



SERVICE BULLETIN No. 1

ISSUED BY

RADIO CORPORATION PTY. LTD.

A Division of Electronic Industries Ltd.

126-130 GRANT STREET, S.C.4,

MELBOURNE.

FOREWORD

In pre-war days, we were always proud of our ability to supply all "Astor" replacement parts no matter how old or obsolete the receiver may be. With the advent of the war and the eventual change over of our plant to exclusive production of communication equipment for the Fighting Forces, we were faced with many difficulties in maintaining our stocks. Nevertheless, we have been substantially successful, and although it has been necessary to use substitutes in some instances where the original part was absolutely unobtainable, we know of no "Astor" set that has been rendered inoperative by our inability to supply the required part. Some of the major difficulties have been caused by the shortage of certain types of valves, and in this issue we deal with substitutes for the most popular types used in "Astor" sets.

We propose to publish these bulletins once a month with the hope that they will be of assistance to you in overcoming service difficulties in "Astor" receivers brought about by the war. We would also appreciate receiving any ideas that you may have in this regard so that they may be incorporated in future bulletins for the benefit of other "Astor" retailers.

Valve	Replacement	Model	Procedure
32L7GT	6V6G 6X5GT	AR	In converting this model to BR, it is necessary to substitute the present power transformer with type PT 291, also an additional valve socket must be fitted into the chassis between the present 32L7GT socket and the electrolytic condenser mounted in the corner of the chassis. The new socket is wired to take a 6X5GT valve and the 32L7GT is replaced by a 6V6G or 6F6G valve. The additional parts required are a 400 ohm bias resistor and 25 mfd. condenser to the cathode of the output valve and 50,000 ohm grid decoupling resistor on this same valve. The filaments of the rectifier and output valves are wired in parallel to the 6 volts winding of the transformer and the 12 volts winding to the 12B8GT valve.
32L7GT	5YE 6V6G	CN	It will be necessary to fit a separate power supply to this receiver, a PT 437 transformer 5Y3G valve and 8 mfd. 525V condenser fitted to a separate chassis. In place of the 32L7GT valve, a 6V6G or 6F6G valve is fitted with socket connection and bias resistor altered to 400 ohms with a 25 mfd. condenser across this resistor. The first filter condenser of the receiver is removed as this is rated at 350V, this vacant position can be used to take the bias condenser. The above power supply can be wired to the receiver with three wires, i.e., filament, high tension and a common earth wire. The dial lights and valves are wired in parallel. It is necessary to disconnect the present power transformer in the receiver but it is left in position and the necessary alterations would be small to convert the receiver back to its original circuit when 32L7GT valves are again available.
6A8	EK2GT	CG AUTO	Lack of space prevents the substitution of a G type tube and to fit the EK2GT to this model it is necessary to lower the socket $\frac{1}{4}$ in. from the chassis by inserting spacers, circuit changes are a 40,000 ohm resistor from screen to B+ and a .05 bypass condenser from screen to earth. This is to prevent oscillation.
6A8	EK2GT	AL	The only alterations will be to lower the socket as suggested for CG Auto and fit a 6A8G valve.
84	6X5GT	Auto Sets (FA DA EE HE)	Change existing 6 pin socket to octal type with correct socket connections.
oz4	6X5GT	AM-AL- AJ-AK	Only alteration is to wire filaments of 6X5GT. In the case of 12 volt receivers, it will be necessary to insert a 10 ohm 10 watt resistor in series with the lead from "A" supply to the filament pin of this valve.
43	42	OZ-PZ	Disconnect 25 volt filament winding and wire 42 valve socket in parallel with 6 volt valves.
25Z5} 25Y5}	6X5GT	OZ-PZ	Remove 6 pin socket and replace with octal type deleting 25 volt winding and wiring filaments of this socket to the 6 volt winding supplying the 6A7-6D6-6B7 valves.
47	2A5	VARIOUS	Remove 5 pin socket and replace with 6 pin socket, insert 400 ohm resistor and 25 mfd condenser on cathode of 2A5 valve. WARNING: In certain models back bias is used and in these cases it will not be necessary to fit the bias resistor and condenser but to run the cathode direct to earth.

