DRIVE CORD REPLACEMENT.

The cord assembly is at centre travel (Fig. 1) when the tuning spindle is turned 3 turns clockwise from its full anti-clockwise position. Then, both spring and pointer are in the mid position.

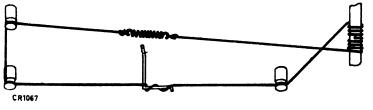


fig. 1

SERVICE NOTES.

TRANSISTOR MOUNTING.

Power transistors are thermally connected to but electrically insulated from the heat sink.

If a transistor is removed or replaced for any reason, it is essential that the following method of mounting be carefully adopted.

On no account must the old mica insulator be used again.

To mount the transistor first liberally smear the relevant surfaces of the heat sink, the transistor and both sides of the mica insulator with Silicone Heat Sink Compound, type 340 (Code No. 217016).

Place the mica insulator and transistor in place on the heat sink and secure the assembly to the heat sink with two No. 6 x ¼" self-tapping screws.

Warning: Excessive tightening of these screws can distort the transistor with the danger of rupture to the to the mica insulator.

Finally check with an ohmmeter the insulation between the collector (mounting flange) and the heat sink (should be greater than 1 megohm). For this check, connections to the transistor socket should be removed.

PRINTED BOARD REMOVAL.

Remove the ten Philips Head screws securing the lid to the cabinet body and remove the lid.

From the rear of the receiver, release the board retaining clips and tilt the board to clear the clips.

Move the board backwards to clear the board locating slots in the cabinet body.

Lift the left-hand end of the board upwards to clear the top of the cabinet body and the board can be tilted to reveal the wiring side.

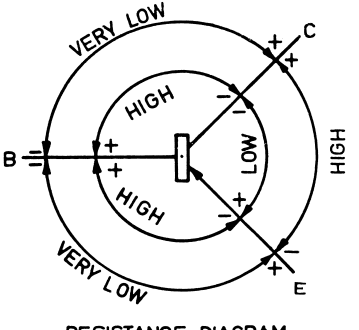
Re-assembly is the reverse of the above.

Power Transistor Test:

Power transistors are easily checked for short or open circuit by careful use of an ohmmeter to determine the forward and reverse resistance of each junction (as a diode).

An ohmeter, either multimeter or vacuum tube type, having a small battery voltage of 1.5 volts applied on the X1 range must be used. Check this with a voltmeter before using, as a higher voltage will cause damage. Also check the polarity of the meter leads in the ohmmeter position. Often this is the reverse of the polarity when used as a voltmeter or ammeter.

Fig. 2 shows the correct resistance readings between the junctions of the 2N301 power transistor with the + and — signs indicating the correct polarity of the applied ohmmeter leads. The base and emitter leads should be disconnected from a mounted transistor.



RESISTANCE DIAGRAM

fig. 2

Manufacturer's Setting of Adjustments:

The receiver is tested by the manufacturer with precision instruments and all adjusting screws, except the aerial trimmer, 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.

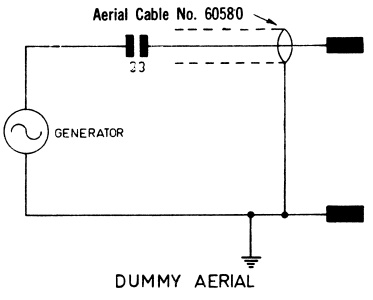
It is especially important that the adjustments should not be altered unless in association with the correct testing instruments listed below.

For all alignment operations connect the "low" side of the signal generator to the receiver chassis, and keep the generator output as low as possible to avoid a.g.c. action.

When the generator is connected to the aerial terminal, use the dummy aerial as shown in the diagram.

Testing Instruments:

Signal Generator—modulated 400 c.p.s.
or Modulated Oscillator
Dummy Aerial—see diagram
Output Meter—15 ohms impedance.



ALIGNMENT TABLE

A. GENERAL

Order Alignment	Connect High Side of Generator to:	Tune Generator to:	Tune Receiver to:	Adjust for Max. Peak Output
1	Collector of VT1*	455 Kc/s	L.F. Limit	TR3 Sec. (Top)
2	Collector of VT1*	455 Kc/s	L.F. Limit	TR3 Prim. (Bottom)
3	Collector of VT1*	455 Kc/s	L.F. Limit	TR2 Sec. (Top)
4	Collector of VT1*	455 Kc/s	L.F. Limit	TR2 Prim. (Bottom)
	Repeat the above adjustments until no further improvement is possible.			
5	Aerial Terminal via Dummy Aerial	1620 Kc/s	H.F. Limit	H.F. Osc. Adj. (C11)
6	Aerial Terminal via Dummy Aerial	1500 Kc/s	1500 Kc/s	H.F. R.F. Adj. (C7)
7	Aerial Terminal via Dummy Aerial	1500 Kc/s	1500 Kc/s	H.F. Aer. Adj. (C1)
8	Aerial Terminal via Dummy Aerial	600 Kc/s	600 Kc/s	L.F. Osc. Padder Adj. (L3)†
	Repeat adjustments 5, 6, 7 and 8 until no further improvement is possible.			
9	Calibration Alignment: With the receiver connected to an aerial, the dial scale calibration should now be checked and corrected if necessary. The pointer may be moved relative to the dial scale by sliding it along the dial cord.			

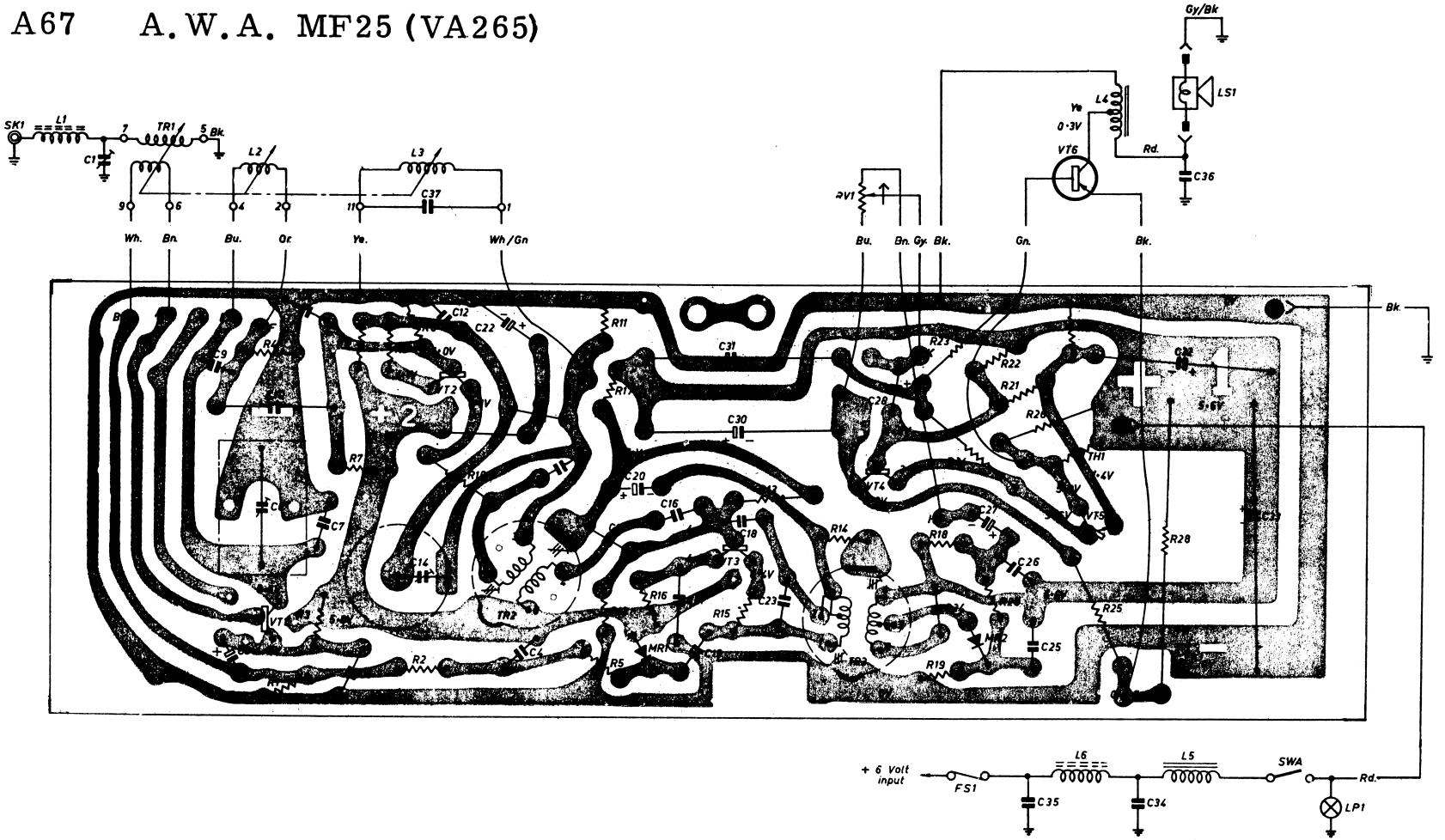
* A 0.01μf capacitor should be connected in series with the high side of the generator.
† Rock the tuning control back and forth through the signal.

B. TUNER ALIGNMENT

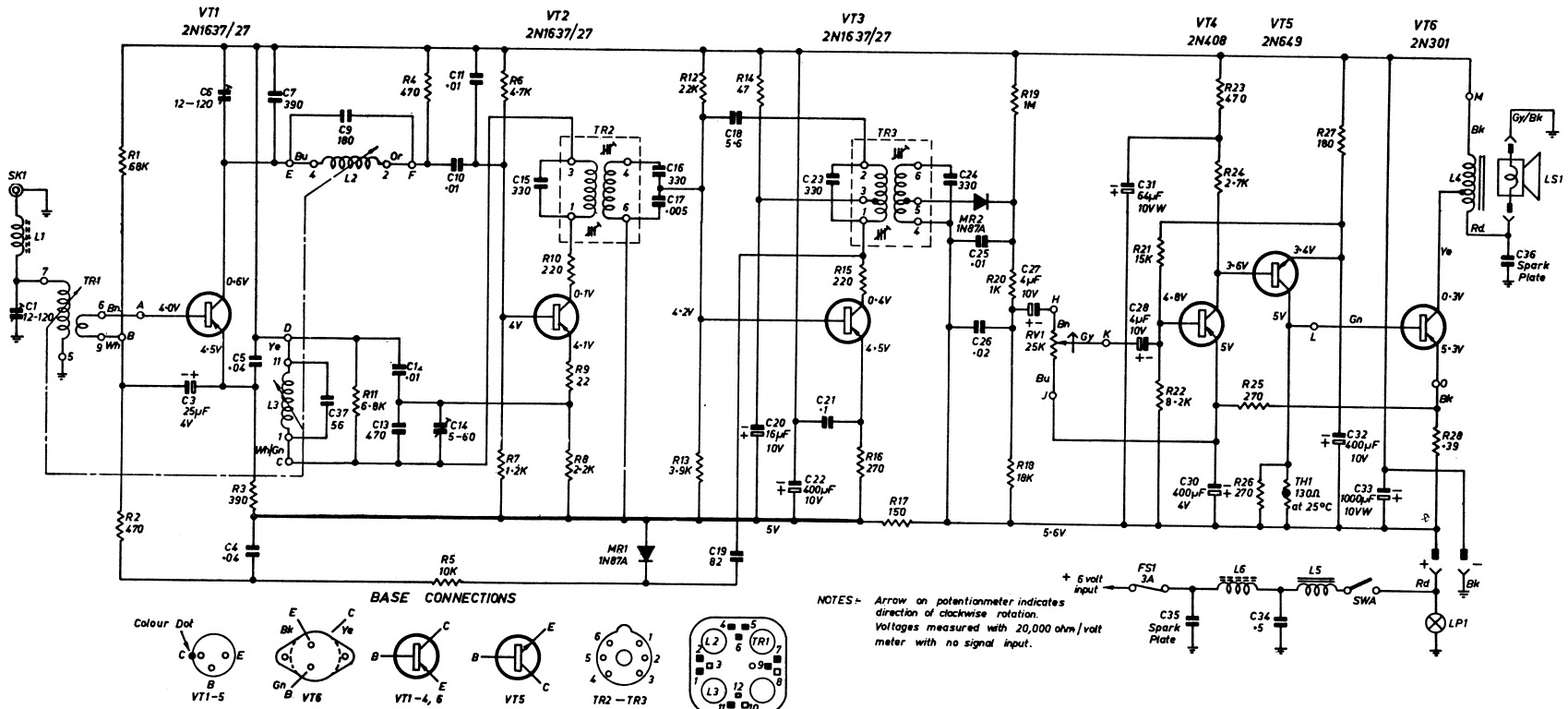
The adjustment of the tuning cores will be necessary only if a tuning core or coil has been replaced. To make this adjustment proceed as follows:—

(1) Adjust the manual tuning control until a 0.560" gauge can be slipped between the core carriage and the front end of the slot in the tuner frame. Use the gauge in the manner of a feeler gauge.
(2) Tune the signal generator accurately to 980 Kc/s and connect it to the aerial terminal via the dummy aerial. Adjust the oscillator core then the aerial and R.F. cores until the maximum output is obtained.
(3) Proceed with adjustments 5, 6, 7 and 8 in Table "A" and then repeat adjustment 2 above, if necessary.
(4) Repeat step 3 as often as necessary until no further improvement is possible.
(5) Seal the tuning cores.

A67 A.W.A. MF25 (VA265)



VOLKSWAGEN CAR RADIO VA265



NOTES:- Arrow on potentiometer indicates direction of clockwise rotation.
Voltages measured with 20,000 ohm/volt meter with no signal input.

VOLKSWAGEN

ALL TRANSISTOR MANUALLY TUNED

CAR RADIO VA265

(This corresponds to A.W.A. Model MF25)

MANUFACTURED BY AMALGAMATED WIRELESS (AUSTRALASIA) LIMITED

WARNING: This receiver is designed for 6-VOLT NEGATIVE earth operation only.

GENERAL DESCRIPTION

Model VA265 is a 6-transistor, 6-volt negative earthed, manually tuned car radio designed for the reception of the Medium Wave Broadcasting Band. The receiver is tailored to fit VW1200 and VW1300 cars.

ELECTRICAL AND MECHANICAL SPECIFICATIONS

Frequency Range	525-1,620 kHz
Intermediate Frequency	455 kHz
Battery Voltage	6 Volts
Battery Polarity	Negative Earth
Battery Consumption	1.0 Amp.

Loudspeaker

5″ 53387

V.C. Impedance 15 ohms at 400 Hz

Undistorted Power Output ..... 2 Watts

Controls:

Tuning, Volume

Transistor and Diode Complement:

AWV 2N1637/27 R.F. Amplifier.
AWV 2N1637/27 Converter.
AWV 2N1637/27 I.F. Amplifier.
AWV 2N408 Audio Amplifier
AWV 2N649 Driver
AWV 2N301 Output
AWV 1N87A A.G.C.
AWV 1N87A Detector

Dial Scale Replacement

Remove the control knobs

Remove the escutcheon and replace the dial scale.