



# PHILIPS

## SERVICE NOTES

### RADIO PHONOGRAPH CM70AF & CM70A6F

The model CM70AF is identical to the CM70A radio phonograph combination with the exception of the speaker and the record changer. It is designed for 115 volts, 25 cycles operation only.

The model CM70A6F is identical to the CM70A radio phonograph combination with the exception of the speaker, the record changer and the power transformer, which is equipped with a voltage adjustment plug. It is designed for 115 volts, 60 cycle operation only.

The speaker is a Philips ten inch permanent magnet dynamic type with a D.C. voice coil resistance of 5 ohms. The record changer unit is a Farnsworth Type P54 with a Webster N7 or an Astatic L71S Crystal Pickup Cartridge.

Refer to the CM70A Service Notes for specifications, alignment instructions, schematic diagram, replacement parts, etc., for data on all items other than the parts listed above.

Voltage Adjustment Plug of Model CM70A6F - (60 cycle version only). The voltage to which the receiver is set is indicated by the voltage adjustment plug which is located on the power transformer. The receiver is shipped with the plug set at 125 volts. The receiver should be operated at this setting, when the line voltage is higher than average.

WARNING: Always disconnect supply cord before changing the voltage adjustment plug.

When the receiver has been adjusted to correspond with the average requirements of a local power line it should be left at that adjustment. The line voltage indicator disc on the back cover should always indicate the line voltage to which the receiver is adjusted.

Details of the internal wiring of the primary of the power transformer, covering the voltage adjustment plug connections, are not shown on the CM70A schematic diagram.

#### REPLACEMENT PARTS

All standard CM70A replacement parts may be ordered for service, with the exception of the speaker and the record changer unit. The replacement power transformer is the standard CM70A type, with a rating of 115 volts, 25 to 60 cycles, (without voltage adjustment plug). The power plug for the phonograph has four contacts, instead of the two contacts shown on the schematic.

All new parts should be wired according to the CM70A circuit diagram, with the exception of the speaker. The 5 ohm (D.C. Resistance) speaker connects to the black and yellow leads of the output transformer winding I24, and not to the black and green leads as shown on the schematic diagram.

The replacement parts for the receiver differing from those listed in the CM70A parts list are as follows:-

Speaker, 10" P.M., D.C. Res. of V.C. = 5 ohms.	041-024
Phonograph Record Changer, 25 cycle	090-047
Phonograph Record Changer, 60 cycle	090-043
Crystal Pickup Cartridge L71S	090-045
Cabinet Record Changer Panel	353-022
Phonograph Motor only, 25 cycle	090-048
Phonograph Motor only, 60 cycle	090-046