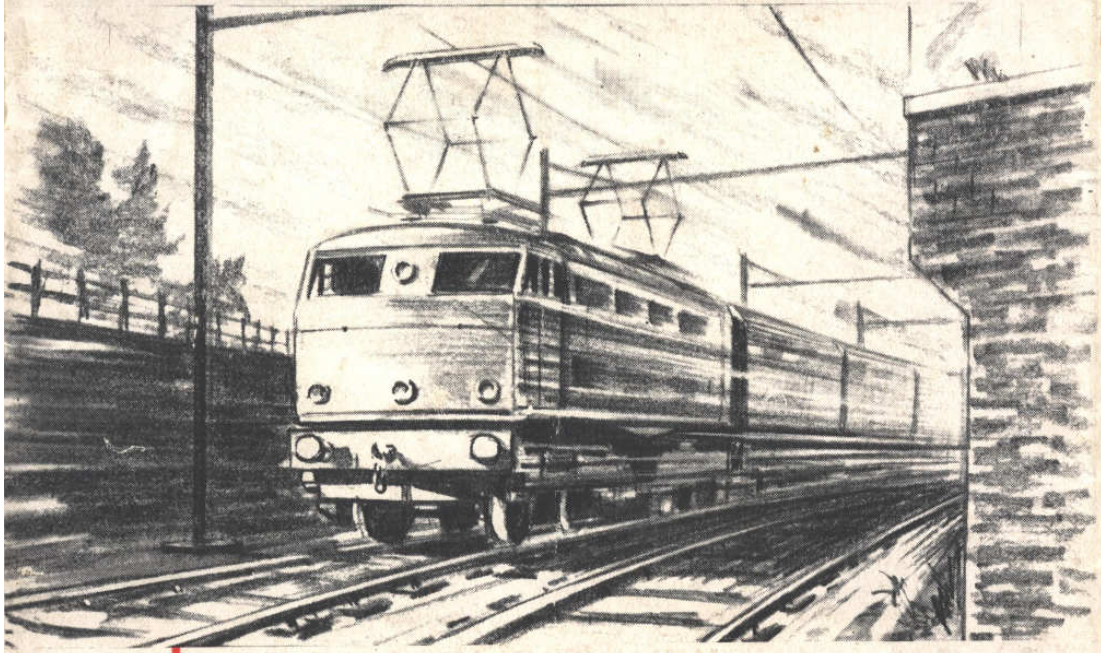
TRIX



INSTRUCTIONS

For fully detailed scale model

ELECTRIC LOCOMOTIVE
BO-BO E·M·I CLASS (CAT. NO. F105)
AND OVERHEAD CATENARY SYSTEM

12 VOLT DIRECT CURRENT 'O.O.' GAUGE

TRIX TWIN RAILWAYS NORTHAMPTON

MADE IN ENGLAND

1

OPERATION

First study the photographs and diagrams carefully.

On this locomotive current can be picked up by the shoes which are in contact with the rails or by the pantograph which obtains its current from the overhead wire. To avoid short circuits and the possibility of two trains working from one controller, study Figure 4 carefully before operating the locomotive. These illustrations in diagramatic form show the various positions of the pick-up shoes and roof plug for use on different types of layout systems. (See Sections 2 and 3 below.)

2

TRIX TWIN RAILWAY SYSTEM

Operating the E.M.I. locomotive from the overhead catenary as well as two locomotives from the track.

(i) Connect the overhead terminal post and track to the power supply as shown in Figure 5.

(ii) Arrange the shoes and roof plug as shown in Figure 4 D. If in this position the locomotive does not run in the direction as indicated on the controller (forward or reverse) you may either turn the locomotive round or change the position of the shoes and roof plug to that shown in Figure 4 E. This is the only difference between 4 D and 4 E.

Operating the locomotive from the track on layouts not equipped with the overhead catenary.

Arrange the position of shoes and roof plugs as shown in Figure 4 A or 4 B according to which outside rail is being used. Without the overhead catenary it is only possible to run two locomotives (of any type) on the track at the same time.

3

SYSTEMS OTHER THAN TRIX

(i) Figure 4 F shows the arrangement of shoes and roof plug for operating the locomotive on 2-rail track layouts equipped with an overhead system.

(ii) For 2-rail layouts not so equipped, arrange roof plug and shoes as shown in Figure 4 C.

(iii) For 3-rail systems equipped with an overhead catenary see Figure 4 D or 4 E and for those layouts not so equipped see Figure 4 A or 4 B.

4

LOCOMOTIVE

Changing and replacing collector shoes.

Take out screws A (Figure 2) and detach retainers to remove shoes. Refitting is done in the reverse order, making sure that the spring is pressing on the shoe and that it is located correctly in the retainer.

Note.—When one set of shoes is removed, replace shoe retainer and screw to avoid losing these parts.

5

OILING

Remove body shell from chassis by taking out screw B (Figure 2) and lifting off shell, taking care not to damage the wire leads. Use only T.T.R. oil which is obtainable from any T.T.R. Dealer. Oil at points shown in Figures 2 and 3. **Use oil sparingly.**

6

TO REPLACE HEADLAMP BULBS

Remove body shell. Take out screws C (Figure 3) and detach bulb holder assembly. Slide out the bulb and bulb holder from the clip, remove bulb, fit new bulb and re-assemble in the reverse order, making sure that the lighted part of the bulb is level with the headlamp lens.

LOCOMOTIVE

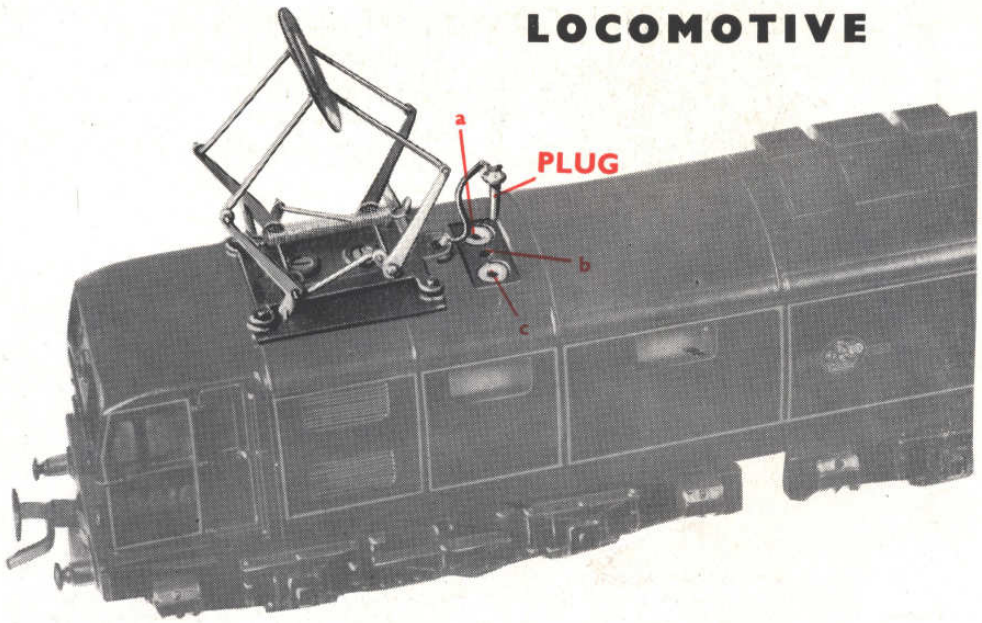


Fig. 1 View of Locomotive showing Pantograph and Roof Plug.

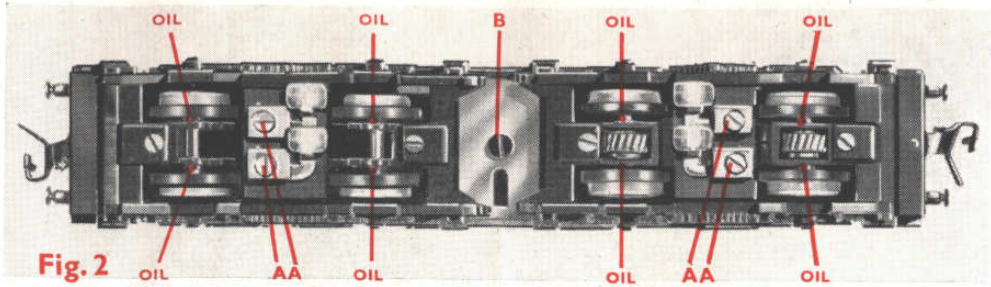


Fig. 2

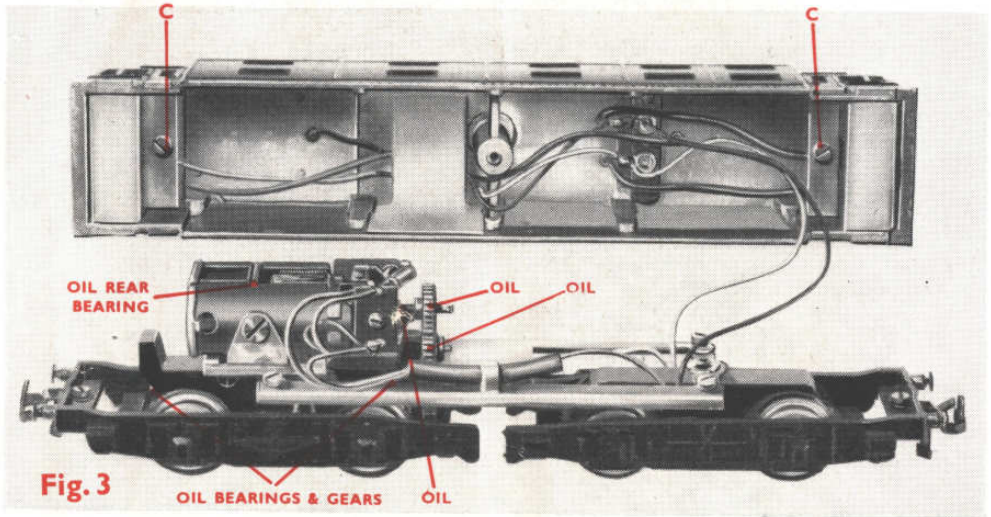
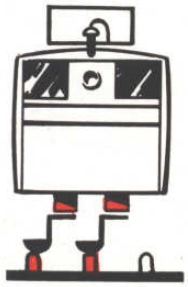


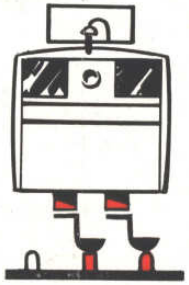
Fig. 3

DIAGRAMS SHOWING THE VARIOUS POSITIONS OF THE PICK-UP SHOES AND ROOF PLUG



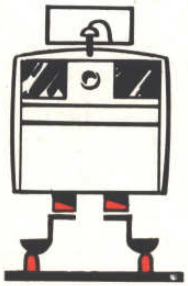
Roof Plug in Socket 'b'

Fig. 4 A



Roof Plug in Socket 'b'

Fig. 4 B

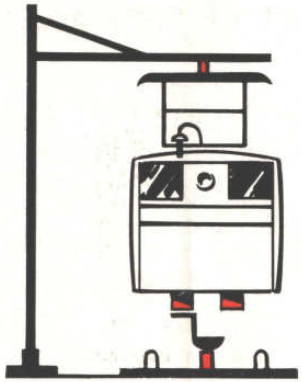


Roof Plug in Socket 'b'

Fig. 4 C

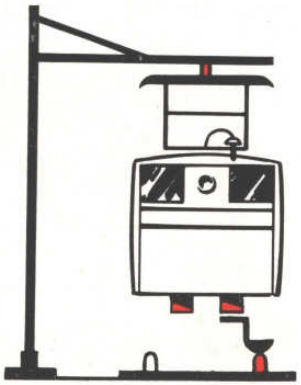
Roof Plug in Socket 'c'
Remove shoes as shown

Fig. 4 D



Roof Plug in Socket 'a'
Remove shoes as shown

Fig. 4 E



Roof Plug in Socket 'c'
Remove shoes as shown

Fig. 4 F

INSTRUCTIONS

Please read instructions carefully before operating your locomotive.

This is a scale model locomotive and a masterpiece of small scale engineering ; it is precision made by craftsmen with a background of over forty years in model train manufacture. Remember, that when new, the various parts will need to run in, therefore do not expect the locomotive to draw full loads at once ; always gently increase and decrease speed by careful use of the controller.

Never push the locomotive along the track by hand.

SERVICE

If, after a long period of use, it seems advisable to have your locomotive overhauled, it should be sent, very carefully packed, to :—

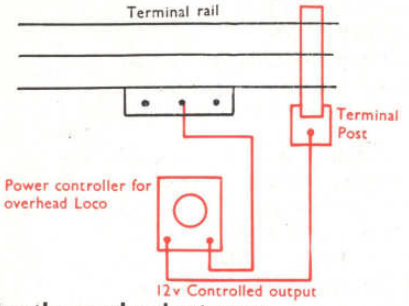
TRIX SERVICE DEPT.,
STIMPSON AVENUE, NORTHAMPTON.

The Bo-Bo E.M.1. loco is designed to operate from the overhead catenary by means of the operating pantographs on the roof. It will also operate from the track on layouts not equipped with the overhead catenary system. By arranging the position of the shoes and roof plug the locomotive will run on 2-rail or 3-rail layout systems with or without the overhead catenary. To lower the pantographs, when not in use, gently press them down with the forefinger until they lock into position. To raise them, gently pull upwards.

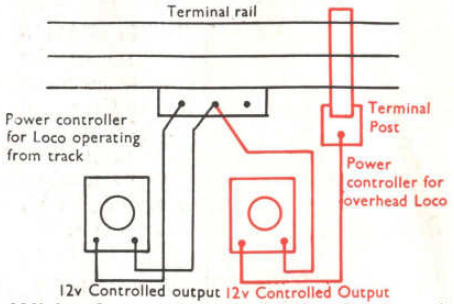
On TRIX layouts it is now possible to run three trains under individual control (see Section 2). The centre rail forms the common return for the three circuits and the catenary must only be wired as shown. On other makes of 2-rail and 3-rail layouts, WIRE ONLY as shown in Figure 6.

WIRING — Trix Twin Railway Layouts

Connect your power supply to the track and terminal post as shown below. Note that the centre rail is the common return for all circuits.



Wiring the overhead catenary



Wiring for one Loco operating from track and one from overhead catenary

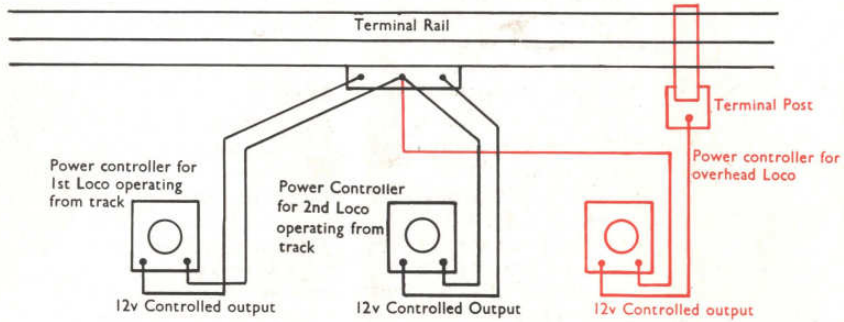


Fig. 5 **Wiring for three trains**

Systems other than Trix

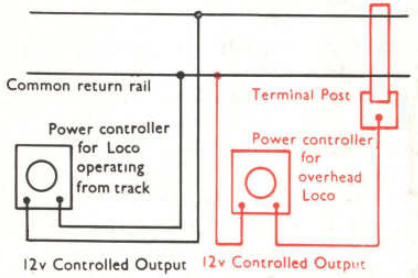
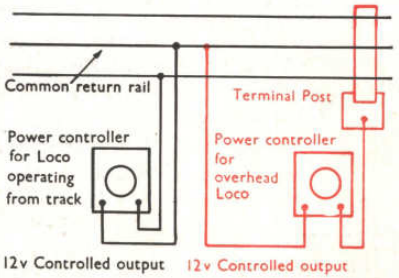


Fig. 6 **Wiring catenary to two rail layouts**



Wiring catenary to three rail layouts

P.T.O. FOR OVERHEAD CATENARY DETAILS

OVERHEAD POWER SYSTEM

With the TRIX system it is possible to build a complete model railway with overhead power supply and run three trains under separate control over all sections of the layout. Posts are based on the British Railways design of single H section girders, and using the extension girder section (Part No. B.8.) two parallel tracks can be spanned to carry both sets of overhead conductor wires. This not only makes a neat appearance but accords with real railway practice.

The overhead power equipment consists of the following parts :—

B.5. Post with base and overhead wire clip.
B.9. Terminal Post.
B.6. Catenary (overhead wire) 14″ long.
B.8. Extension girder for double track.
B.7. Wire clip.
B.10. Track clip.

ASSEMBLY

On permanent layouts, posts can be pinned to the baseboard at a distance of 1.6 ins. from the centre rail as shown in Figure 7 and spaced approximately 12 ins. apart. Alternatively, the posts can be fixed to the rail base by using the Track Clip (Part No. B.10.) as shown in Figure 11. Always attach metal base to rail clear of the metal tags which hold the rails to the rail base. The posts should be spaced approximately 1½ rail lengths apart.

Fix catenary wires to posts as shown in Figure 10. On curved sections of the track the wire should be curved by hand to match the radius of the centre rail before attaching to the posts. Where tracks run parallel to each other, posts should be put on either side and joined together with Extension Girders (Part No. B.8.) to form one double post as shown in Figure 13.

The arrangement of the posts and catenary wire at points and crossovers is shown in Figures 12 and 13.
The wire for the crossover should be cut and bent to conform with the centre rail curve before fitting.
For diamond crossings see Figure 8.

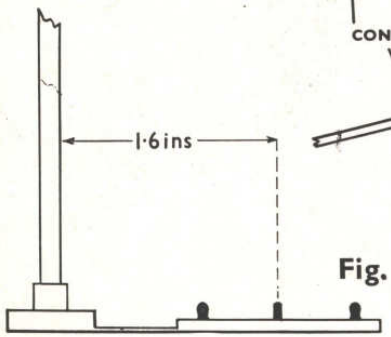


Fig. 7

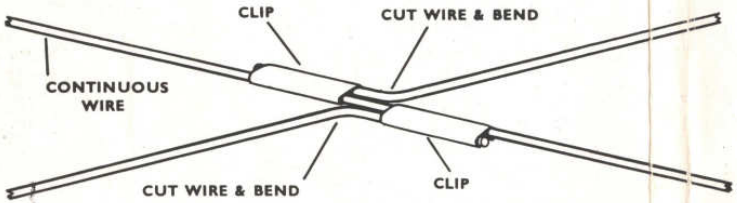


Fig. 8

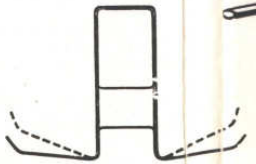


Fig. 9

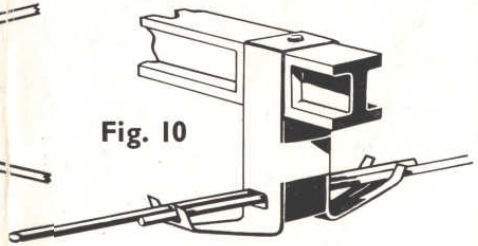


Fig. 10

Thread wires through clip. If too slack bend spring slightly to give more grip (see Fig. 9).

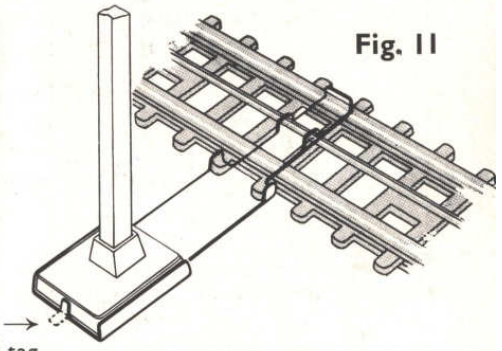


Fig. 11

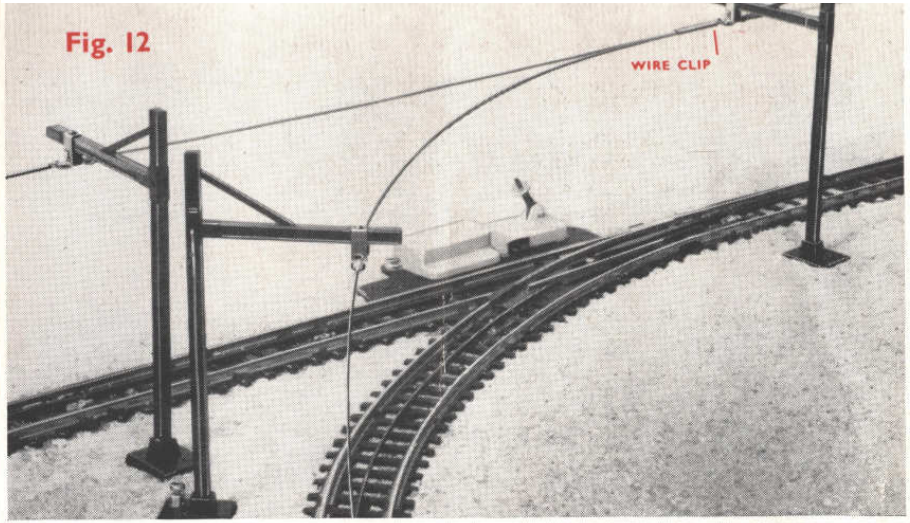


Fig. 12

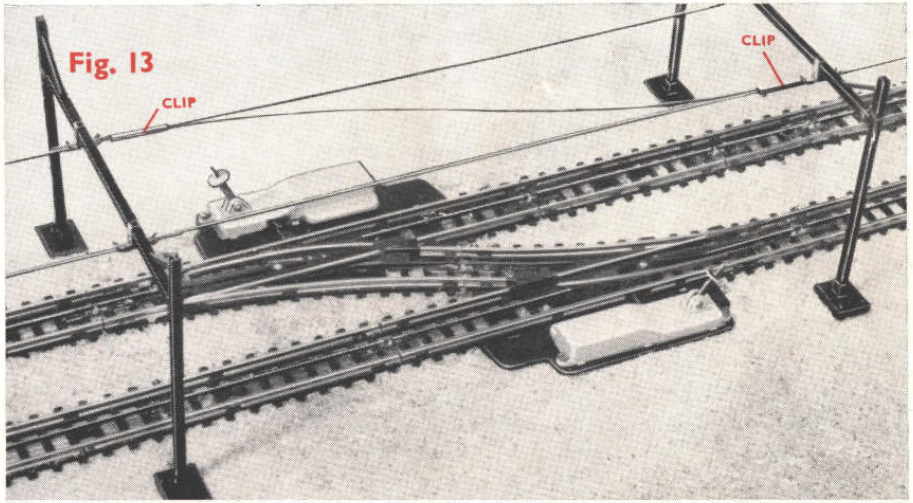


Fig. 13

IL1042 Printed in England, Hoare & Cole Ltd., Northampton 191/10m/59