output impedance; non metallic trimming tool; 0.1mF, 0.01mF, and 500pF; sound output meter.

**AM, IF.** Switch to MW, turn gang to minimum capacity and volume to maximum, connect sound meter to speaker terminals. Inject 470kc/s, AM modulated, to pin 2 of V3 (via 0.1mF), and adjust L17 and L16 for maximum, maintaining output of approximately 50mW. Transfer input to pin 2 of V2 and adjust L15 and L14 similarly.

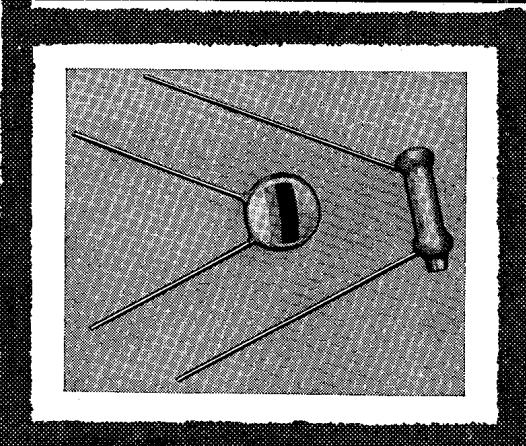
**AM, RF.** Inject signals via a loop loosely coupled to ferrite rod aerial, and with gang at maximum capacity set cursor to right-hand marker. Inject 1400kc/s and tune to alignment marker near 200m point; adjust C29 and C22 for maximum output.

Tune to marker near 500m, inject 580kc/s and tune L10 and adjusting ring on ferrite rod for maximum output. Repeat last two operations until no further adjustment is necessary.



HIGH-Q TUBULAR				HIGH-K TUBULAR (Tolerance -20% +80%)			
List No.	Capacitance	$\pm 5\%$	List Prices $\pm 10\%$ $\pm 20\%$	List No.	Capacitance	$\pm 5\%$	List Prices $\pm 10\%$ $\pm 20\%$
<b>Type P100</b>				<b>Type N750</b>			
CT10Q/2	1.5 pF	—	— 1/0d	CT10K/2	470 pF	1/1d	1/0d
CT10Q/2	2.2 pF	—	1/1d	CT10K/2	680 pF	1/1d	1/0d
CT10Q/2	2.7 pF	—	1/1d	CT10K/2	1,000 pF	1/1d	1/0d
CT10Q/2	3.3 pF	—	1/1d	CT10K/2	1,500 pF	1/1d	1/0d
CT10Q/2	3.9 pF	—	1/1d	CT10K/2	2,200 pF	1/1d	1/0d
CT10Q/2	5.0 pF	1/1d	1/0d	CT15K/2	3,300 pF	1/1d	1/0d
CT12Q/2	7.5 pF	1/1d	1/0d	CT18K/2	4,700 pF	1/1d	1/0d
CT12Q/2	8.2 pF	1/1d	1/0d	CT20K/2	5,000 pF	1/1d	1/0d
CT12Q/2	10.0 pF	1/1d	1/0d	<b>HIGH-K DISC (Tolerance -20% +80%)</b>			
CT15Q/2	15.0 pF	1/1d	1/0d	CD 8K/2	470 pF	1/1d	1/0d
CT20Q/2	20.0 pF	1/1d	1/0d	CD 8K/2	680 pF	1/1d	1/0d
CT20Q/2	22.0 pF	1/1d	1/0d	CD 9K/2	1,000 pF	1/1d	1/0d
CT25Q/2	30.0 pF	1/1d	1/0d	CD 9K/2	1,500 pF	1/1d	1/0d
CT25Q/2	33.0 pF	1/1d	1/0d	CD11K/2	2,200 pF	1/1d	1/0d
CT30Q/2	39.0 pF	1/1d	1/0d	CD12K/2	3,300 pF	1/1d	1/0d
				CD14K/2	4,700 pF	1/1d	1/0d

\* Hunts announce their new ranges of Tubular and Disc Ceramics. Precise in their characteristics and robust in design, these capacitors are available in High-K and High-Q Tubulars and in High-K Discs. Working Voltage 500 v D.C. or 300 v A.C. Minimum quantity 6 of any one capacitance.



**A. H. HUNT (Capacitors) LTD.**  
 WANDSWORTH, LONDON, S.W.18 VANdyke 6454  
 Factories also in Essex, Sussex, Surrey and North Wales