

# TECHNICAL INFORMATION AND SERVICE DATA

Issued by Amalgamated Wireless (Australasia) Limited



**A.W.A.**

## PORTABLE RECORD PLAYER

**Models B93 and B93Z**



### GENERAL DESCRIPTION

These models are AC operated, four transistor, four-speed record players. They will give monophonic reproduction of 7", 10" or 12" mono or stereo records.

The only variation in these models is the type of cartridge used; Model B93 uses a crystal type X3M or X5M and Model B93Z uses a ceramic type SC5M suitable for tropical conditions.

### ELECTRICAL AND MECHANICAL SPECIFICATIONS

Power Output .....	1½ watts
Power Supply .....	230-260 volts AC 50Hz
Power Consumption (max.) .....	12 watts
Loudspeaker, 6" x 4" .....	52867
Speaker V/C Impedance .....	15 ohm at 400Hz
Controls .....	Volume On/Off Tone Speed Selector

AS208	Complementary
AS128	Symmetry Output
OA663	Compensating Diode
BY126/200	Rectifier

#### Dimensions:

Width .....	11½" (29.2 cms)
Depth .....	10" (25.4 cms)
Height .....	5" (12.7 cms)
Weight .....	6½ lbs. (2.95 kgms)

#### Semi Conductor Complement:

AS149 .....	Input Stage
AS157 (BC157) .....	Driver Stage

### SERVICE NOTES

To gain access to the chassis, proceed as follows:

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 four screws exposed in the bottom of the case.

The case may now be lifted away from the motor board assembly to reveal the complete chassis for servicing.

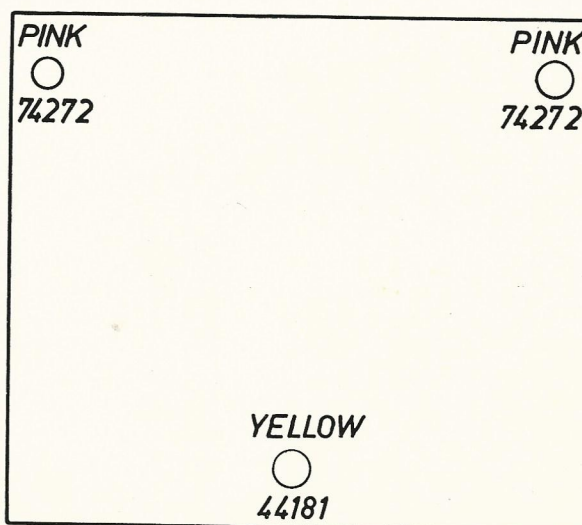
#### Spring Loaded Foot Replacement.

To accomplish this, the whole assembly, comprising foot spring and retaining clip must be replaced. It is essential that the correctly coloured springs, as shown in fig. 1, 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.

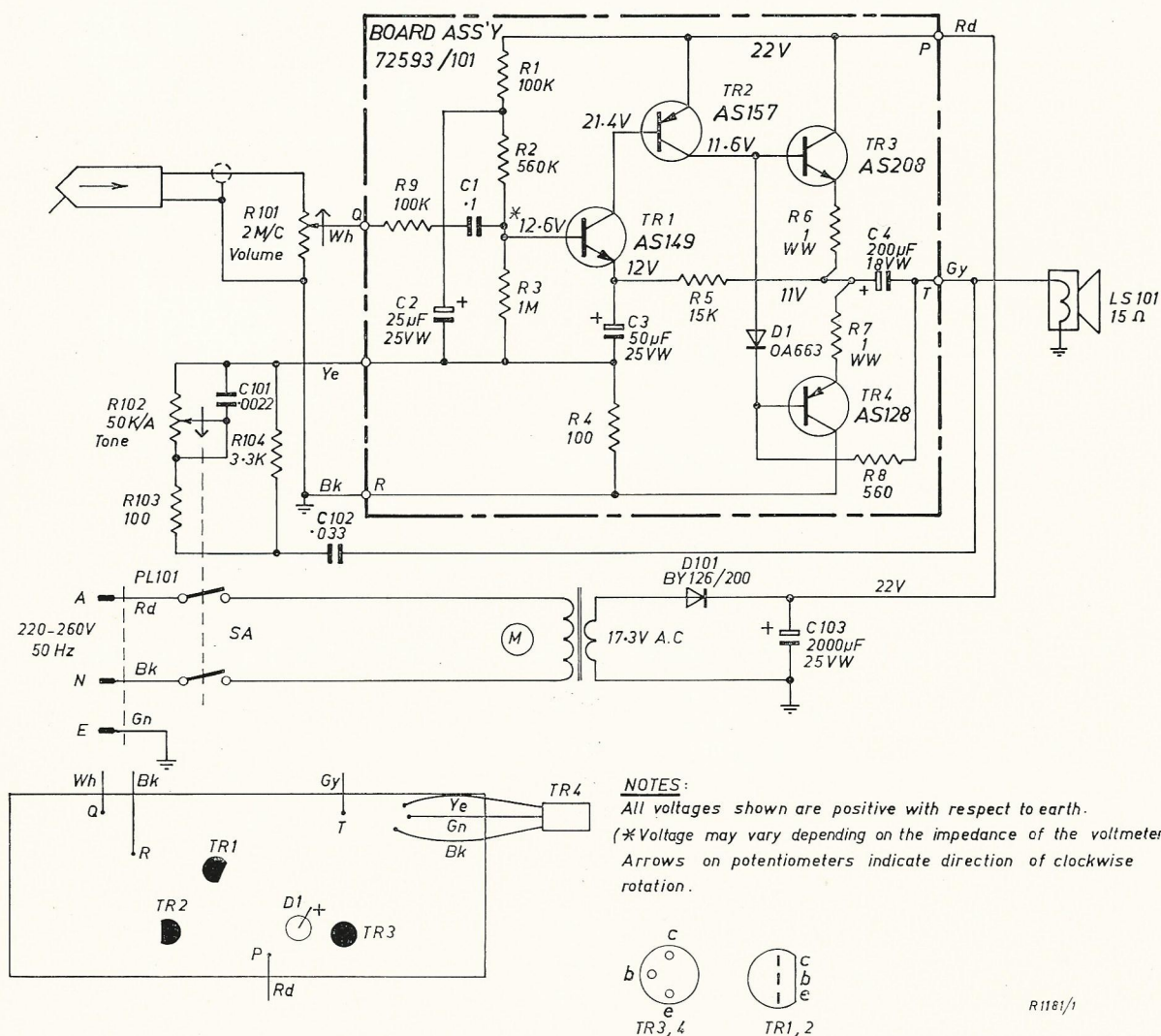
From inside the cabinet case push the retaining clip onto the foot until its teeth engage in the groove in the foot.



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CODE No.	DESCRIPTION	Part No.
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## RESISTORS

All resistors composition type unless otherwise stated

R1	100K ohms	$\pm 5\%$	$\frac{1}{2}$ watt	
R2	560K ohms	$\pm 10\%$	$\frac{1}{2}$ watt	
R3	1 Megohm	$\pm 5\%$	$\frac{1}{2}$ watt	
R4	100 ohms	$\pm 10\%$	$\frac{1}{2}$ watt	
R5	15K ohms	$\pm 10\%$	$\frac{1}{2}$ watt	
R6	1 ohm	$\pm 10\%$	$\frac{1}{2}$ watt WW	
R7	1 ohm	$\pm 10\%$	$\frac{1}{2}$ watt WW	
R8	560 ohms	$\pm 10\%$	$\frac{1}{2}$ watt	
R9	100K ohms	$\pm 5\%$	$\frac{1}{2}$ watt	
R101	2 Megohms curve C carbon, Volume			623210
R102	50K ohms curve A carbon, Tone W/S			622801
R103	100 ohms	$\pm 10\%$	$\frac{1}{2}$ watt	
R104	3.3K ohms	$\pm 10\%$	$\frac{1}{2}$ watt	

## CAPACITORS

C1	0.1 $\mu$ F $\pm 10\%$ 100VW polyester			
C2	25 $\mu$ F +100 -10% 25VW Electrolytic			229444

CODE No.	DESCRIPTION	PART No.
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C3	50 $\mu$ F +100 -10% 25VW Electrolytic	229596
C4	200 $\mu$ F +100 -10% 18VW Electrolytic	229763
C101	0.0022 $\mu$ F $\pm 10\%$ 100VW polyester	
C102	0.033 $\mu$ F $\pm 10\%$ 100VW polyester	
C103	2000 $\mu$ F 25VW Electrolytic	229928

## TRANSISTORS & DIODES

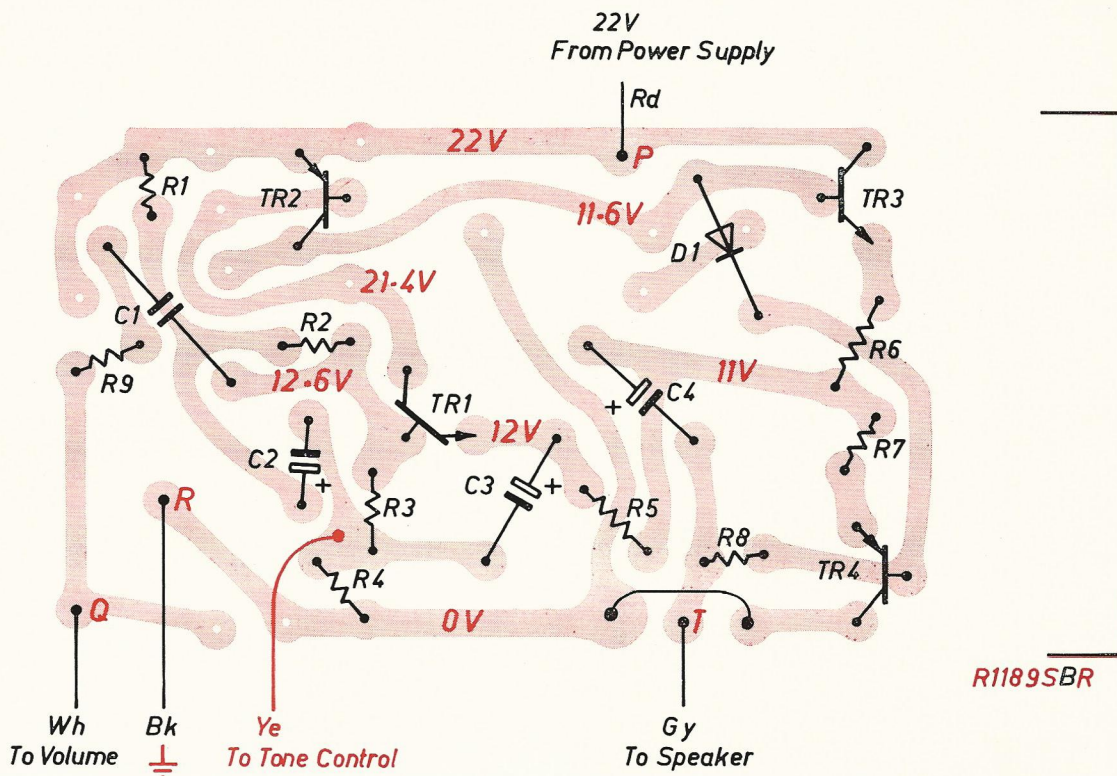
TR1	AS149	
TR2	AS157, BC157 or BC177	
TR3	AS208 (with H.S. F2 Flag)	
TR4	AS128	
D1	0A663	
D101	BY126/200	

## MISCELLANEOUS

LS101	Speaker, 6" x 4", 15 $\Omega$ V/C	52867
	Printed Board Ass'y., C/W Components	72593/101
	Printed Board Blank	72601



## PRINTED BOARD LAYOUT



NOTES: The diagram represents the view from the wiring side of the printed board.  
 Stipple indicates the printed circuit.  
 Black indicates components and leads mounted on the remote side of the board.  
 Red indicates components and leads mounted on wiring side of the board.

## MECHANICAL REPLACEMENTS

Item	Part or Code No.
Case, Cabinet, Tango Red	67682/012
G.T. Gold	67682/014
Marine Blue	67682/016
Catch Ass'y., Button, White	64853/002
Clamp, Power Cable	1221
Clamp, Speaker Cable	32818
Clip, Retaining, Tone Arm	64901
Heat Sink (AS128)	64055
Handle Assembly 64863	396340
Comprising	
Handle	64864
Hinge, Left-hand	64866
Hinge, Right-hand	64865
Insulator, Power Switch	38469
Knob, Control (2)	69575/002
Knob, Speed Selector, White	64867/001
Coupled with — Packer	74033
Lid Assembly, Tango Red	67683/018
G.T. Gold	67683/021
Marine Blue	67683/024

Item	Part or Code No.
Comprising	
Badge	64904
Fret Assembly	67685/002
Lid, Tango Red	67684/018
G.T. Gold	67684/021
Marine Blue	67684/024
Pivot	64851
Stay	64850/001
Trim, 74273	908645
Motor Board, Printed, White	67688/008
Record Player, B93	74289/001
Including	
Cartridge (Crystal)	X3M or X5M
Stylus Replacement (Respectively)	ST8 or ST12
Record Player, B93Z	74289/002
Including	
Cartridge (Ceramic)	SC5M
Stylus Replacement	ST12
Suspension System	
Comprising	
Clip, Retaining (3) SCO/1868	210982
Foot, Grey (3)	64846/001
Spring, Yellow (1) 44181	798151
Spring, Pink (2) 74272	799685