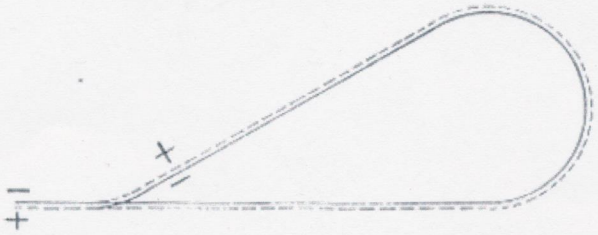
INSTRUCTIONS FOR No. 695 REVERSE LOOP RELAY

There are several methods of reversing the direction of travel of a train. This can be done by building a turntable, or be making a reverse loop into the track. The latter method is the simplest and with the new No. 695 Reverse Loop Relay, it becomes quite foolproof.

The reverse loop causes difficulties in the track when the problems encountered are not clear to the individual wiring the layout and he invariably winds up with a short circuit and does not know why.

The following diagram shows a simple type of reverse loop or "turning track" and shows why the short circuit exists.



At the start you will see the two rails are marked Positive and Negative (-). If you follow them around the loop, you will note that the positive rail becomes the negative where it leads into the switch, and vice versa. This causes a bucking of the polarity and results in a short circuit.

FINDING THE REVERSE LOOP:

When you have a simple track layout, you may have no difficulty in locating the source of trouble caused by a wye-reverse loop or turning track, but sometimes in a large layout they are difficult to spot. Therefore, if you lay the track plan out on a paper and use two different colored pencils to draw the two rails, then whenever you get a clashing of color, you know this is the switch which will cause trouble.

USING THE REVERSE LOOP RELAY:

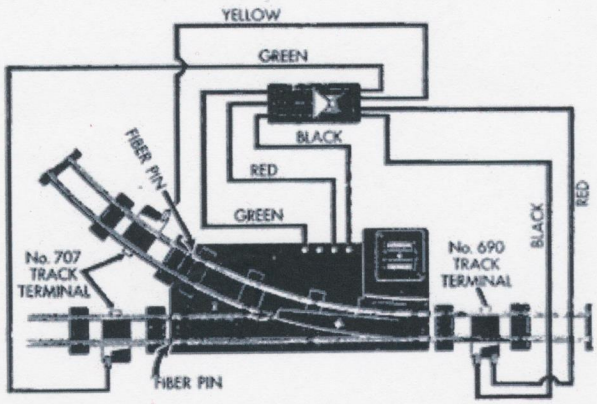
When the reverse loop relay is hooked into a switch which gives this polarity condition, it automatically changes the polarity of the rails and allows the train to follow on through the switch with no shorting or any interruption. There are no additional double pole - double throw switches to throw as was formerly the case.

WIRING THE REVERSE LOOP RELAY: -- see diagram on next page

First remove the two steel pins and replace with fibre pins as marked. Next place the two No. 707 and one No. 690 track terminals on the track as shown. Now connect the three wires protruding from the one end of the relay to the corresponding color terminals on the switch -- (Red to Red) -- (Green to Green) -- (Black to Black).

329

WIRING THE REVERSE LOOP RELAY:



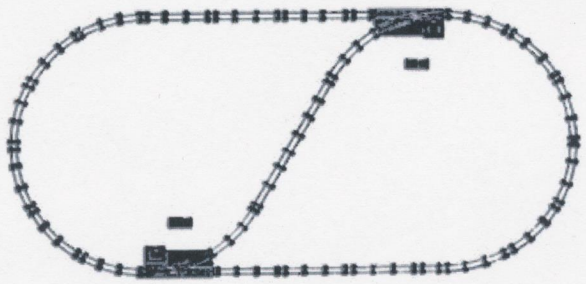
Then connect the 4 wires from the other end of the relay as shown.

The BLACK wire to the rail with the base post current, and the red wire to the rail with the 7-15 volt current.

Now fasten the YELLOW and GREEN wires to the No. 707 track terminals so they are connected to the two outer rails which have been insulated by fibre pins.

NOTE: Be sure the small button at the front of the switch is set for "two train operation."

Hook up for right and left hand switches are identical.
When more than one reverse loop or turning track is incorporated in a layout, a separate relay should be used for each switch. See diagram below. The relay should not be used on Direct Current (DC) and should not be mounted in an upside down position.



330