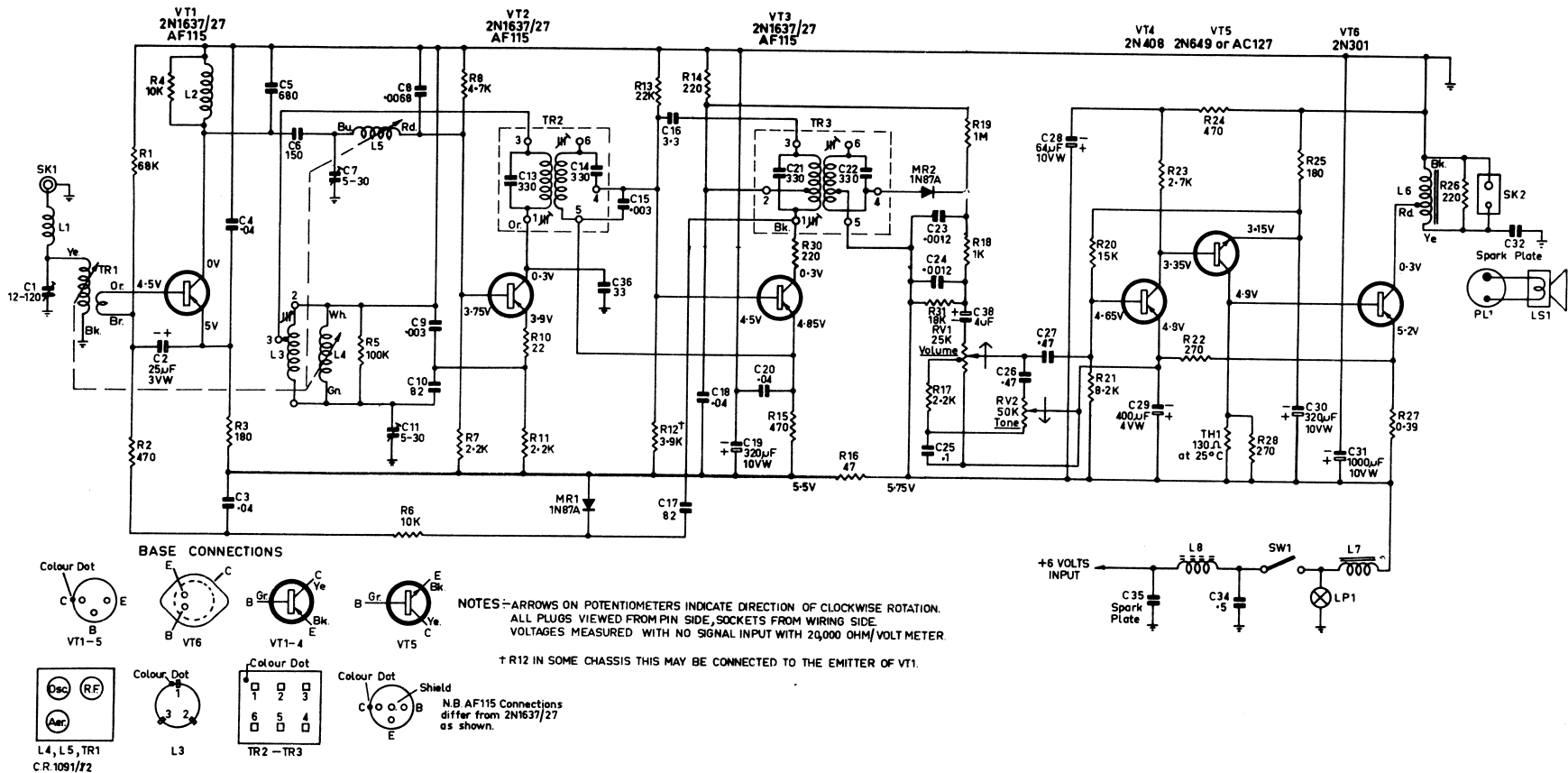


## 998B- 998BZ ( VA240 )



## CIRCUIT VARIATIONS

The above circuit is current as at 1/6/65. Below are the modifications that have been effected since initial production:—

To improve the A.G.C. performance on strong signals:

- (1) R1 was changed from 39K ohms to 68K ohms.
- (2) R6 was changed from 4.7K ohms to 10K ohms.
- (3) C17, connected to pin 3 of TR3, was changed from 270pf to 82pf and connected to pin 1 of TR3.

To improve stability:

- (4) R9, a 470 ohms resistor from VT2 collector to pin 1 of TR2, has been short circuited and C36 has been added.
- To overcome noisy volume controls:
- (5) R31 and C38 have been added and C25, the earth end of RV1 and the wiper arm of RV2, which were connected to the positive rail, are now connected to the emitter of VT4.
- (6) Z models now use new I.F. Transformers 52795 and 52796 which are direct replacements for 52145 and 52147 respectively.

**A.W.A. CAR RADIO MODELS****949A 949AZ 949B 949BZ****998A 998AZ 998B 998BZ****(Models 998A,AZ correspond to Volkswagen VA235)****(Models 998B/BZ correspond to Volkswagen VA240)**

N.B. Z suffix indicates the use of new if transformers

**WARNING:** This receiver is for negative earth operation only. Connection of wrong polarity will cause damage to the receiver.

**GENERAL DESCRIPTION**

These models are six transistor, manual, permeability tuned superheterodyne car radios designed for the reception of the Medium Wave Band.

**ELECTRICAL AND MECHANICAL SPECIFICATIONS**

Frequency Range	525 - 1620 Kc/s
Intermediate Frequency	455 Kc/s
Battery Voltage	6 Volts
Battery Consumption	1.3 Amps.
Battery Polarity	Neg. Earth
Speaker, A Series	7" x 5", 50064W
Speaker, B Series	6" x 4", 50053W
Speaker Impedance	15 ohms at 400 c.p.s.
Undistorted Power Output	1.7 Watts

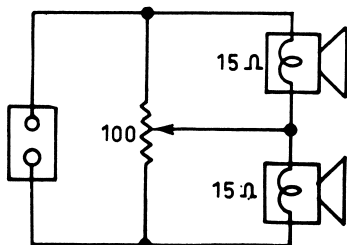
**TWO SPEAKER OPERATION**

The common practice of connecting a second speaker in parallel with the existing one can be tolerated in a receiver having a valve output stage; however, impedance matching is more important in a receiver having a transistor output stage and, in this case, any reduction in the correct loading of 15 ohms will result in considerable distortion.

If a second speaker is desired, it can be connected as shown in fig. 1, utilising a fader control. For this purpose a special kit No. 34787 is available comprising a 7" x 5" 15 ohm speaker, baffle and fader unit.

**Transistor and Diode Complement:**

2N1637/27 or AF115	R.F. Amplifier
2N1637/27 or AF115	Converter
2N1637/27 or AF115	I.F. Amplifier
2N408	Audio Amplifier
2N649 or AC127	Driver (NPN)
2N301	Output
1N87A	A.G.C.
1N87A	Detector

**FIG. 1**