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PHILIPS

SERVICE MANUAL

FOR RECEIVERS

Types 691 A—691 U

GENERAL REMARKS.

Reference should be made to Type 787AX receiver in connection with circuits, description, trimming, fault finding and renewing components, with the exception of the following modifications :—

GRAMOPHONE REPRODUCTION.

The voltage is fed via a potentiometer of 16,000 ohms (R61) and 80,000 ohms (R62), and connected between them is a common lead to a resistance of 0.1 megohms to the grid of L3 (see Fig. 1). The amplified A.F. voltage across R47 is applied to R12, R13, via C58.

NOTE.

The motor is connected across the 100-volt tapping of the Mains Transformer.

METHOD OF REMOVING THE CHASSIS 691U.

1. Remove safety socket from top back and unscrew converter plug panel (2 screws). Release screwed earth connections (2 screws).
2. Unsolder pick-up leads from chassis and release from clips. Unsolder earth lead from motor. Release mains leads from chassis to motor at motor end by removing turntable and unscrewing philite cover. Remove four bolts securing motor board and lift out board.
3. Remove W.C. switch ring—one screw is reached through a felt plugged hole in cabinet top. Take out four screws securing top board. (Note the extra long one back right-hand.)
4. Detach mains and contrast switches by means of the two screws through the mouldings.

5. Detach pilot lamps and TV4 holder. The latter is secured by a hexagon headed screw which can be loosened with a flat spanner.
6. Unsolder speaker leads at speaker.
7. Remove four bolts and four wood screws holding baseboard in position also one wood screw securing mono-knob bracket to baffle. By pulling out the baseboard as far as the leads permit—tilting top board through cabinet top at same time—most repairs can be effected to the drive assembly, etc. Care must be taken with leads from the speaker and bass switches. To completely remove from cabinet :—
8. Take out four bolts holding mains transformer and lift same on to chassis baseboard. (A block of wood under one side of cabinet will aid access to the nuts.)
9. Disconnect earth lead from chassis to baffle.
10. Slide baseboard out of cabinet ; bring top board with it.

REMOVING THE CHASSIS 691A.

Remove the wavechange ring.

Unscrew the mains switch and contrast switch.

Unscrew the ornamental plate over the loudspeaker and bass response switches and tilt the switch plate so that it drops through the hole.

Unscrew the four brackets holding the dial assembly. Disconnect leads from the motor and pick-up, also the speaker leads which are fed through a hole in the baseboard.

Remove the four chassis fixing bolts and the wood screw holding the Mono-knob bracket to the front of the cabinet.

Unsolder the base foil earth leads and remove the pick-up lead clips. The chassis and dial assembly can then be taken out of the cabinet.

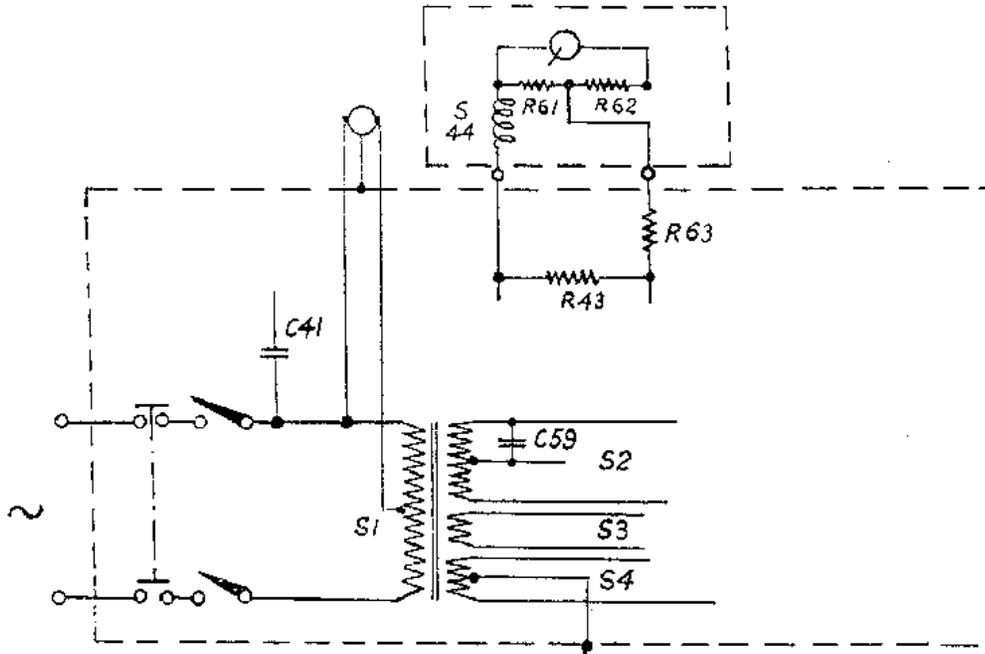
POINT TO POINT TESTS.

CAPACITIES.

$$11 \frac{27}{260} \text{ should be } 9 \frac{27}{355}$$

TYPE 691A.

Modification for 691A from 787AX.



Motor connected to 110 v. tapping.

Fig. 1.

TYPE 691U.

Modification for 691U from 691A.

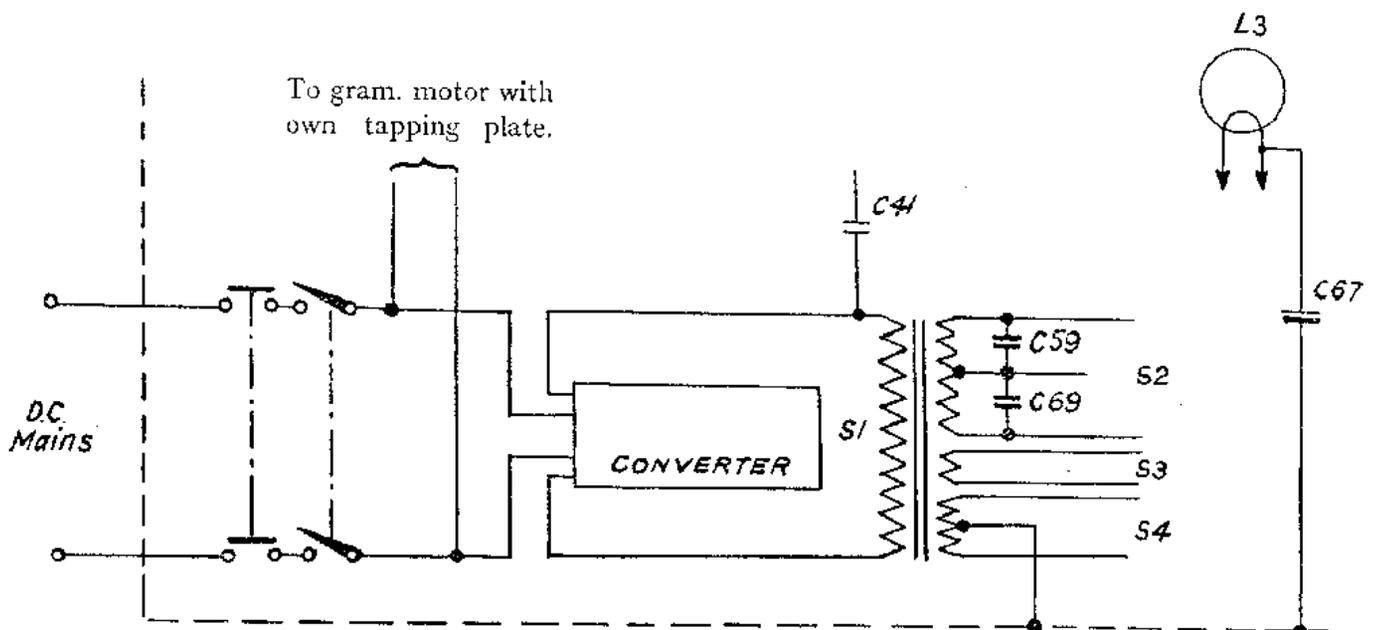
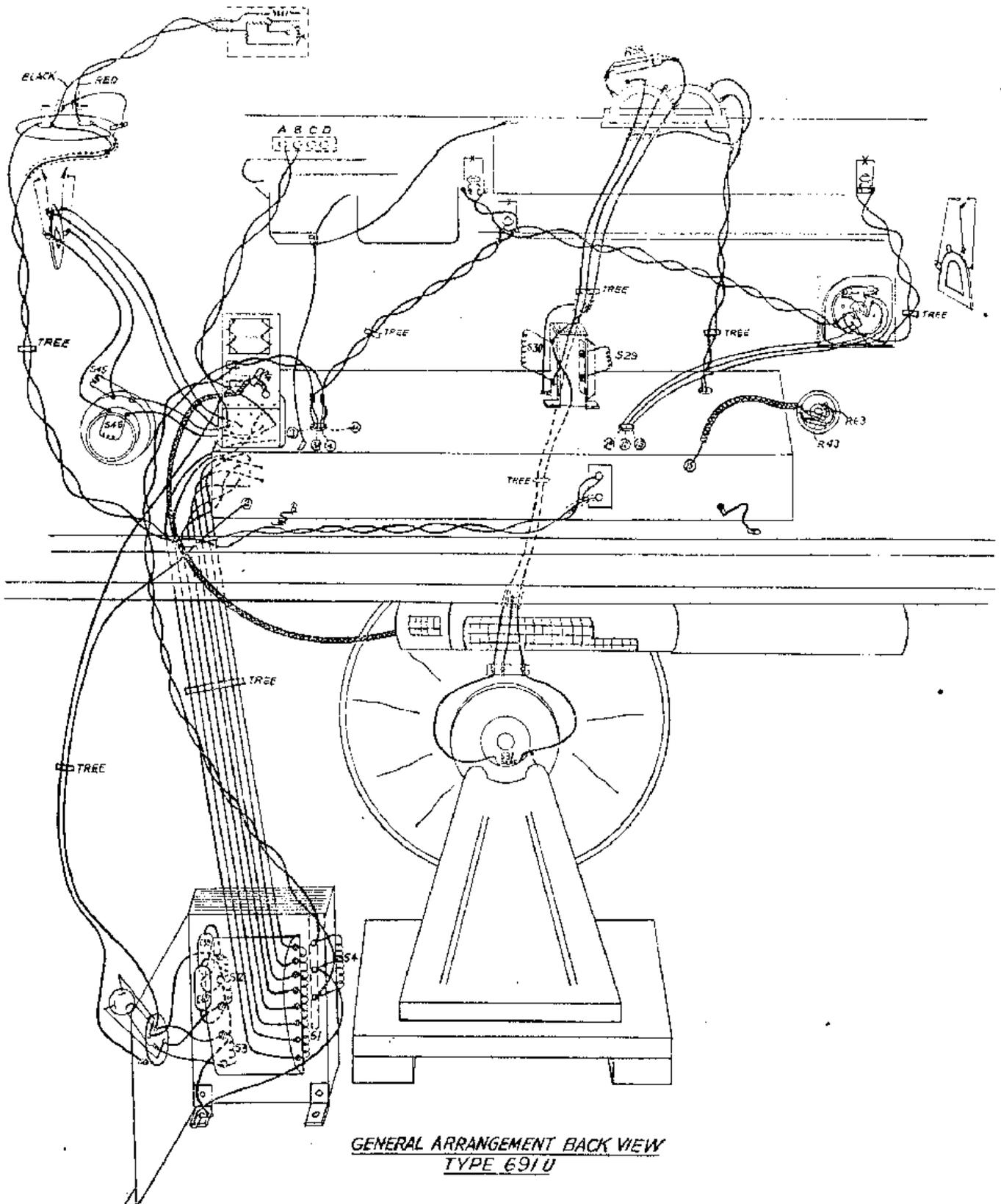


Fig. 2.

Note.—Mains filter coils are inserted in mains leads.



GENERAL ARRANGEMENT BACK VIEW
TYPE 691U

Fig. 3.