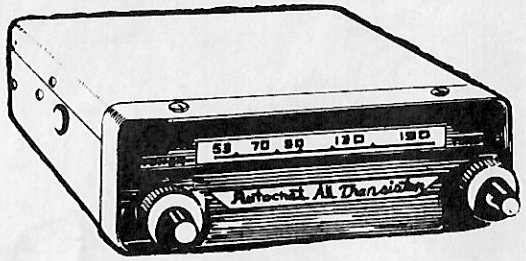
Autocrat

MODEL:- TRM1 / M2-TRP2

• ALL TRANSISTOR AUTO RADIO



SPECIFICATIONS:

TYPE:

6 Transistors.
6 or 12 Volt - Pos. or Neg.
Polarity, adjustable.

FREQUENCY COVERAGE:

530 -1680 Kc/s.

INTERMEDIATE FREQUENCY:

450 Kc/s

TONE CONTROL:

Continuously variable.

OUTPUT: 2 Watts into 3 ohms.

GENERAL NOTE:

For "Special Service instructions for Transistor Radios", see your Service Manual covering either T.P. 3 or 6C-11.

TRANSISTORS

V1, 2SA73 R.F. Amp.
V2, 2SA52 Converter.
V3, 2SA53 I.F. Amp.
V4, 2SA53 I.F. Amp.
V5, 2SB54 1st A.F. Amp.
V6, 2SB54 Power Opt.

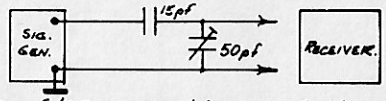
DIODES:

2 - 1NA4G or IN60

REVISED 20/10/65

ALIGNMENT PROCEDURE.

ALIGNMENT PROCEDURE. Input Voltage 13.2V.
The dummy antenna is sketched at right:-



Before switching on, make certain that the 6/12 connections and the +/- polarity plug are in the correct positions. On the polarity there is a small slot which indicates the polarity of the set in relation to the stamped marking on the metal cabinet.

GENERAL. Allow the test equipment to warm up for 10-15 minutes, before starting the alignment.

SIGNAL GENERATOR. Use AM-RF signal generator, connect ground lead to chassis and the output as indicated in the alignment chart.

OUTPUT METER. Connect an output meter (voltmeter or oscilloscope) across the speaker voice coil connections.

OUTPUT LEVEL. Attentuate the signal generator output throughout the alignment so as to maintain the output level below 1 watt.

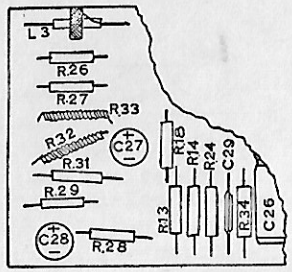
CONTROLS. Set the volume control at maximum and the tone control at the HIGH position. The tuning control as in the chart:- -

STEP	SIGNAL GENERATOR. CONNECTION TO RADIO.	FREQ.	RADIO. DIAL SETTING	SPECIAL INSTR.	ADJUST.
1.	CONNECT SIGNAL GENERATOR TO COLLECTOR OF V1, VIA A 0.1 MFD CAPACITOR	450 Kc/s	TUNING UNIT AT H.F. END.	ADJUST FOR MAXIMUM OUTPUT IN ORDER GIVEN	I.F.T.1,2 3 & 4
2.	CONNECT SIGNAL GENERATOR THROUGH 15 PFD. SERIES, 50 PFD. SHUNT TO AERIAL I.P.	1680 Kc/s	TUNE TO EXTREME HIGH END OF DIAL.	ADJUST FOR MAXIMUM OUTPUT	C14 Osc. TRIMMER.
3.	AS IN 2.	530 Kc/s	TUNE TO EXTREME LOW END OF DIAL	ADJUST FOR MAXIMUM OUTPUT	L2 Osc. COIL
REPEAT 2 & 3 UNTIL NO FURTHER ADJUSTMENT IS NECESSARY.					
4.	AS IN 2.	1400 Kc/s	1400 Kc/s	ADJUST FOR MAXIMUM OUTPUT	C1, AE C4, RF TRIMMERS

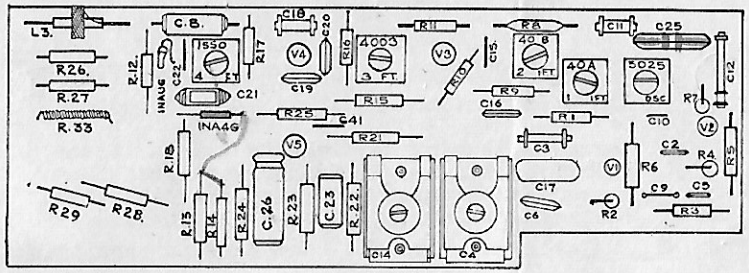
NOTES:-
1. To ensure the junction temperature of the output transistor is not exceeded do not operate the radio for long periods with a sustained high amplitude signal.
2. Take care to use alignment adjusting tools of the correct shape and size and do not use undue force;- to prevent damage of components.

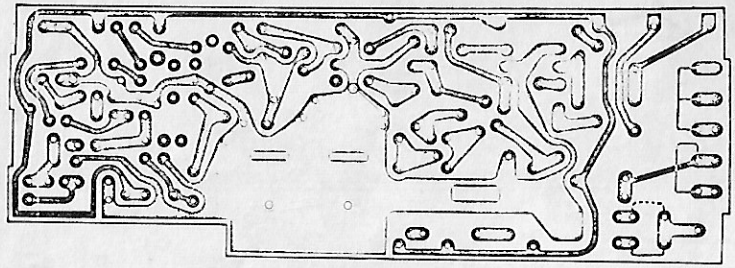
ADJUSTMENT OF TRANSISTOR STAGE CURRENT.

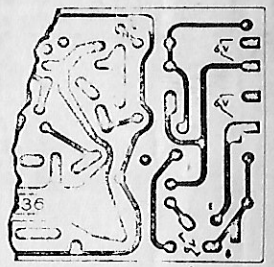
This is adjusted at the factory and should not require resetting unless a component in this part of the circuit is replaced. In this case, insert an ammeter in the collector lead and select a suitable resistor (R30) to parallel the bias resistor (R31) so that the IC measures 300 M/A maximum, with battery supply voltage set at 13.2V at 400 M/A maximum with 6.6V.



TRM2 COMPONENT LAY OUT







TRM2 CIRCUIT BOARD CHANGES.

CONNECT AS SHOWN FOR 6 VOLT OPERATION.

TRM1—P2 Voltage Connection

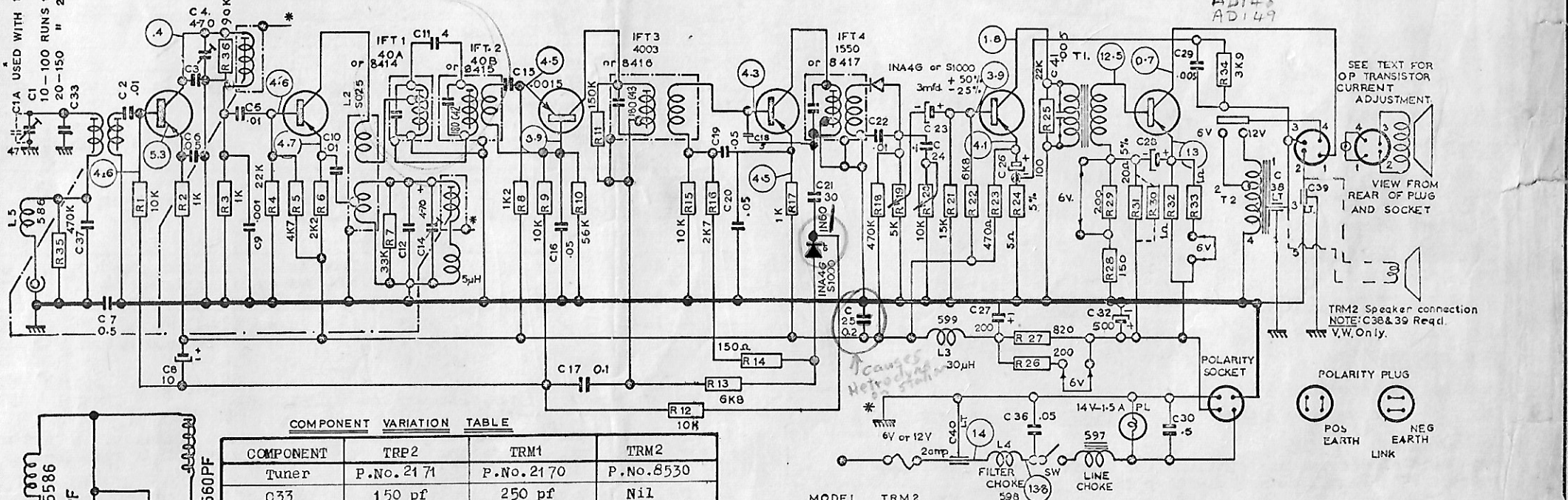
6V. ——

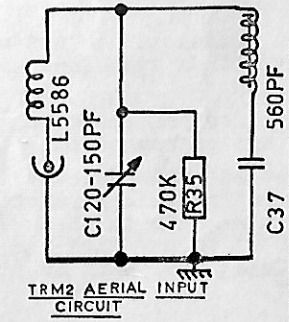
12V. - - - -

* C1A USED WITH 10 - 100PF ONLY.
C1 10 — 100 RUNS 1 ONLY
20 — 150 " 2-3 etc.

V1. 2SA73 V2. 2SA52 V3. 2SA53 V4. 2SA53 V5. 2SB54 V6. 2SB26

2N3836
AD148
AD149



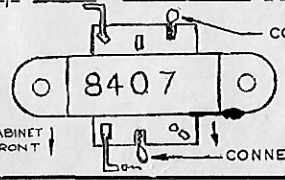


TRM2 AERIAL INPUT CIRCUIT

COMPONENT VARIATION TABLE

COMPONENT	TRP2	TRM1	TRM2
Tuner	P.No.2171	P.No.2170	P.No.8530
C33	150 pf	250 pf	Nil
C37	100 pf	150 pf	560 pf
C3	75 pf	100 pf	100 pf
C12	200 pf	150 pf	60pf POLYSTYRENE C47 120pf N750 CERAMIC PARALLD
C28	500 mfd 10 wv	500 mfd 10 wv	200 mfd 10wv
T1	P.No.B81	P.No.B81	P.No.B70
T2	P.No.B82	P.No.B82	P.No.8407

O/P TRANS. CONNECTIONS MODEL TRM2 6 & 12 VOLT OPERATION



* METAL CASE
ALL RESISTORS 10% UNLESS SHOWN OTHERWISE

AUTOCRAT

CIRCUIT DIAGRAM
MODEL TRM1 — TRP2 - TRM2

REVISED DRN: GP. DTE
CHK: APPD:

unstable at top end of Band.
(ie. whistle on station) check AGC Diode