

HMV 15

Electrical reproducer incorporating a 20-record (10- and 12-in. intermixed) record changer, with remote control pedestal for switching on or off and changing records. The output from a radio receiver may be plugged into the amplifier and extra loudspeakers may be connected to the output. For operation from AC mains supply, 40-60 cycles, 100-120 v, or 200-240 v. Marketed in 1930 by The Gramophone Co., Ltd., Hayes, Middlesex.

THE amplifier and loudspeaker incorporated in this instrument are similar to those employed in the HMV Model 551, reviewed in this issue. The motor is Type 82, which operates on 40 volts

through a dropping resistance in series with the mains supply. The resistance is one of three mounted on the floor of the cabinet and is labelled "Motor." It is adjusted by means of a slider contact running along a volt calibrated slider bar.

The mechanism in the Model 15 is of heavy construction, and to give the motor more power to effect a cycle of record changing, a booster switch is operated by the mechanism which allows a further 20 v to be applied to the motor during the record-changing cycle.

This is effected by means of an additional "booster" resistance adjacent to and in series with the motor resistance on the floor of the cabinet and is adjustable by means of a sliding contact.

The "booster" resistance also supplies current to the remote control relay which operates the trip lever of the mechanism when the press-button on the remote control pedestal is pressed. The "booster" resistance is shorted out by the switch to give the extra voltage to the motor.

In some models a pilot lamp is mounted on the motor board to facilitate the loading of the records on to the unused record platform and this pilot lamp is fed from the mains through a lamp resistance. A switch in the lid stay switches the lamp on directly the lid of the cabinet is raised.

The three resistances have the following values :-

Booster and relay resistance . . . 400 ohms
 Motor resistance 200 ohms
 Lamp resistance 2,500 ohms

The muting switch on the mechanism is in the Model 15 connected in series with the output wiring of the amplifier to the speech coil of the loudspeaker and opens the circuit during a period of record changing.

The jack for the radio input is mounted on the side of the instrument adjacent to the mains on-off switch, but the jack may remain in position if desired, as a radiogram change-over switch is mounted on the front control panel adjacent to the volume control.

HMV 12

An electrical reproducer incorporating a 12-record (10- or 12-in. intermixed) auto-mechanism.

THE amplifier employed in this instrument and the energised loudspeaker with its pot rectifier unit are identical with the equipment described in the review covering the HMV Model 551 in this issue. The main difference with regard to the external wiring to the amplifier is that there is a pickup muting switch on the underside of the mechanism which silences the pickup circuit directly the arm commences to move during the course of record changing. A separate on-off switch is used to control the mains input to the whole instrument.

The motor circuit incorporates a hand

switch which is operated by the mechanism when a programme of records is to be played, or may be operated by hand when it is desired to play single records.

A Type 82 motor is employed in the mechanism and is of the commutator universal type operating at 40 volts. A voltage dropping resistance is connected in series with the mains supply to the motor and may be adjusted by means of a slider which moves along a calibrated bar. The slider should be adjusted along the bar until the arrow on the moving contact is opposite the figures corresponding to the supply voltage.

If the motor is sluggish in operation and is itself apparently OK, the voltage across the motor input should be measured on load and the resistance adjusted to give a full 40 volts irrespective of the calibration.

The motor resistance will be found under the bottom of the cabinet.

The mains voltage adjustment of the amplifier and pot rectifier unit is as given in the review for the Model 551.

