

MODIFICATION SHEET

PHILIPS RADIOPLAYER

MODELS 120M-L-T

NOTE: This sheet should be read in conjunction with the Service Data Sheet for Model 120.

MODEL 120M:

Model 120M is the same as Model 120, except for a change in cabinet styling, baffle and several electrical component changes. Refer to the original data sheet for all information other than that given below.

C12 deleted.

R4 deleted.

R7 changed to 50,000 ohms $\frac{1}{2}$ W carbon

Baffle assembly CR.005.254.

MODELS 120L-T:

Models 120L-T use the same cabinet as 120M, but there is a change in power transformer and gramo. unit which gives rise to changes in the voltage analysis table and several electrical components. A circuit diagram incorporating circuit changes is published overleaf.

The new power transformer has a higher voltage H.T. secondary. The new voltage analysis is given below. There were a few of the "L" version which used the old power transformer CZ.344.030.

VALVE EQUIPMENT AND VOLTAGE ANALYSIS.

Valve Function	Valve No.	Valve Type	Plate Volts	Screen Volts	Osc. P. Volts	Bias Volts	Bias Resistor	
Frequency Converter	V1	6AN7	248	84	50	-2.3	R17	
I.F. Amplifier	V2	6SK7GT	248	84	—	-2.3	R17	
Demodulator, A.V.C. and 1st Audio	V3	6SQ7GT	37	—	—	—	—	
Power Amplifier	V4	6M5	230	248	—	-6.9	R14 & 17	
Rectifier	V5	6X5GT	V5 Cathode — L10 C.T. 287V					
Dial Lamp	V11	6.3V. 0.32A. tubular screw						

NOTE: These voltages are measured with an "1,000 ohms per volt" meter and may vary $\pm 10\%$ from the quoted figures. They are measured from the socket points quoted to chassis or across the resistors listed. The receiver should be in a "no signal" condition.

The code number of the new transformer is CZ.344.049; it can be recognised by the pitched finish.

The gramo. unit used on 120L is Philips type 2978, and that used on 120T is Philips type AG2001. Separate service sheets cover these units. Associated with the use of these units are several electrical component changes. They are:—

C11 changes to 0.004 mF mica 10%

C12 deleted

C17-23 24 mF 525V electrolytic

R4 changes to 0.5 megohm $\frac{1}{2}$ W carbon

R6 changes to 100,000 ohms $\frac{1}{2}$ W carbon

R7 changes to 250,000 ohms $\frac{1}{2}$ W carbon

A subsequent modification to improve output on gramo. reproduction and to give a wider range in tone control, was made. These details are:—

C11 changed to a position in series with the pick-up

R4 deleted

R6 deleted

R7 deleted

C20 changes to 80 pF mica

C21 deleted

MAINS VOLTAGE ADJUSTMENT.

The CZ.344.049 power transformer has two primary winding tappings for adjustment of the receiver to the supply mains voltage at the point of installation. These tappings are 200/230 volts and 240/250 volts. The receiver is adjusted to the 240/250 volts tapping at the factory.

MODULATION HUM.

Tendencies to modulation hum were noticed in 120L-T. This was overcome by the inclusion of an 0.001 mF 600V paper capacitor from one side of the power mains to chassis. If this trouble is noticed in an unmodified chassis the inclusion of the modification would be worthwhile.

Published by Philips Electrical Industries Pty. Limited

Sydney - Melbourne - Brisbane - Adelaide - Perth

L	1	2		3	4	5	6	9	7, 10/12B.		13.	14.	15.	16.	L		
C	1.	2.3	4	6	11.	5.	7, 12B.	9	10	15.	16.	17.	18.	19, 20.	24.	C	
R		21.	1.	2.	4.	6.	7	3	9	5	8	10	11	12	13, 14	15, 16/7B.	R
V			1.							2.		11.	5	3		4	V

