

TECHNICAL INFORMATION AND SERVICE DATA



MODEL B38

A.W.A. PORTABLE RECORD PLAYER

ISSUED BY AMALGAMATED WIRELESS (AUSTRALASIA) LTD.



GENERAL DESCRIPTION

Model B38 is a four transistor, A.C. operated four speed record player designed to reproduce 7", 10" and 12" records. Stereophonic records may be played without damaging the record, although both channels will be reproduced through one loudspeaker.

ELECTRICAL AND MECHANICAL SPECIFICATIONS

Power Output 1 Watt
Loudspeaker 6" x 4" 50245
V.C. Impedance 15 Ohms
Power Supply 240 Volts A.C. 50 C.P.S.
via motor overwinding

Transistor Complement:

AWV 2N408 Pre Amplifier.
AWV 2N591 Driver.
AWV AS128 (2) P-P Output.

Dimensions:

Width 11½". Depth. 10" Height 5". Weight 9 lbs.

Controls:

Volume, ON/OFF-Tone, Speed Selector.

Chassis Removal:

Remove the front control knobs by pulling them straight off their spindles.

Remove the lid and make sure the pick-up arm is secured to its rest.

Place the record player face down and remove three screws exposed in the bottom of the case.

The case may now be lifted away from the motor board assembly.

To gain access to the wiring side of the printed board, remove two Phillips Head screws situated at the bottom front of the chassis and loosen the two screws clamping the chassis to the moulded lugs. The complete assembly may now be lifted and tilted forward to reveal the printed wiring.

Spring Loaded Foot Replacement

To accomplish this, the whole assembly comprising foot (part No. 64846) spring and Retaining Clip (No. SC0/1868) must be replaced. It is essential that the correctly coloured springs, as shown in the accompanying diagram, are replaced in their corresponding positions. The diagram is viewed from the underside of the cabinet case.

To replace a foot, first remove the cabinet case. Mount the correct spring on the foot and push it through its mounting hole. From inside the cabinet case push the retaining clip onto the foot until its teeth engage in the groove in the foot.

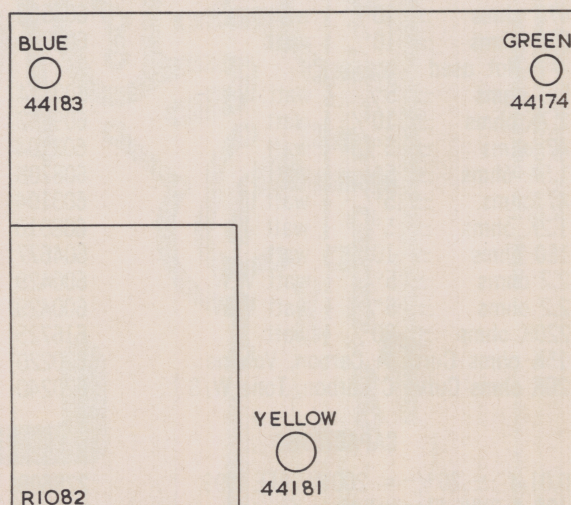
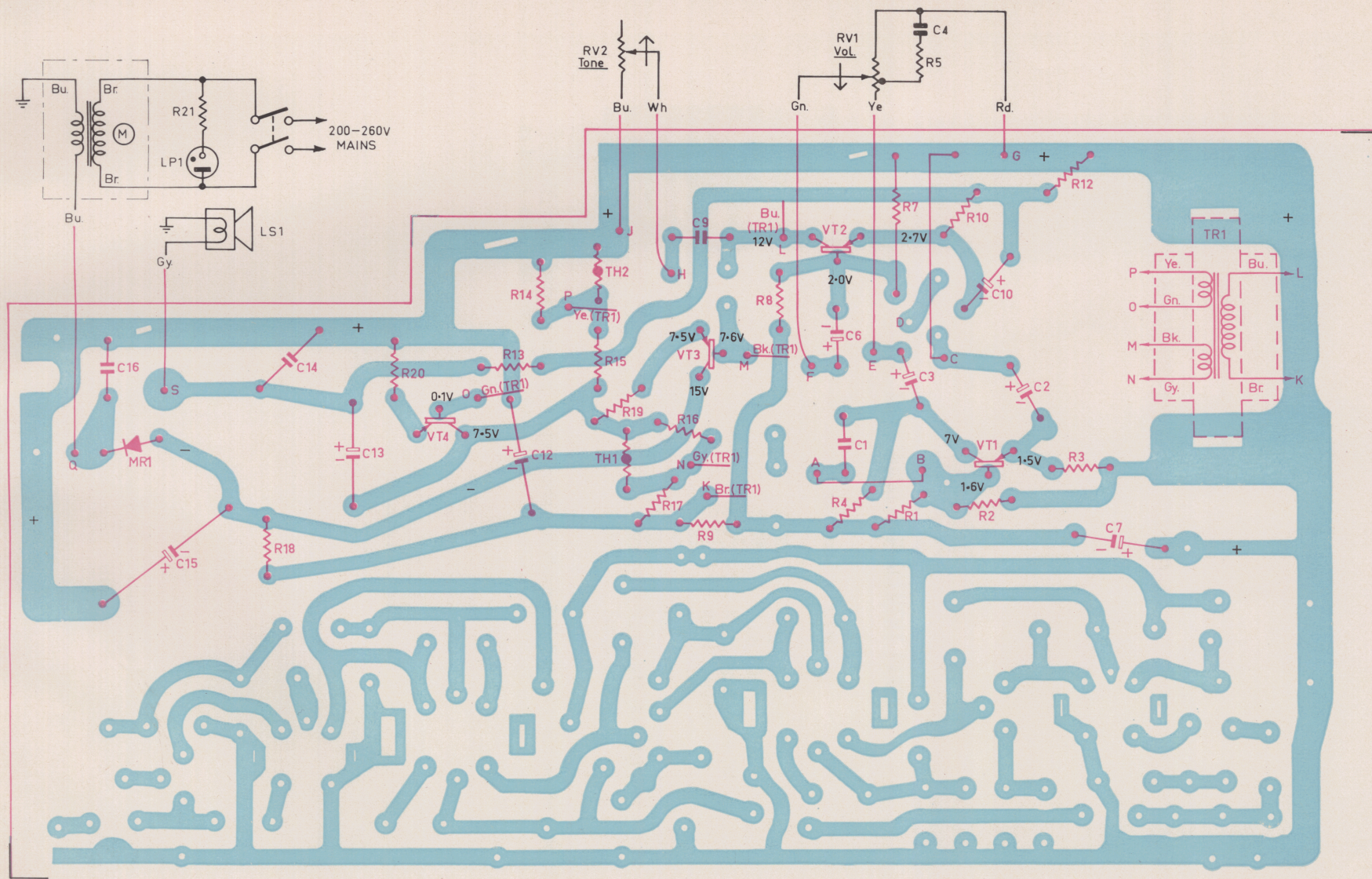


Fig. 1

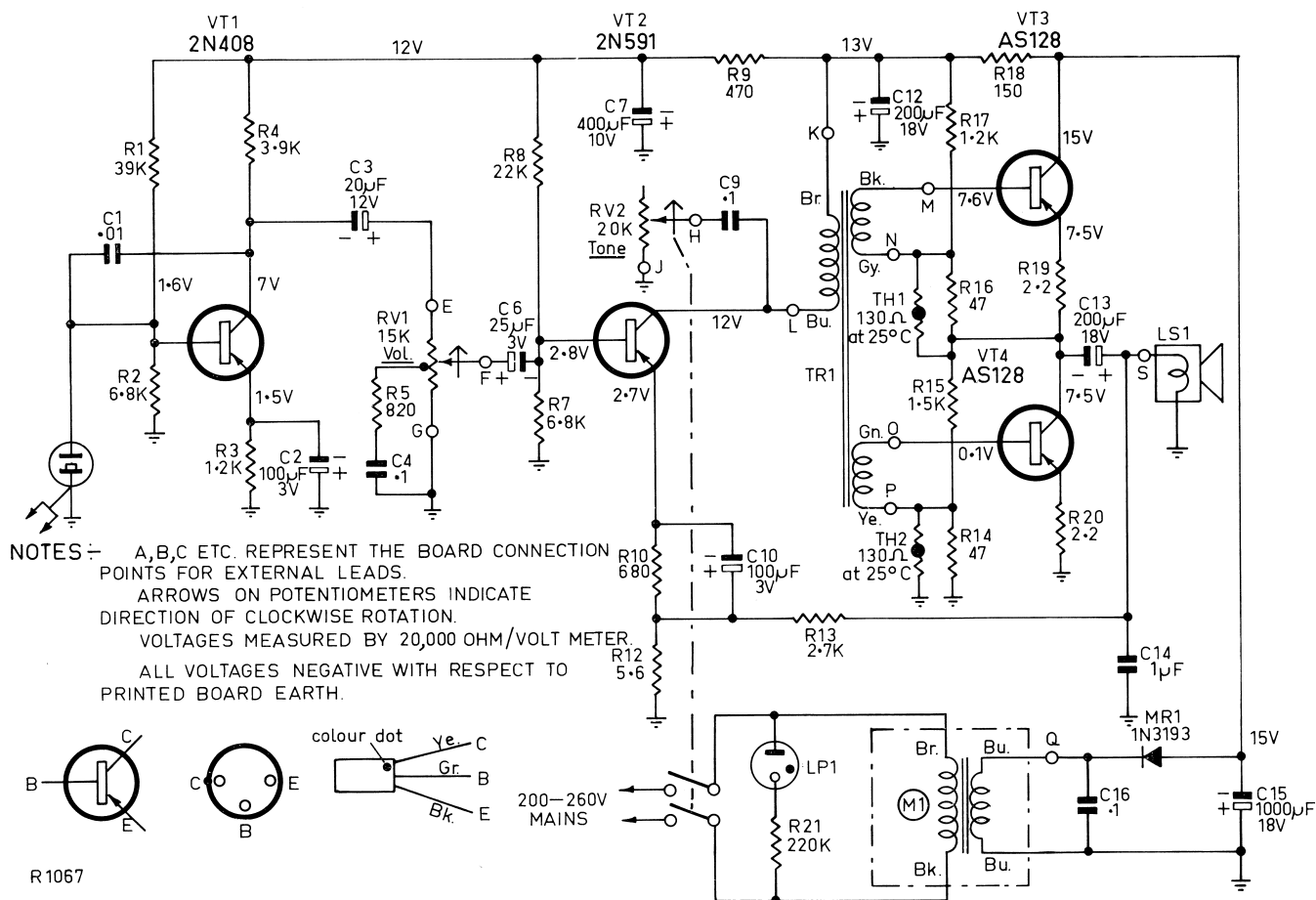
DEC. '64



R1089

R1090/RB

Notes: The diagram represents the view from the wiring side of the printed board.
 Red indicates components and leads mounted on the remote side of the board.
 Black indicates those components and leads mounted on the wiring side or completely removed from the board.
 All voltages shown are negative with respect to the board earth (positive terminal of the battery) and measured with no signal input and volume maximum clockwise using a 20,000 ohm/volt meter.



CIRCUIT CODE. RADIOLA PORTABLE PLAYER B38

CODE No.	DESCRIPTION	PART No.	CODE No.	DESCRIPTION	PART No.
RESISTORS			TRANSFORMERS		
All Resistors composition type unless otherwise stated			TR1	Driver Transformer	52428A
R1	39K ohms $\pm 5\%$ $\frac{1}{2}$ watt cracked carbon	614698	TRANSISTORS AND DIODES		
R2	6.8K ohms $\pm 5\%$ $\frac{1}{2}$ watt cracked carbon	611540	VT1	AWV 2N408	
R3	1.2K ohms $\pm 10\%$ $\frac{1}{2}$ watt	608312	VT2	AWV 2N591	
R4	3.9K ohms $\pm 10\%$ $\frac{1}{2}$ watt	610556	VT3	AWV AS128	
R5	820 ohms $\pm 10\%$ $\frac{1}{2}$ watt	607665	VT4	AWV AS128	
R6	Not used		MR1	AWV 1N3193	
R7	6.8K ohms $\pm 10\%$ $\frac{1}{2}$ watt	611526	MISCELLANEOUS		
R8	22K ohms $\pm 10\%$ $\frac{1}{2}$ watt	613653	TH1	130 ohms at 25°C N.T.C. Thermistor	893703
R9	470 ohms $\pm 10\%$ $\frac{1}{2}$ watt	606588	TH2	130 ohms at 25°C N.T.C. Thermistor	893703
R10	680 ohms $\pm 10\%$ $\frac{1}{2}$ watt	607281	LP1	Pilot Lamp	428528
R11	Not used		LS1	6" x 4" P.M. Speaker	50245
R12	5.6 ohms $\pm 5\%$ $\frac{1}{2}$ watt W.W.	600714	SWA	ON-OFF Switch (on RV2)	
R13	2.7K ohms $\pm 10\%$ $\frac{1}{2}$ watt	609862			
R14	47 ohms $\pm 5\%$ $\frac{1}{2}$ watt	603104			
R15	1.5K ohms $\pm 5\%$ $\frac{1}{2}$ watt	608708			
R16	47 ohms $\pm 5\%$ $\frac{1}{2}$ watt	603104			
R17	1.2K ohms $\pm 5\%$ $\frac{1}{2}$ watt	608316			
R18	150 ohms $\pm 10\%$ $\frac{1}{2}$ watt	604677			
R19	2.2 ohms $\pm 5\%$ $\frac{1}{2}$ watt W.W.	600429			
R20	2.2 ohms $\pm 5\%$ $\frac{1}{2}$ watt W.W.	600429			
R21	220K ohms $\pm 20\%$ $\frac{1}{2}$ watt	616725			
RV1	15K ohms Curve A Carbon, Volume	620220			
RV2	20K ohms Curve C Carbon, Tone W/S	620240			
CAPACITORS					
C1	0.01 μf $\pm 20\%$ — 200VW AEE W99	228609			
C2	100 μf 3VW Electrolytic	229706			
C3	20 μf 12VW Electrolytic	229307			
C4	0.1 μf $\pm 20\%$ 25VW Hi-K disc	227083			
C5	Not used				
C6	25 μf 3VW Electrolytic	229428			
C7	400 μf 10VW Electrolytic	229786			
C8	Not used				
C9	0.1 μf $\pm 80\%$ — 20% 25VW Hi-K disc	227074			
C10	100 μf 3VW Electrolytic	229706			
C11	Not used				
C12	200 μf 18VW Electrolytic	229763			
C13	200 μf 18VW Electrolytic	229763			
C14	1 μf $\pm 20\%$ 200VW AEE W48	227732			
C15	1,000 μf 18VW Electrolytic	229910			
C16	0.1 μf $\pm 80\%$ — 20% 25VW Hi-K disc	227074			

MECHANICAL REPLACEMENT PARTS

ITEM	PART No.	ITEM	PART No.
Badge (AWA)	64904	Hinge, Handle, Right Hand	64865
Bezel, Light	64899	Knob, On/Off-Tone	64916
Box, Cord Storage	64847	Knob, Speed Selector	64867
Case	64843	Knob, Volume	64869
Catch, Button Assembly	64853	Lid	64849
Clip, Retaining Tone Arm	64901	Lid, Cord Storage	64844
Fret, Speaker	64856	Nameplate (Radiola)	64852
Handle	64864	Support, Lid	64850
Hinge, Handle, Left Hand	64866		

NOTE: When ordering spares, always quote the above Part Numbers, and in the case of coloured parts such as knobs, etc., also quote the colour.