

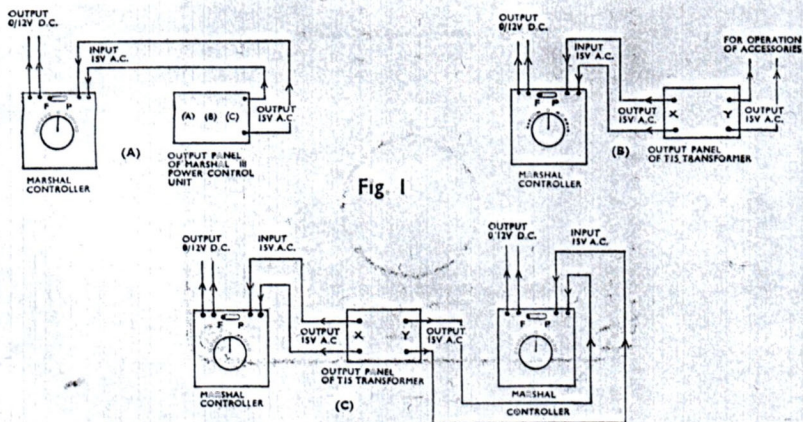
INSTRUCTIONS

for

HORNBY (MARSHAL) CONTROLLER

MADE BY MECCANO LTD.

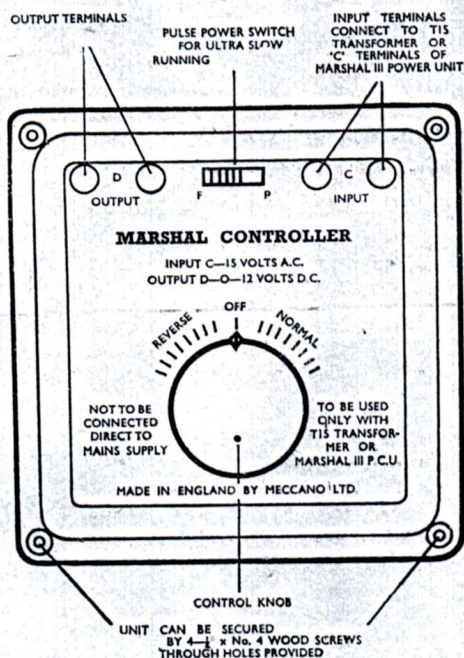
The Hornby (Marshal) Controller is a step-resistance, rectifier-controller for use with a 15 V A.C. input. It is intended for use with output 'C' (15 V A.C. fixed output) of the Hornby (Marshal) III Power Control Unit or with either output of the T15 Transformer, see Fig. 1.



In Fig. 1(a) the Hornby (Marshal) Controller is shown as used with the Hornby (Marshal) III Power Control Unit. Output 'C' of the Hornby (Marshal) III Power Control Unit gives a fixed 15 volts A.C., which can be fed into the input of the Hornby (Marshal) Controller. The Hornby (Marshal) Controller will in turn, rectify the input, and provide through the stepped resistance, an output of 0 to 12 volts D.C., for running a tractive type mechanism. If, therefore, a Hornby (Marshal) Controller is used in conjunction with a Hornby (Marshal) III Power Control Unit, as shown in Fig. 1(a), two such tractive type mechanisms may be controlled independently of each other.

If the Hornby (Marshal) Controller is used with the T15 Transformer, as in Fig. 1(b), the 15 volt output that is fed into the Hornby (Marshal) Controller, from the T15, will be rectified and controlled in the manner already described. This will leave the other output free for the operation of accessories. If so desired, two Controllers may be used with the T15 Transformer, see Fig. 1(c), making it possible to operate two tractive type mechanisms simultaneously.

THE HORNBY (MARSHAL) CONTROLLER MUST, NOT AT ANY TIME BE CONNECTED TO THE MAINS SUPPLY. IT IS EXCEEDINGLY DANGEROUS TO DO THIS AS THE UNIT IS DESIGNED FOR AN INPUT OF 15 VOLTS A.C. ONLY



The Hornby (Marshal) Controller is fitted, as is the Hornby (Marshal) III Power Control Unit, with a Pulse Power Switch. If this switch is moved from 'F' to 'P', ultra-slow running conditions are obtained. This can be done no matter what the setting of the control knob is.

This Controller affords eight speed control positions in either 'NORMAL' or 'REVERSE' for the purpose of controlling the above mentioned tractive type mechanisms. It is matched for use with the Hornby (Marshal) III Power Control Unit and is therefore an ideal auxiliary.