

MODIFICATION TO THE B89A

To make oscillation more reliable on the medium waveband, with reduced H.T. voltage, decoupling has been introduced in the primary circuit of the first I.F. transformer.

This consists of a 10,000 ohms resistance between HT+ and L13, with a 0.01 μF condenser connected from the junction of L13 and the resistance, to V1 filament negative.

This modification can be incorporated in sets wired according to the circuit diagram, in the following way:-

- (1) Connect a 10,000 ohms resistance from HT+ (second tag on resistance rack) to the blank socket on V1 valve holder;
- (2) Transfer the pink lead from the 1st I.F. transformer from HT+ to this socket;
- (3) Connect a 0.01 μF condenser between this socket and the negative filament socket of V1 valve holder (the filament socket close to the small resistance panel).

TABLE OF COMPONENTS B89A							
Code	Value	Code	Value	Code	Value	Code	Value
C1	500 pf.	C29	100 pf.	R14	68,000	T1 Prim.	700
C2	80 pf.	C32	100 pf.	R18	270,000	Sec.	*
C3a	Variable	C33	0.002 μf .	R19	3.9 M Ω	T2 Prim.	180
C3b	Variable	C34	0.05 μf .	R22	920	Sec.	710
C4	Trimmer	C38	0.02 μf .	R23	100,000		+910
C5	0.025 μf .					L.S.	
C7	500 pf.	R1	470,000	L1	*	Sp. coil	4
C8	200 pf.	R2	330	L2	2	VALVES	
C10	500 pf.	R3	22,000	L3	*	V1	TP26
C12	Trimmer	R4	47,000	L4	*	V2	VP23
C13	0.05 μf .	R5	27	L6	3	V3	HL23DD
C14	Trimmer	R6	4,700	L7	*	V4	P215
C17	700 pf.	R7	39,000	L8	1.5	V5	P215
C19	92 pf.	R8	47,000	L9	*		
C22	92 pf.	R9	1 M Ω	L12	*		
C23	0.05 μf .	R10	20,000	L12	*		
C24	92 pf.	R12	2.2 M Ω	L13	8		
C27	92 pf.	R13	2 M Ω	L14	8		
C28	8 μf .			L17	8		
All values marked "*" less than 1 ohm.				L18	8		

TABLE OF COMPONENTS B89B							
Code	Value	Code	Value	Code	Value	Code	Value
C1	500 pf.	C24	92 pf.	R13	2 M Ω	L10	*
C2	80 pf.	C27	92 pf.	R14	68,000	L12	2
C3a	Variable	C28	8 μf .	R17	270,000	L13	8
C3b	Variable	C29	100 pf.	R18	2.2 M Ω	L14	8
C4	Trimmer	C32	100 pf.	R19	470,000	L17	8
C6	0.025 μf .	C33	0.002 μf .	R20	470,000	L18	8
C8	500 pf.	C34	0.003 μf .	R21	2.2 M Ω		
C9	200 pf.	C38	0.003 μf .	R22	330	T1 Prim.	700
C12	Trimmer			R23	100,000	Sec.	*
C13	0.05 μf .					L.S.	
C14	Trimmer	R1	470,000	L1	*	Sp. coil	4
C15	0.05 μf .	R2	47,000	L2	2	VALVES	
C17	662 pf.	R3	330	L3	13	V1	TP26
C18	414 pf.	R4	30,000	L4	1	V2	VP23
C19	92 pf.	R7	40,000	L5	*	V3	HL23DD
C20	50 pf.	R8	47,000	L6	3	V4	PEN25
C22	92 pf.	R9	1 M Ω	L7	*		
C23	0.05 μf .	R12	3.3 M Ω	L8	1.5		
All values marked "*" less than 1 ohm.				L9	1.5		

A96		TABLE OF VOLTAGES			A96	
Valves	Type	Electrode	Test Point	Square	Voltage	
V1	Mazda TH41	Hexode Anode	20	23 L	105	
		Hexode Screen	19	23 L	105	
		Triode Anode	22	23 L	42	
V2	Mazda VP41	Anode	54	19 N	188	
		Screen	38	19 N	190	
V3	Mazda HL41DD	Anode	72	15 N	85	
		Cathode	64	15 N	-2.9	
		Control Grid	63	4 C	-4.2	
V4	Mazda PEN45	Anode	77	14 N	183	
		Screen	38	14 N	190	
		Cathode	78	14 N	6	
V5	Mazda UU6	Cathode	92	3 F	345	
Voltages measured to chassis, under no signal conditions with V/C at minimum, using an Avometer Model 7.						