INSTRUCTIONS

Meccano Transformer, Type T20

Output: 20 VA at 20 Volts

The Transformer provides an economical and perfectly safe means of running a Meccano 20-volt Motor or a Hornby 20-volt Electric Train. It transforms the high voltage of the electric light supply to the requisite low voltage. The Transformer can be used in connection with any apparatus requiring an alternating current supply of 1 ampere at 20 volts. The running cost averages one penny for five hours.

Transformers work only on alternating current (A.C.). It is important to remember that a Transformer must not be connected to direct or continuous current (D.C.). To ascertain the nature of the supply, refer to the label on the electric light meter. The Transformer must be suitable for the voltage and frequency (~) of the supply. These particulars are given on the meter, and they should be checked before the Transformer is connected to the supply. If there is any doubt on any point, reference should be made to the supply authority.

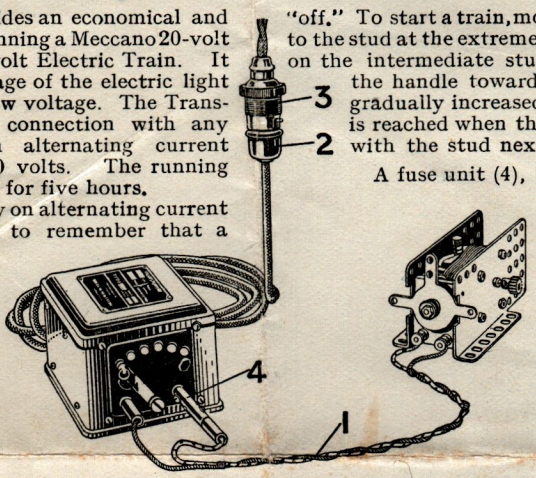

Fig. A

Fig. A shows how the Transformer is connected for driving a Meccano 20-volt Motor. The connection is made by means of the flexible connection (1) supplied with the Transformer. For this purpose the sockets of the flexible connection are removed, and the bare ends of the wire inserted in the terminals of the motor. The adaptor (2) is fitted into the lamp-holder (3).

Fig. B shows the Transformer connected to rails for driving a 20-volt Hornby Train.

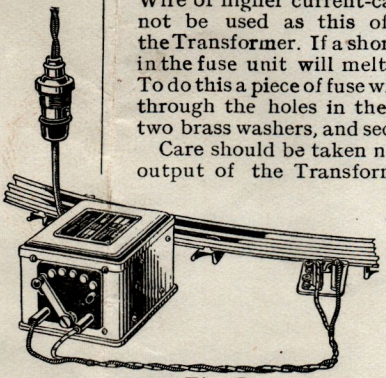

Fig. B

A speed regulator is incorporated with the Transformer. When the handle is at the left as shown, the current to the motor or train is "off." To start a train, move the regulator handle to the stud at the extreme right, without pausing on the intermediate studs Then, by moving the handle towards the left, the speed is gradually increased until maximum speed is reached when the handle is in contact with the stud next to the "off" stud.

A fuse unit (4), Fig. A, is supplied with the Transformer. This device consists of a holder fitted with a piece of soft wire that melts at a low temperature, and thus prevents damage to the Transformer resulting from short circuit. The unit can be plugged into any one of the sockets to protect that particular circuit. As supplied, it is fitted with a piece of No. 32 S.W.G. Lead Wire. A supply of this wire may be purchased from any Meccano dealer. Wire of higher current-carrying capacity should not be used as this offers no protection to the Transformer. If a short circuit occurs the wire in the fuse unit will melt, and must be replaced. To do this a piece of fuse wire 1¾" in length is passed through the holes in the holder and under the two brass washers, and secured by the two screws.

Care should be taken not to exceed the rated output of the Transformer, as continuous overloading causes damage to the windings.

As an extra safety precaution, it is advisable to connect the case of the Transformer to earth. This course is recommended where the Transformer is to be used on a concrete floor or near earthed metal objects. To facilitate this connection, an earthing screw is provided where the flex enters the Transformer.

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