

Car chassis

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Resistors				
R2	2.2kΩ	A2	R17	470Ω
R3	68kΩ	B2	R18	39Ω
R3*	150kΩ	B2	R19	56Ω
R4	12kΩ	B2	R20	330Ω
R5	1.5kΩ	B2	R21	470Ω
R7	5.6kΩ	B2	R22	45Ω
R7*	10kΩ	B2	R23	15Ω
R8	1.2kΩ	A2	R24	VA1034
R10	10kΩ	A3	R25	0.22Ω
R11	20kΩ	C2	R26	47Ω
R12	22kΩ	B2	R27	22kΩ
R13	10kΩ	C2	R28	4.7kΩ
R14	820Ω	C2	R29	2.2kΩ
R15	1kΩ	C2	R30	3.3kΩ
R16	2.2kΩ	B1	R31	39Ω
			R32	560Ω
			R33	330Ω

Resistors				
MR1	47kΩ			
MR2	6.8kΩ			
MR3	100Ω			
MR4	820Ω			
MR5	56kΩ			
MR6	680Ω			
MR7	22kΩ			
MR8	4.7kΩ			
MR9	1kΩ			
MR10	8.2kΩ			
MR11	180Ω			
MR12	470Ω			

Capacitors

C1	80pF	B1
C2	1,400pF	A2
C4	5,000pF	A2
C5	2,200pF	A2
C6	5,000pF	A2
C7	10μF	A2
C8	5,000pF	B2
C9	1,200pF	A2
C10	180pF	A1
C11	3,300pF	A2
C12	0.1μF	B2
C13	100pF	B2
C14	180pF	A1
C15	5,600pF	B1
C16	1,000pF	B1
C17	40pF	B1
C18	0.01μF	B2
C19	0.05μF	B2
C19*	0.22μF	C2
C20	16μF	C2
C21	0.022μF	B2
C22	160μF	C2
C23	640μF	C2
C24	16μF	B2
C25	160μF	C2
C26	1,000pF	C2
C27	0.1μF	C2
C28	0.1μF	C2
C29	15μF	B2
C31	0.1μF	C1
C32†	16μF	
MC1	0.047μF	
MC2	0.047μF	
MC3	—	
MC4	—	
MC5	0.047μF	**
MC6	0.047μF	**
MC7	0.047μF	
MC8	—	
MC9	10μF	
MC10	0.047μF	
MC11	0.01μF	

*This value used in early production receivers.

† Not fitted in early production receivers.

** I.F. module components.

§ Located in input lead assembly.

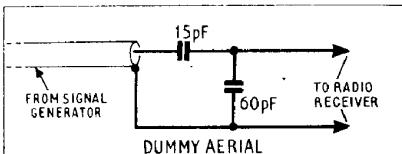
CIRCUIT ALIGNMENT

Equipment Required.—A 14V d.c. supply; an r.f. signal generator, amplitude modulated 30 per cent at 400c/s; an output meter 0-1W with an impedance to match 3Ω; a dummy aerial consisting of a series 15pF capacitor followed by a 60pF shunt.

No alignment instructions are given for the module and the manufacturers stipulate that no alignment whatsoever is to be carried out on the module.

Note: All alignment to be carried out on negative earth operation. Turn tone control fully anti-clockwise and the volume control fully clockwise. All adjustments are to be made for maximum output, and keep input signal level down to a minimum to avoid a.g.c. action.

- 1.—Switch on signal generator and allow 15 minutes to warm up. Disconnect the loudspeaker and connect in its place the audio output meter. Connect the signal generator via the dummy aerial to the aerial socket. Switch on the radio receiver, but do not advance tone control more than is necessary for this operation.



- 2.—Depress a m.w. button and tune to the high frequency end of the band. Feed in a 1,620kc/s signal. Adjust C14.

- 3.—Tune receiver to 200m and feed in a 1,500kc/s signal. Adjust C1 and C10.

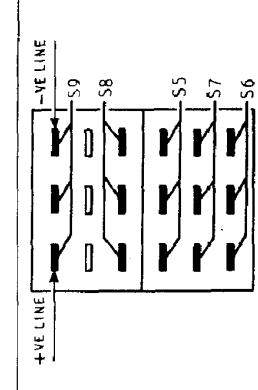
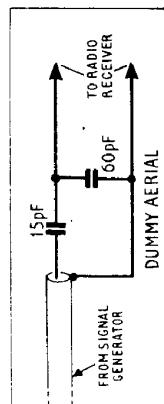
- 4.—Feed in a 1,000kc/s signal. Tune receiver to signal approaching from the high frequency end of the band.

- 5.—Note the position of the pointer in operation 4, then depress a l.w. button and bring the pointer back to this same position, again approaching from the high frequency end of the band.

- 6.—Ensure that the bottom cover is fitted and the position of the pointer is undisturbed. Feed in a 225kc/s signal. Adjust L7 and L5.

- 7.—Feed in a 180kc/s signal and tune the receiver to this signal. Adjust L2.

- 8.—Seal all cores.



Voltage and polarity switches.

Transistor Table

Transistor	Emitter (V)	Base (V)	Collector (V)
TR1 AF117	{* 0.33	—	—
	{* 0.4	—	—
	1.5	—	5.1
TR2 NKT 275	{* 1.7	—	5.4
	{* 0.9	—	5.8
TR3 NKT 270	{* 1.05	—	12.5
TR4 NKT 450	—	—	—
TR5 NKT 450	—	—	—
MTR1 AF115†	{* 0.8	—	—
	{* 0.95	—	—
MTR2 AF 117	—	—	—
MTR3 AF 117	—	—	—

PYE - 2060 MAJOR

TRANSISTOR ANALYSIS

All voltages quoted in the table overleaf were obtained from data supplied by the manufacturers. Measurements were made using an Avometer model 8, and they are negative with respect to the positive line in all cases.

Four additional voltages which can be easily measured at the connecting tags of the module are: tag 2, 6.2V, (5.75V) and tag 7, 6.9V, (6.4V). Voltages in brackets are those obtained with a 7V supply.

The quiescent current is quoted as 310mA when operating from a 14V supply.