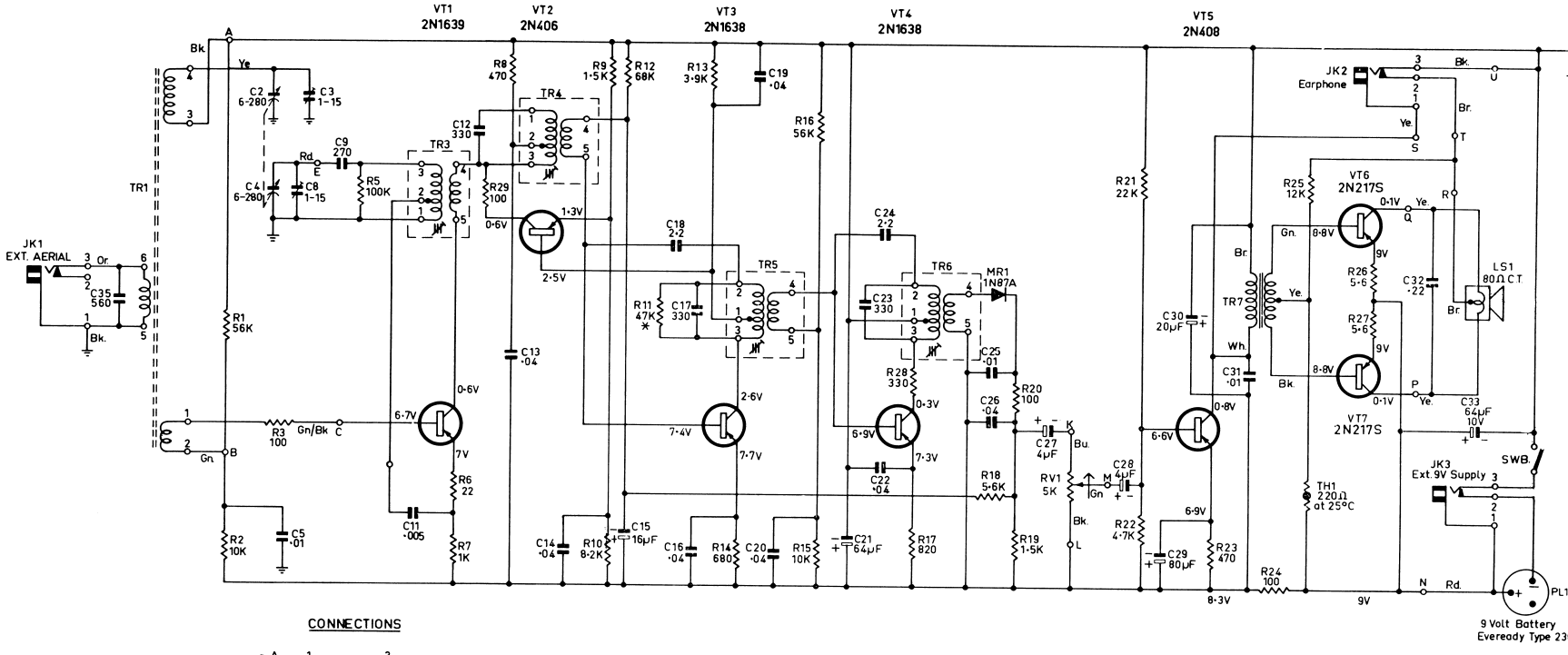
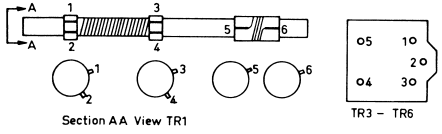
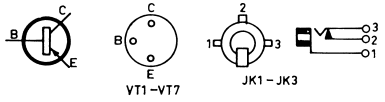


CONNECTIONS





NOTES:– ARROW ON POTENTIOMETER INDICATES DIRECTION OF CLOCKWISE ROTATION.
VOLTAGES MEASURED WITH NO SIGNAL INPUT AND VOLUME MAXIMUM.
VOLTAGES SHOWN ARE POSITIVE WITH RESPECT TO CHASSIS (BATTERY NEGATIVE TERMINAL) AND ARE MEASURED WITH 20,000 OHM/VOLT METER.
* MAY VARY IN PRODUCTION.

In the "Z" model a piece of copper braid is used to bridge the top of the housings of TR4, TR6 and TR7 causing a substantial reduction in 910 Kc/s whistle. The gain of the receiver was then increased by changing the shunt resistor R11 to 150K ohms and slightly modifying the existing ferrite rod aerial.

Drive Cord Replacement:

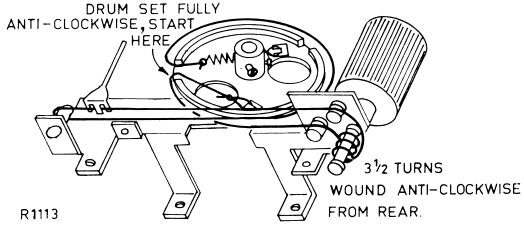
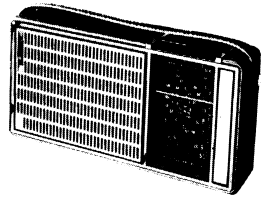


Fig. 2.

Fig. 2 shows the route of the cord and the method of attachment.



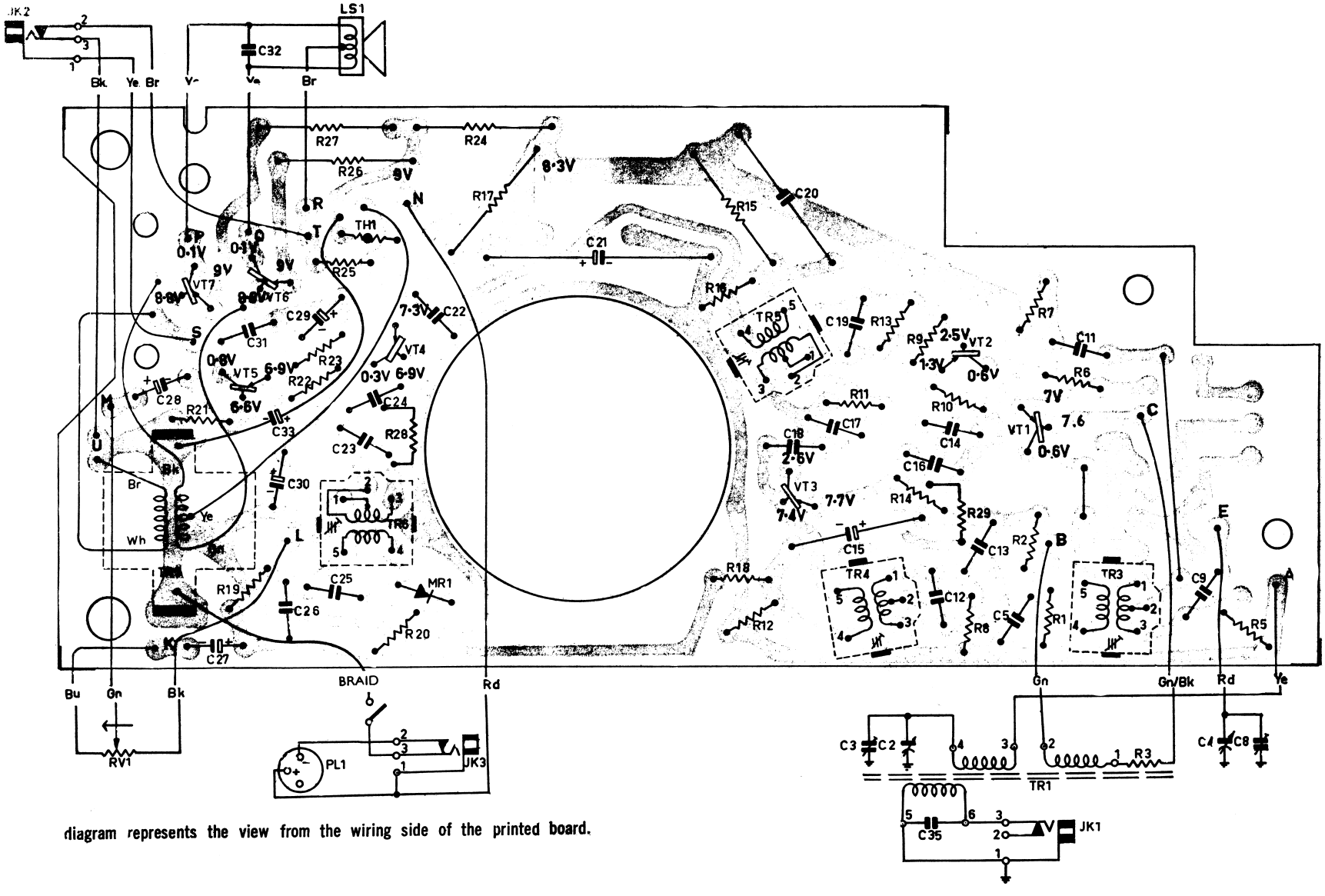


diagram represents the view from the wiring side of the printed board.

ALIGNMENT PROCEDURE

Manufacturer's Setting of Adjustments:

The receiver is tested by the manufacturer with precision instruments and all adjusting screws are sealed. Re-alignment should be necessary only when components in tuned circuits are repaired or replaced or when it is found that the seals over the adjusting screws have been broken. It is specially important that the adjustments should not be altered unless the correct testing instruments, listed below, are used.

For all alignment operations keep the generator output as low as possible to avoid a.g.c. action and set the volume control in the maximum clockwise position.

Testing Instruments:

Signal Generator modulated 400 c.p.s. or, Modulated Oscillator.

If the modulated oscillator is used, connect a 0.22 megohms non-inductive resistor across the output terminals.

Output measurement must be made with either the speaker connected or with two 40 ohm resistors connected in series across the output collectors when the speaker is removed. If an indication only is required Output Meter type 2M8833, switched to 5,000 ohms and connected across the collectors, should be adequate. For a true reading of power output, an a.c. meter, with neither probe earthed, connected similarly will measure 1.4 volts for 50 mW (the effective load being 40 ohms).

I.F. Alignment Tool Part No. 39462.

A.W.A. MODEL B46 & B46Z

ALIGNMENT TABLE

ORDER	CONNECT "HIGH" SIDE OF GENERATOR TO:	TUNE GENERATOR TO:	TUNE RECEIVER TO:	ADJUST FOR MAX. PEAK OUTPUT
1	Aerial Section of Gang	455 Kc/s	Gang fully closed	Cores in TR4, TR5‡ and TR6‡
Repeat adjustment until maximum output is obtained.				
2	Inductively coupled to Rod Aerial*	600 Kc/s	600 Kc/s	Osc. Core (TR3)†
3	Inductively coupled to Rod Aerial*	1,770 Kc/s	Gang fully open	Osc. Trimmer (C8)
4	Inductively coupled to Rod Aerial*	1,500 Kc/s	1,500 Kc/s	Aer. Trimmer (C3)
Repeat adjustment 2, 3 and 4 until no further improvement is possible.				

‡ Peak these IF transformers with cores towards the board.

* A coil comprising 3 turns of 16 gauge D.C.C. wire, about 12 inches in diameter should be connected between the output terminals of the test instrument, placed concentric with the rod aerial and distant not less than 1 foot from it.

† Rock the tuning control back and forth through the signal.

ALIGNMENT PROCEDURE

Manufacturer's Setting of Adjustments:

The receiver is tested by the manufacturer with precision instruments and all adjusting screws are sealed. Re-alignment should be necessary only when components in tuned circuits are repaired or replaced or when it is found that the seals over the adjusting screws have been broken. It is specially important that the adjustments should not be altered unless the correct testing instruments, listed below, are used.

For all alignment operations keep the generator output as low as possible to avoid a.g.c. action and set the volume control in the maximum clockwise position.

Testing Instruments:

Signal Generator modulated 400 c.p.s. or, Modulated Oscillator.

If the modulated oscillator is used, connect a 0.22 megohms non-inductive resistor across the output terminals.

Output measurement must be made with either the speaker connected or with two 40 ohm resistors connected in series across the output collectors when the speaker is removed. If an indication only is required Output Meter type 2M8833, switched to 5,000 ohms and connected across the collectors, should be adequate. For a true reading of power output, an a.c. meter, with neither probe earthed, connected similarly will measure 1.4 volts for 50 mW (the effective load being 40 ohms).

I.F. Alignment Tool Part No. 39462.

A.W.A. MODEL B47

ALIGNMENT TABLE

ORDER	CONNECT "HIGH" SIDE OF GENERATOR TO:	TUNE GENERATOR TO:	TUNE RECEIVER TO:	ADJUST FOR MAX. PEAK OUTPUT
Set the Wave Switch to M.W.				
1	Aerial Section of Gang	455 Kc/s	Gang fully closed	Cores in TR4, TR5‡ and TR6‡
Repeat adjustment until maximum output is obtained.				
2	Inductively coupled to Rod Aerial*	600 Kc/s	600 Kc/s	Osc. Core (TR3)†
3	Inductively coupled to Rod Aerial*	1,770 Kc/s	Gang fully open	Osc. Trimmer (C8)
4	Inductively coupled to Rod Aerial*	1,500 Kc/s	1,500 Kc/s	Aer. Trimmer (C3)
Repeat adjustment 2, 3 and 4 until no further improvement is possible.				
Set the Wave Change Switch to S.W. Set the Fine Tuning control so that the white line is central.				
5	Inductively coupled to Rod Aerial*	4 Mc/s	4 Mc/s	Osc. Core (TR2)†
6	Inductively coupled to Rod Aerial*	10.5 Mc/s	Gang fully open	Osc. Trimmer (C6)
7	Inductively coupled to Rod Aerial*	9 Mc/s	9 Mc/s	Aer. Trimmer (C34)**
Repeat adjustments 5, 6 and 7 until no further improvement is possible.				

‡ Peak these IF transformers with cores towards the board.

* A coil comprising 3 turns of 16 gauge D.C.C. wire, about 12 inches in diameter should be connected betwee the output terminals of the test instrument, placed concentric with the rod aerial and distant not less than foot from it.

† Rock the tuning control back and forth through the signal.

** Before adjusting C34, set C1 in its mid position.