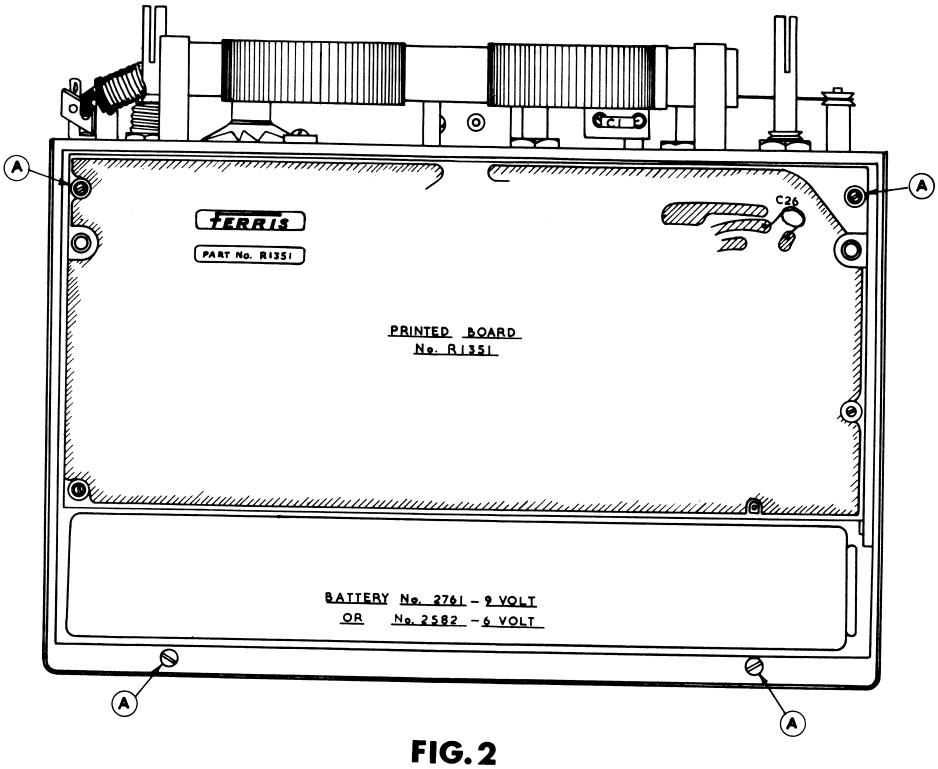


FIG. 2

REAR VIEW OF SET

FERRIS 204

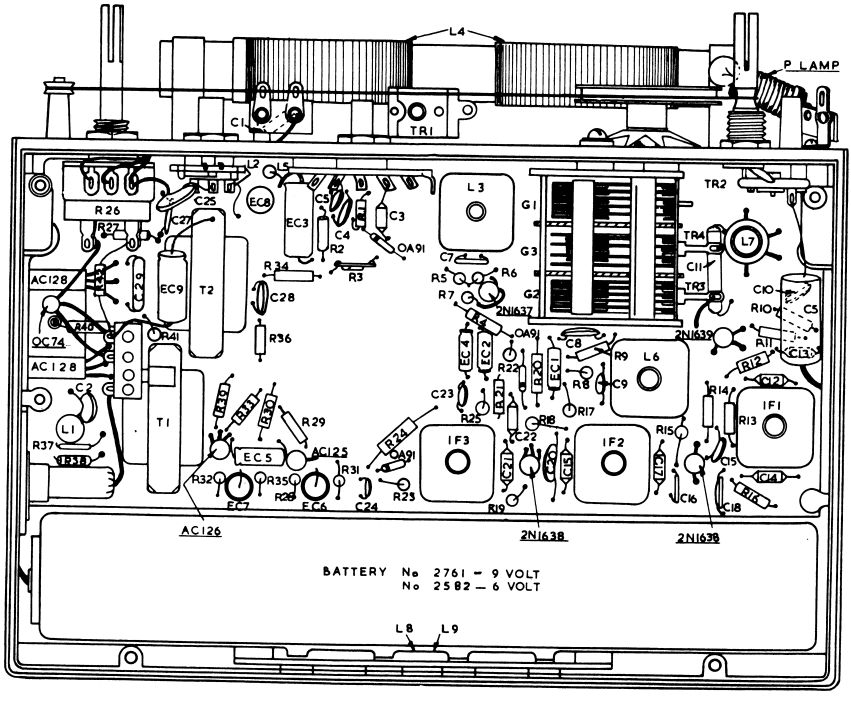


FIG. 4

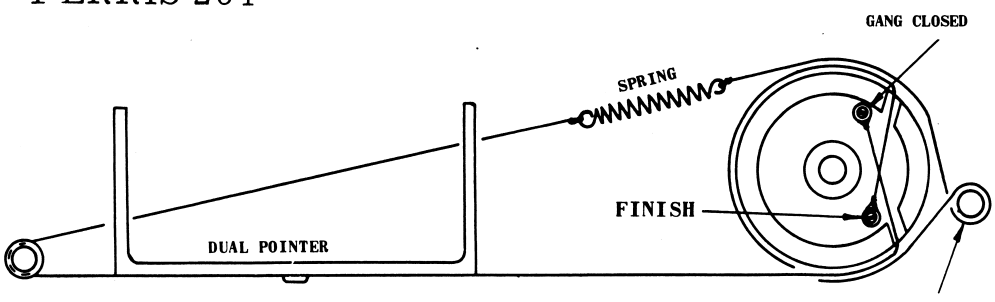
FRONT VIEW OF SET

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.

FERRIS 204

DIAL CORD DETAIL



TOTAL CORD LENGTH - 22"

CORD TYPE - NYLON - B 184

2 TURNS ANTI-CLOCKWISE AROUND TUNING SPINDLE.

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 2 3	Base of 2N1639 via .1 uf capacitor	455 KC/S	Gang fully open " " "	IF3 (one slug) IF2 (all slugs on IF 1 outer peaks.)
4	Repeat above adjustments until no further increase can be obtained.			
5 6	Aerial socket via dummy aerial "	525 KC/S 1620 KC/S	Gang fully closed Gang fully open	Osc. coil slug (L7) Osc. Trimmer TR4
7	Repeat steps 5 and 6 until band limits are 525 - 1620 KC/S			
8 9	Aerial socket via dummy aerial "	550 KC/fl 1400 KC/fl	550 KC/S 1400 KC/S	* RF Coil slug (L6) * Aer. coil slug (L3) 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/fl.

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

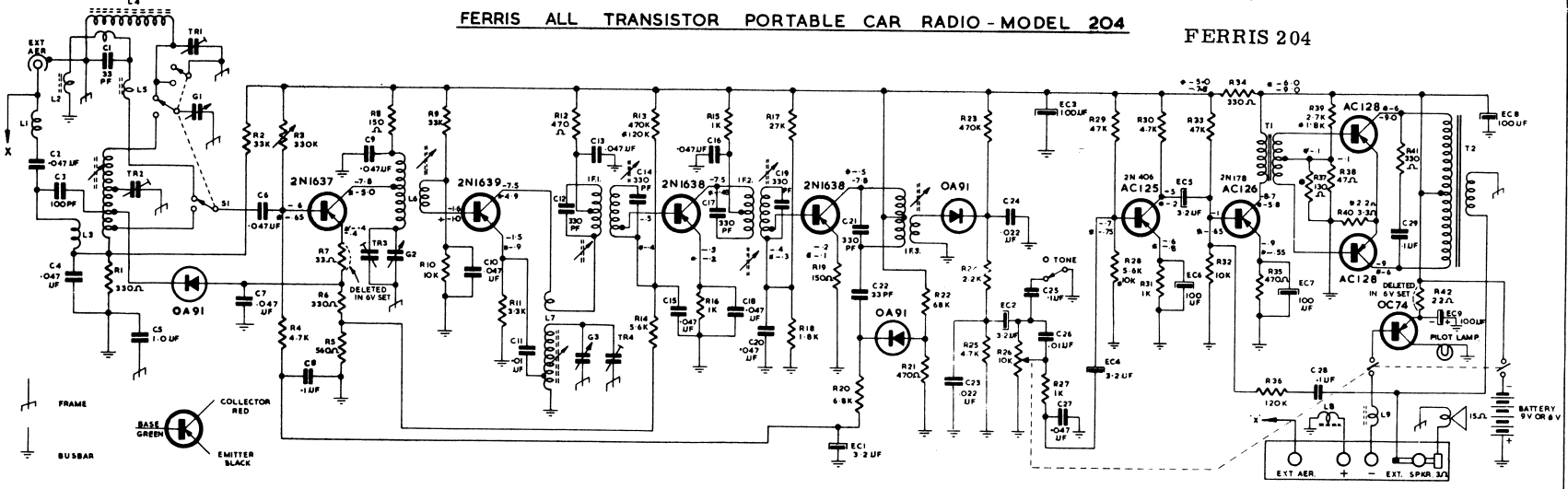
STEP	Connect Sig. Gen. to	Tune Sig. Gen. to	Tune Receiver to	Adj. for Max. Output
1	To aerial socket via dummy aerial (see note)	1400 KC/S	1400 KC/S	TR1
2	"	550 KC/S	550 KC/S	Slide windings (L4) along Ferrite slab.

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 204

FERRIS 204



R1 – 330Ω 10% RESISTOR
R2 – 33K 10% RESISTOR
R3 – 330K VARIABLE RESISTOR
R4 – 4·7K 10% RESISTOR
R5 – 560Ω 10% RESISTOR
R6 – 330Ω 10% RESISTOR
R7 – 33Ω 10% RESISTOR
R8 – 150Ω 10% RESISTOR
R9 – 33K 10% RESISTOR
R10 – 10K 10% RESISTOR
R11 – 3·3K 10% RESISTOR
R12 – 470Ω 10% RESISTOR
R13 – 470K 10% RESISTOR
R14 – 5·6K 10% RESISTOR
R15 – 1K 10% RESISTOR
R16 – 1K 10% RESISTOR
R17 – 27K 10% RESISTOR
R18 – 1·8K 10% RESISTOR
R19 – 150Ω 10% RESISTOR
R20 – 6·8K 10% RESISTOR
R21 – 470Ω 10% RESISTOR
R22 – 68K 10% RESISTOR
R23 – 470K 10% RESISTOR
R24 – 2·2K 10% RESISTOR

R25 – 4·7K 10% RESISTOR
R26 – 10K POTENTIOMETER WITH D.P.S.T. SWITCH
R27 – 1K 10% RESISTOR
R28 – 5·6K 10% RESISTOR
R29 – 47K 10% RESISTOR
R30 – 4·7K 10% RESISTOR
R31 – 1K 10% RESISTOR
R32 – 10K 10% RESISTOR
R33 – 47K 10% RESISTOR
R34 – 330Ω 10% RESISTOR
R35 – 470Ω 10% RESISTOR
R36 – 120K 10% RESISTOR
R37 – 130Ω N.T.C. RESISTOR
R38 – 47Ω 10% RESISTOR
R39 – 2·7K 10% RESISTOR
R40 – 3·3Ω 10% RESISTOR
R41 – 33Ω 10% RESISTOR
R42 – 22Ω 10% RESISTOR BW ½

C1 – 33 PF 125 V STYROSEAL CAPACITOR
C2 – ·047 UF 25 V CAPACITOR
C3 – 100 PF 125 V STYROSEAL CAPACITOR

C4 – ·047UF 25V CAPACITOR
C5 – 1·0 UF 200V PAPER CAPACITOR
C6 – ·047 UF 25V CAPACITOR
C7 – ·047 UF 25 V CAPACITOR
C8 – ·1 UF 25 V CAPACITOR
C9 – ·047 UF 25 V CAPACITOR
C10 – ·047 UF 25 V CAPACITOR
C11 – ·01 UF 125 V POLYESTER CAPACITOR
C12 – 330 PF 125 V STYROSEAL CAPACITOR
C13 – ·047 UF 25 V CAPACITOR
C14 – 330 PF 125 V STYROSEAL CAPACITOR
C15 – ·047 UF 25 V CAPACITOR
C16 – ·047 UF 25 V CAPACITOR
C17 – 330 PF 125 V STYROSEAL CAPACITOR
C18 – ·047 UF 25 V CAPACITOR
C19 – 330 PF 125 V STYROSEAL CAPACITOR
C20 – ·047 UF 25 V CAPACITOR
C21 – 330 PF 125 V STYROSEAL CAPACITOR
C22 – 33 PF 125 V STYROSEAL CAPACITOR
C23 – ·022 UF 25 V CAPACITOR
C24 – ·022 UF 25 V CAPACITOR
C25 – ·1 UF 25 V CAPACITOR
C26 – ·01 UF 25 V CAPACITOR
C27 – ·047 UF 25 V CAPACITOR

C28 – ·1 UF 25 V CAPACITOR
C29 – ·1 UF 125 V POLYESTER

EC1 – 3·2 UF 6 V ELECTRO
EC2 – 3·2 UF 6 V ELECTRO
EC3 – 100 UF 16 V ELECTRO
EC4 – 3·2 UF 6 V ELECTRO
EC5 – 3·2 UF 6 V ELECTRO
EC6 – 100 UF 4 V ELECTRO
EC7 – 100 UF 4 V ELECTRO
EC8 – 100 UF 16 V ELECTRO
EC9 100 UF 16 V ELECTRO

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

G1 – 3 GANG TUNING CAPACITOR
G2 – 200 X 200 PF X 98 PF
G3 – OSCILLATOR SECTION

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

L1 – AERIAL CHOKE TYPE 6108
L2 – FILTER CHOKE TYPE 6109
L3 – AERIAL COIL TYPE 7109
L4 – FERRITE ROD AERIAL TYPE 7110/1
L5 – FILTER CHOKE TYPE 6109
L6 – RF COIL TYPE 7202
L7 – OSC COIL TYPE 7320
L8 – FILTER CHOKE TYPE 6109
L9 – FILTER CHOKE TYPE 6109

PILOT LAMP 12V·1A OR 6V ·05A

T1 – DRIVER TRANSFORMER 5207
T2 – OUTPUT TRANSFORMER 4323
T2 – OUTPUT TRANSFORMER 4325
IF1 – 455 KC TRANSFORMER 9120
IF2 – 455 KC TRANSFORMER 9120
IF3 – 455 KC TRANSFORMER 9121

BATTERY 9 VOLT TYPE 2761
BATTERY 6 VOLT TYPE 2582

# INDICATES VALUES FOR 6VOLT MODEL

BAND COVERAGE 530 – 1620 KC/S
IF FREQUENCY 455 KC/S
TOTAL BATTERY CURRENT 13 MA FOR 9 VOLT BATTERY
COLLECTOR CURRENT OF O/P STAGE FOR ZERO SIG = 3·0 MA
TOTAL BATTERY CURRENT 12 MA FOR 6 VOLT BATTERY
COLLECTOR CURRENT OF O/P STAGE = 4·5 MA

ALL RESISTORS ½ WATT UNLESS OTHERWISE STATED

NOTE ALL VOLTAGES CHECKED WITH 40,000 OPV METER AT ZERO SIGNAL INPUT.

DO NOT OPERATE SET WITHOUT SPEAKER CONNECTED