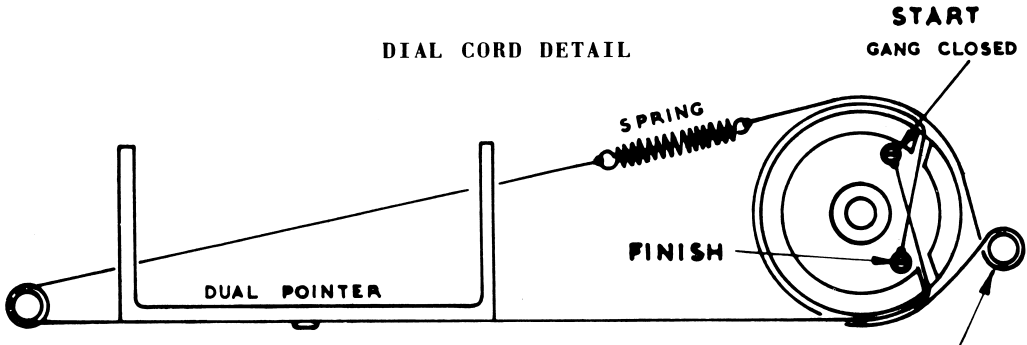


DIAL CORD REPLACEMENT:

Remove canopy and dial scale as previously described. Re-string dial in accordance with diagram. The dual pointer is attached to the dial cord by a three lug pointer carriage, calibration is achieved by sliding the pointer along the cord as required. Seal pointer with a drop of lacquer or paint. When replacing canopy, first set pointer to left hand end of dial so that it will come through the slots in the canopy and lodge on the face of the canopy back plate.

DIAL CORD DETAIL



TOTAL CORD LENGTH - 22'

**2-TURNS ANTI-CLOCKWISE
AROUND TUNING SPINDLE**

CORD TYPE - NYLON - B.184.

ALIGNMENT PROCEDURE:

For all alignment operations, connect the low side of the signal generator to the frame or case and keep the generator output as low as possible to avoid AVC action. Set volume control at maximum.

NB - Use proper alignment tool for making adjustments. Cores are easily broken by improper handling, making replacement of entire coil or transformer necessary. Set aerial switch to 'CAR'.

STEP	Connect sig. gen. to	Tune sig. gen. to	Tune receiver to	Adj. for Max. output
1	Base of 2N1639 via .1 uf capacitor	455KC/S	Gang fully open	1F3 (one slug)
2			" " "	1F2 (all slugs on
3			" " "	1F1 outer peaks.)
4	Repeat above adjustments until no further increase can be obtained.			
5	Aerial socket via dummy aerial	525 KC/S	Gang fully closed	OSC coil slug (L6)
6	"	1620KC/S	Gang fully open	OSC. Trimmer TR4
7	Repeat steps 5 and 6 until band limits are 525 - 1620 KC/S			
8	Aerial socket via dummy aerial	550 KC/ft	550 KC/S	* RF coil slug (L5)
9	"	1400 KC/ft	1400 KC/S	* Aer. coil slug (L2) TR2 and TR3

- Rock gang back and forth through signal. Repeat steps 8 and 9 till no further increase can be obtained. Check sensitivity at 1400, 900 and 550 KC/ft.

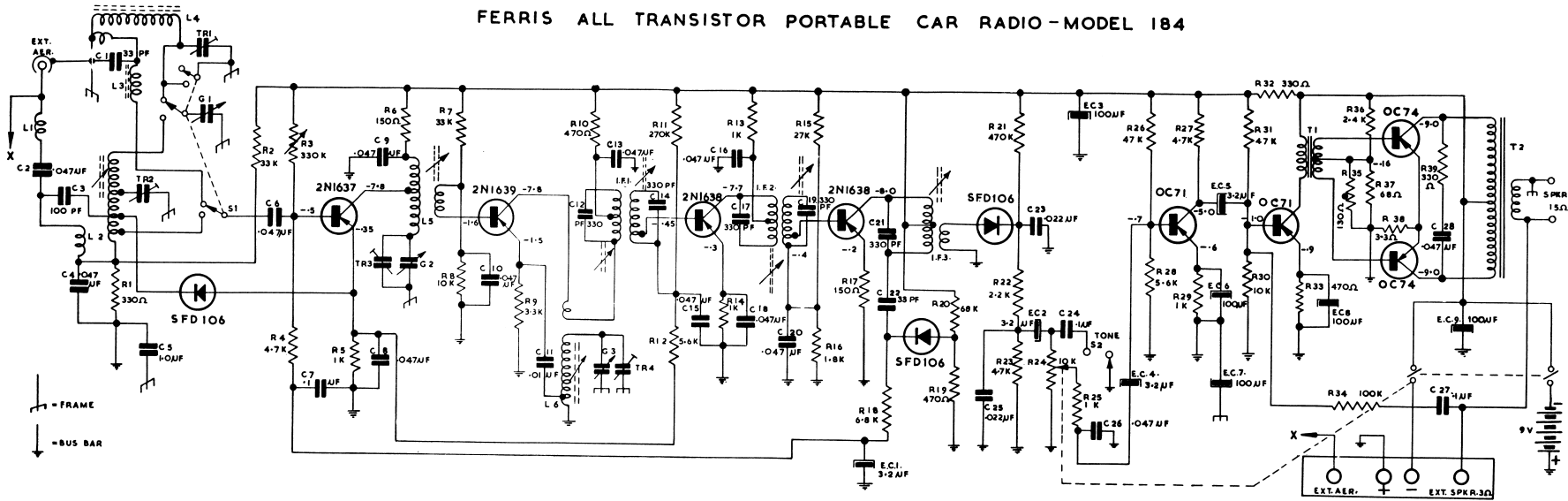
Ferrite Rod Alignment: Place set in normal operating position with canopy removed. Set aerial switch to 'Port'

STEP	Connect sig. gen. to	Tune sig. gen. to	Tune receiver to	Adj. for max. output
1	To aerial socket via dummy aerial (see note)	1400 KC/S	1400 KC/S	TRI
2	"	550 KC/S	550 KC/S	Slide winding (L4) along Ferrite slab.

Repeat 1 and 2 until no further increase can be obtained.

NOTE - When aligning the rod aerial as described, the output from the signal generator needs to be in the order of 0.3 - 1 MV, as it is only loosely coupled to the set via the capacity of the aerial switch.

FERRIS ALL TRANSISTOR PORTABLE CAR RADIO - MODEL 184



- R1 330Ω 10% RESISTOR
- R2 33K 10% RESISTOR
- R3 330K VARIABLE RESISTOR
- R4 4.7K 10% RESISTOR
- R5 1K 10% RESISTOR
- R6 150Ω 10% RESISTOR
- R7 33K 10% RESISTOR
- R8 10K 10% RESISTOR
- R9 3.3K 10% RESISTOR
- R10 470Ω 10% RESISTOR
- R11 270K 10% RESISTOR
- R12 5.4K 10% RESISTOR
- R13 1K 10% RESISTOR
- R14 1K 10% RESISTOR
- R15 27K 10% RESISTOR
- R16 1.8K 10% RESISTOR
- R17 150Ω 10% RESISTOR
- R18 6.8K 10% RESISTOR
- R19 470Ω 10% RESISTOR
- R20 68K 10% RESISTOR
- R21 470K 10% RESISTOR
- R22 2.2K 10% RESISTOR
- R23 4.7K 10% RESISTOR

- R24 10K POTENTIOMETER WITH D.P.S.T. SWITCH
- R25 1K 10% RESISTOR
- R26 47K 10% RESISTOR
- R27 4.7K 10% RESISTOR
- R28 5.6K 10% RESISTOR
- R29 1K 10% RESISTOR
- R30 10K 10% RESISTOR
- R31 47K 10% RESISTOR
- R32 330Ω 10% RESISTOR
- R33 470Ω 10% RESISTOR
- R34 100K 10% RESISTOR
- R35 130Ω NTC RESISTOR
- R36 2.4K 5% RESISTOR
- R37 68Ω 10% RESISTOR
- R38 3.3Ω 10% RESISTOR
- R39 330Ω 10% RESISTOR

- C8 .047μF 25V CAPACITOR
- C9 .047μF 25V CAPACITOR
- C10 .047μF 25V CAPACITOR
- C11 .01μF 25V STYROSEAL CAPACITOR
- C12 330PF 125V STYROSEAL CAPACITOR
- C13 .047μF 25V CAPACITOR
- C14 330PF 125V STYROSEAL CAPACITOR
- C15 .047μF 25V CAPACITOR
- C16 .047μF 25V CAPACITOR
- C17 330PF 125V STYROSEAL CAPACITOR
- C18 .047μF 25V CAPACITOR
- C19 330PF 125V STYROSEAL CAPACITOR
- C20 .047μF 25V CAPACITOR
- C21 330PF 125V STYROSEAL CAPACITOR
- C22 33PF 125V STYROSEAL CAPACITOR
- C23 .022μF 25V CAPACITOR
- C24 .1μF 25V CAPACITOR
- C25 .02μF 25V CAPACITOR
- C26 .047μF 25V CAPACITOR
- C27 .1μF 25V CAPACITOR

- EC.4. 3.2μF 6V ELECTRO
- EC.5. 3.2μF 6V ELECTRO
- EC.6. 100μF 4V ELECTRO
- EC.7. 100μF 16V ELECTRO
- EC.8. 100μF 4V ELECTRO
- EC.9. 100μF 16V ELECTRO

- S1 3 POLE 2 POSITION SWITCH
- S2 1 POLE 2 POSITION SWITCH

- G1 } 3 GANG TUNING CAPACITOR
- G2 } 200 X 200 PF X 96 PF
- G3 } OSCILLATOR SECTION

- L1 AERIAL CHOKER TYPE - 6108
- L2 AERIAL COIL TYPE - 7109
- L3 FILTER CHOKER TYPE 6109
- L4 FERRITE ROD AERIAL TYPE - 7110
- L5 R.F. COIL TYPE - 7202
- L6 OSC. COIL TYPE - 7302

- TR1 2 PLATE TRIMMER
- TR2 2 PLATE TRIMMER
- TR3 GANG TRIMMER
- TR4 GANG TRIMMER

- T1 I.F.1. 455 KC. TRANSFORMER - 9120
- T2 I.F.2. 455 KC TRANSFORMER - 9120
- T3 I.F.3. 455 KC TRANSFORMER - 9121

- T1 DRIVER TRANSFORMER - 5207
- T2 OUTPUT TRANSFORMER - 4315

BATTERY 9 VOLT TYPE - 2761

BAND COVERAGE 530 - 1620 KC./S
I.F. FREQUENCY 455 KC.

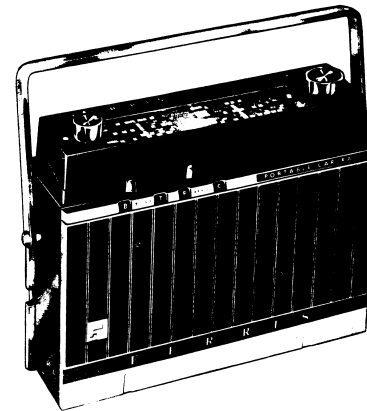
TOTAL BATTERY CURRENT 14 MA

COLLECTOR CURRENT OF O/P STAGE 5MA FOR ZERO SIGNAL.

ALL RESISTORS 1/2 WATT RATING UNLESS OTHERWISE STATED.

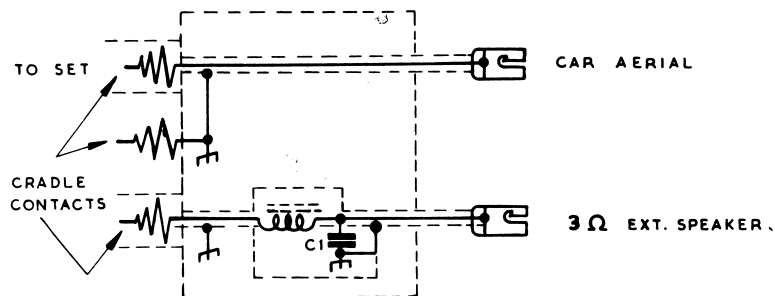
NOTE: ALL VOLTAGES CHECKED WITH 40,000 O.R.V. METER AT ZERO SIGNAL INPUT.

DO NOT OPERATE SET WITHOUT SPEAKER CONNECTED.



STANDARD CRADLE - MODEL 184.S.

FOR USE WITH FERRIS M.184 PORTABLE CAR RADIO.

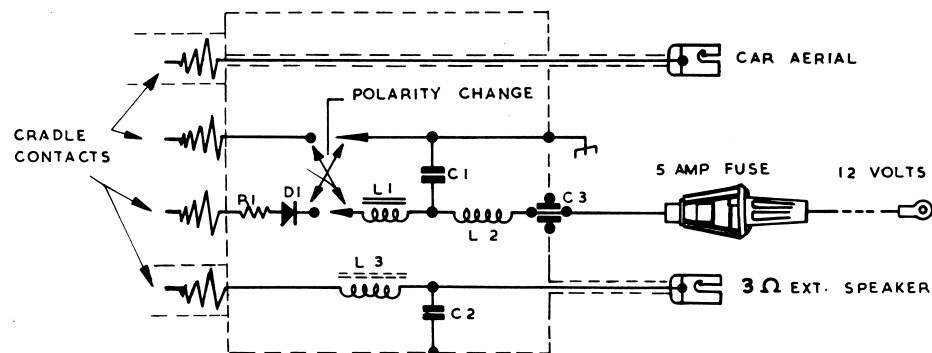


L = FERRITE BEAD CHOKE TYPE-6109

C1 = .047 μF 25V CAPACITOR

POWERED CRADLE - MODEL 184 P

FOR USE WITH FERRIS M.184. PORTABLE CAR RADIO



R1 - 47 Ω BW 1/2 RESISTOR

C1 - 1 μF 125 VOLT CAPACITOR

C2 - .047 μF 25 VOLT "

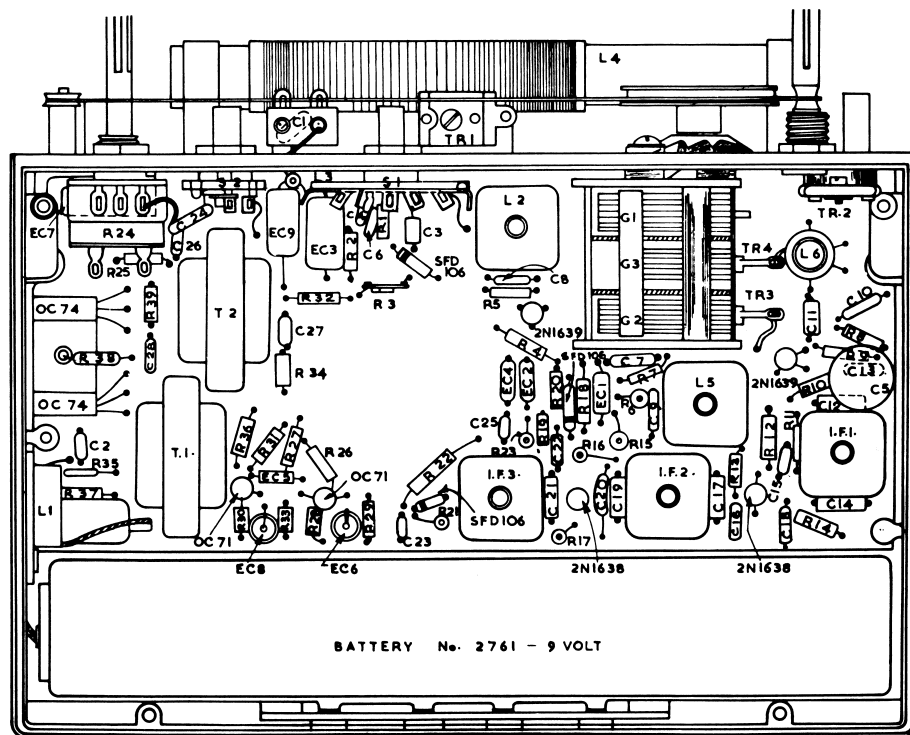
C3 - .005 μF BUTTON CERAMIC

D1 - SILICON DIODE HR.10.

L1 - FILTER CHOKE TYPE 8116

L2 - R.F. CHOKE TYPE R.859.

L3 - FERRITE BEAD CHOKE TYPE 6109



- FIG. 5 -

FRONT VIEW OF SET
SHOWING COMPONENT LAY-OUT