

2 plugs and blue/yellow button controller



Hello TinMan here with another new item which again we need thank Sam G for his suggestions as to how we need to improve our original design. His concern was he did not care for the center "action control and wanted each switch control to work totally independent of the other control. Well ask and you shall receive! For those who are familiar with our original switch control, you will notice several differences. And here they are:

- The two toggle switches are no longer toggle switches. They are double pole double throw center off switches momentary. What that means is the switches are normally in the center straight up and down position. To change the switch position, you need only push up or down on the switch, and the switch will change automatically. Basically, the same way Lionel's flip lever switch controller worked.
- The center blue button has been changed to an on/off toggle switch (push it once and it turns on and an LED in the switch lights up, push it again and it turns it off. This switch can be used for anything you would like to turn on or off remotely. For example, to power on a dead end spur track, or a trolley or another train loop altogether.
- There is an additional wire in the cable that goes to the transformer. This new wire is where you connect to the transformer where you want to where you want the large green wire to control power to anything you like.
- This new switch, unlike our "spur control switch", can operate totally independently of where your switches are.
- There is an extra wire at the output of the control which goes to wherever you want to connect something else.
- The cable to the controller and the extra output wires are much heavier than the original ones. This is in case you wanted to run something that has a significant power draw, like a 2nd train loop.

This new controller will work with virtually any manufacturer's switches that have lights on the remote control indicating which way the switch is turned. If you are concerned about a different model switch, give us a call.

The large LED's that indicate switch position, are our usual very bright models with additional circuitry added to insure several lifetimes of use, without burning out, while using less than 1/100th the power of a normal incandescent bulb.

As with our original design, this controller also has 2 additional leads which provide optional power taps to keep those trains running even when they are quite some distance from the transformer.

The 2 plugs shown connect into the sides of the O22/O72 switches that originally were supplied with what were called "bootstrap plugs.

WIRING DIRECTIONS FOR YOUR NEW SWITCH

THE 3' CABLE: THE RED WIRE SHOULD BE WIRED TO ACCESSORY POWER TO POWER THE SWITCH. THE BLACK WIRE SHOULD BE TIED INTO YOUR TRACK POWER THAT SUPPLIES THE POWER TO THE CENTER RAIL IN THE LOOP YOUR SWITCH IS INSTALLED IN. THE YELLOW WIRE SHOULD BE WIRED TO ANY ONE OF THE "COMMON" CONNECTORS ON YOUR TRANSFORMER. THE BLUE WIRE GOES TO POWER THE CENTER SWITCH FOR WHATEVER PURPOSE YOU LIKE.

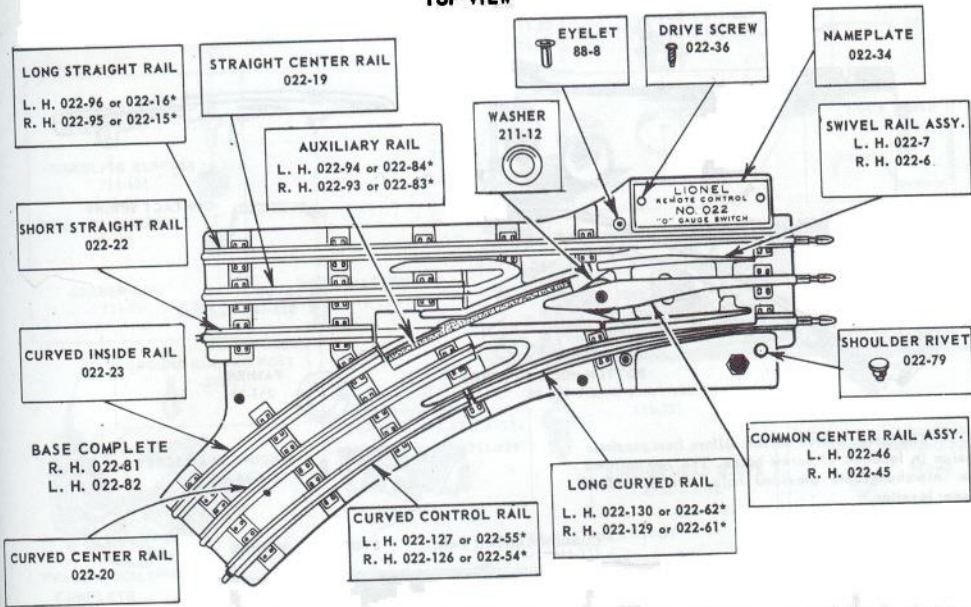
THE 8' LONG CABLE: THE RED WIRE GOES TO THE RED WIRE ON THE BOOTSTRAP, THE BLACK WIRE TO THE BLACK WIRE ON THE BOOTSTRAP. THE BLUE WIRE GOES TO THE LEFT OUTSIDE SCREW TERMINAL ON THE SWITCH, THE YELLOW TO THE RIGHT HAND SCREW. NOTHING TO THE CENTER TERMINAL. NOTE: IF THE SWITCH WORKS BACKWARDS, IE RED SHOULD BE GREEN ETC. SWAP THE YELLOW & BLUE



THE LONG GREEN WIRE GOES TO WHATEVER YOU WANT THE ABILITY TO TURN THE POWER ON OR OFF TO. THIS CAN BE TOTALLY INDEPENDENT OF ANY OF THE SWITCH WIRING.

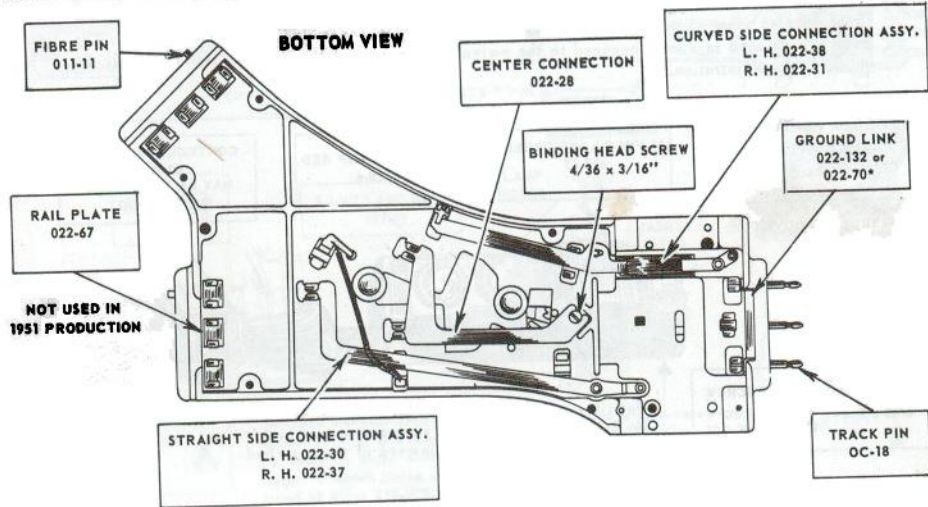
A tip for you regarding crimping on the spade connectors. The wires are pretty thin and are not structurally strong enough to take a normal crimp. What we do here is strip the insulation off about 3/8" worth or so, then we fold the wires over the insulation on the wire. Then we put the spade connector over both the wire and the insulation and crimp it. By doing this the crimping force is now on the vinyl insulation as well as the wire, much stronger.

TOP VIEW



Illustrations on this page show the top and bottom views of the left-hand switch base. The companion right-hand switch base is its mirror image except for the location of the steel track pins and the section which makes contact with the switch motor. In 1950 a number of changes were made to facilitate production. However, the old parts, marked by asterisks, may be used interchangeably with the new parts except as noted.

BOTTOM VIEW



CONTACT@TINMAN3RAILCOM. OR 262-914-0057

**WHEN YOU HAVE TIME, CHECK OUT OUR WEB SITE. LOTS OF COOL STUFF THERE,
ALONG WITH SOME TIPS AND TRICKS THAT MAY BE USEFUL TO YOU.**

**ENJOY YOUR PURCHASE AND REMEMBER EVERYTHING WE SELL HAS A MINIMUM OF
A 2 YEAR WARRANTY.**