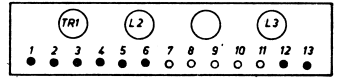


NOTES:- Arrows on potentiometers indicate direction of clockwise rotation. Voltages measured with 20,000 ohm/volt meter with no signal input. * Value of R23 varies with VT5 transistor type used

ERRATA: Value of C39 should read 150



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 adjustments should not be altered unless the correct testing instruments, listed below, are used.

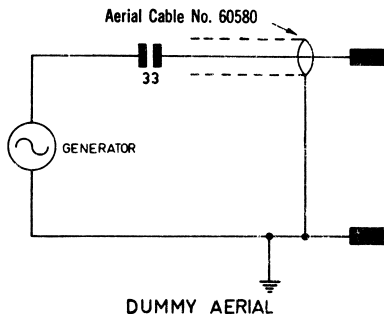
For all alignment operations connect the "low" side of the signal generator to the receiver chassis and keep the generator output as low as possible to avoid a.g.c. action. Also, keep the volume control in the maximum clockwise position.

When the generator is connected to the aerial terminal, use the dummy aerial as shown in the diagram of Fig. 3.

Testing Instruments:

Signal Generator — Modulated 400 Hz or Modulated Oscillator.

Dummy Aerial — See diagram.
Output Meter — 15 ohms impedance.
I.F. Alignment Tool No. 39462.



**TOYOTA CROWN
TOYOTA COROLLA
ALL TRANSISTOR CAR RADIOS
Models T806 01 07 and T807 21 10
(Corresponding to AWA Models PF39 and PF45 respectively.)**

WARNING: These receivers are for 12 VOLT NEGATIVE EARTH operation only.

GENERAL DESCRIPTION

Both models are six transistor press-button permeability tuned car radios.

ELECTRICAL AND MECHANICAL SPECIFICATIONS

Frequency Range	525-1620 kHz	V.C. Impedance	15 ohms at 400 Hz
Intermediate Frequency	455 kHz	Undistorted Power Output	2 Watts
Battery Voltage	12 Volts	Transistor and Diode Complement:	
Battery Polarity	Negative Earth	AWW 2N1637	R.F. Amplifier
Battery Consumption	0.7 Amps	AWW 2N1639	Converter
Controls:		AWW 2N1638	I.F. Amplifier
Manual Tuning, Volume, On/Off Switch, Tone, Press-button Tuning (Set of 5).		AWW 2N408	Audio Amplifier
Loudspeaker PF39 5"	53417	AWW 2N649 or AS313	Driver
Loudspeaker PF45 7" x 5"	53409	AWW 2N301	Output
		AWW 1N87A	A.G.C.
		AWW 1N87A	Detector

SERVICE NOTES**Component Removal and Replacement:**

Remove the top cover to reveal the printed board. Release the two spring clips retaining the board. Move the board forward toward the front of the receiver until it is clear of the recesses in the heat sink.

The board may now be pivoted clear of the heat sink to gain access to the component side.

Replacing the board is the reverse of the above, making sure that the board locates in the recesses provided on the heat sink and spring clips.

Transistor Mounting:

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

If a transistor is removed from the heat sink 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, 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 position on the heat sink and secure the assembly to the heat sink with two No. 6 x 1/4" self-tapping screws.

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

A. GENERAL**ALIGNMENT TABLE**

ORDER	CONNECT GENERATOR TO:	TUNE GENERATOR	TUNE RECEIVER TO:	ADJUST FOR MAX. PEAK OUTPUT:
1	Collector of VT1 *	455 kHz	H.F. Limit	TR3 Secondary Core
2	Collector of VT1 *	455 kHz	H.F. Limit	TR3 Primary Core
3	Collector of VT1 *	455 kHz	H.F. Limit	TR2 Secondary Core
4	Collector of VT1 *	455 kHz	H.F. Limit	TR2 Primary Core
Repeat the above adjustments until maximum output is obtained.				
5	Aerial Terminal via Dummy Aerial	1,620 kHz (Accurate)	H.F. Limit	Oscillator Trimmer (C11)
6	Aerial Terminal via Dummy Aerial	1,550 kHz	1,550 kHz	R.F. Trimmer (C6)
7	Aerial Terminal via Dummy Aerial	1,550 kHz	1,550 kHz	Aerial Trimmer (C1)

Repeat adjustments 5, 6 and 7 until no further improvement is possible.

* A 0.01μF capacitor should be connected in series with the high side of the generator.

B. CALIBRATION ALIGNMENT. With the receiver connected to an aerial, the dial scale calibration may be checked and corrected if necessary. The pointer position may be altered on turning a screwdriver in the slot provided at the rear of the pointer.

C. TUNER ALIGNMENT. Adjustment of the tuner cores should not be made unless a coil has been replaced or it is suspected that the alignment has been interfered with, in which case, carefully follow the procedure below:—

1. Adjust the tuner to the H.F. end stop and back all cores out of the coils as far as possible.
2. Tune the signal generator accurately to 1,620 kHz and adjust the oscillator, R.F. and aerial trimmers for maximum output.
3. Tune the signal generator accurately to 600 kHz and the core carriage to a point 0.680" from the H.F. end stop. Adjust the oscillator, R.F. and aerial cores for maximum output.
4. Tune the signal generator to 1,620 kHz and the tuner to the H.F. end stop and re-adjust the oscillator trimmer for maximum output.
5. Tune the signal generator to 1,550 kHz and adjust the R.F. and aerial trimmers for maximum output.
6. Repeat steps 3, 4 and 5 until no further improvement is obtained.
7. Seal the tuning core studs.