



# Switch Commander

## Installation Manual



July 20, 2015

# Switch Commander

## Overview

The Switch Commander is designed to allow TMCC Command Control operation of Lionel remote control Fastrack™ switches.

## Included in Kit:

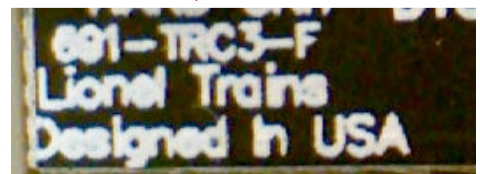
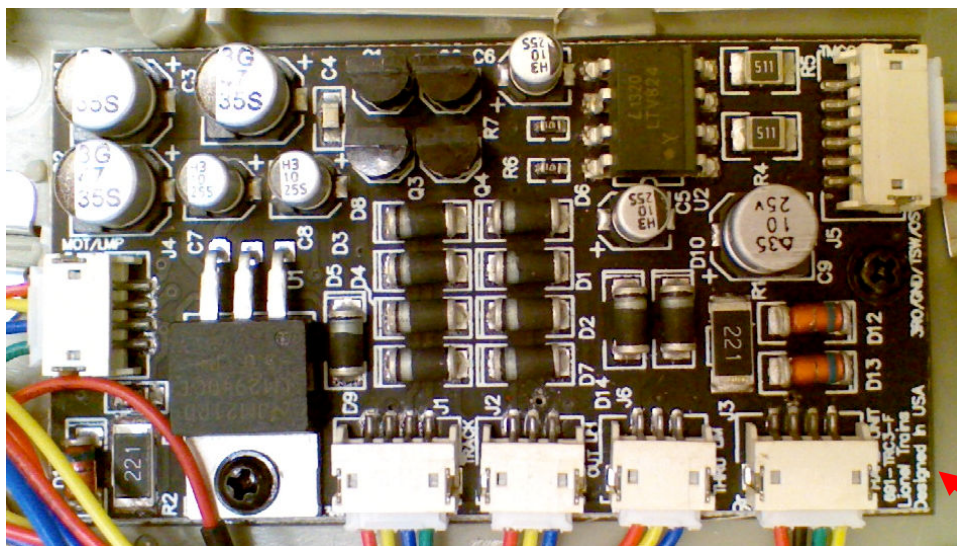
- Switch Commander PCB
- Double-stick tape
- Wiring harness with program/run push-button
- Shrink Tube

## Tools Required:

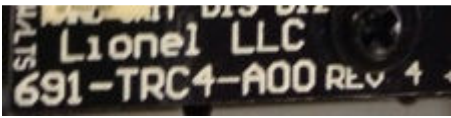
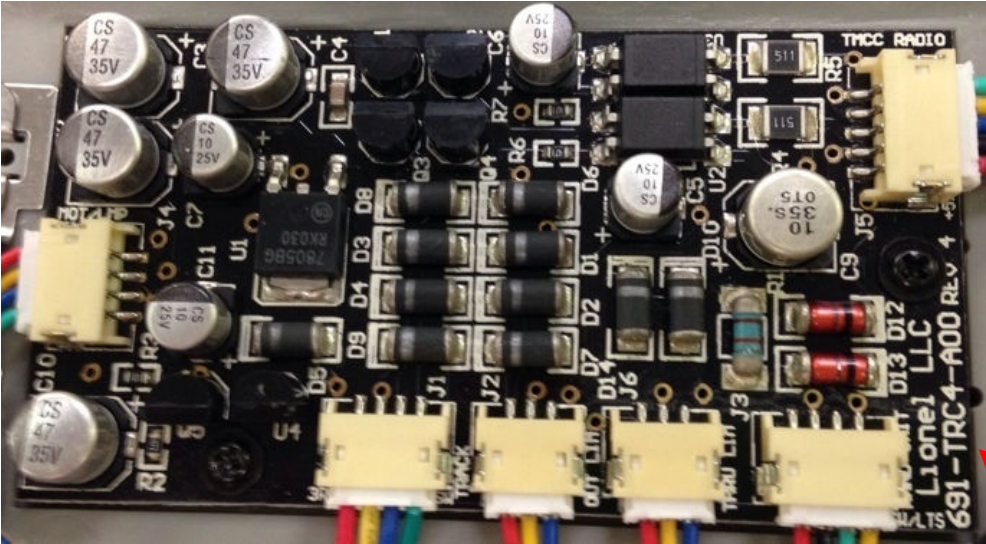
- 1/8" drill bit
- Soldering iron and solder
- Phillips screw driver

Installing the switch commander involves removing the bottom plate from the switch with a small Phillips screwdriver, installing the switch commander PCB, attaching the wiring harness and installing the program/run push-button.

This is a TRC3 board used in remote Fastrack™ switches. It is compatible with this upgrade kit.



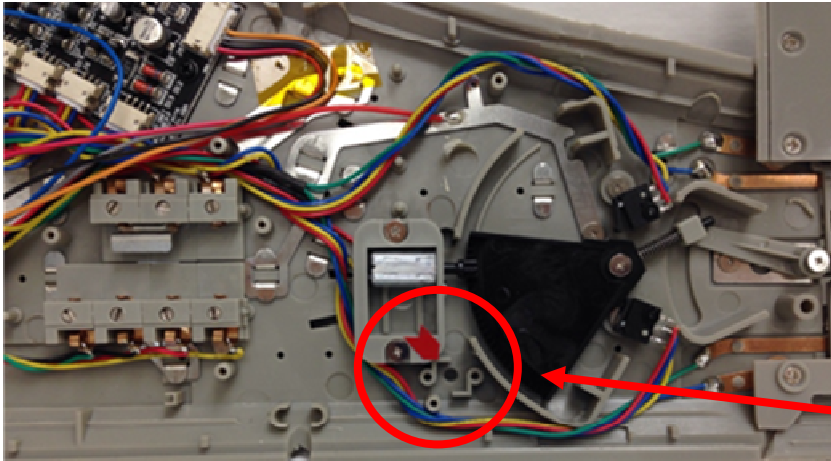
This is a TRC4 board used in Command Control Fastrack™ switches. It is **NOT** compatible with this upgrade kit.



Please confirm you have a compatible switch before proceeding with this install.

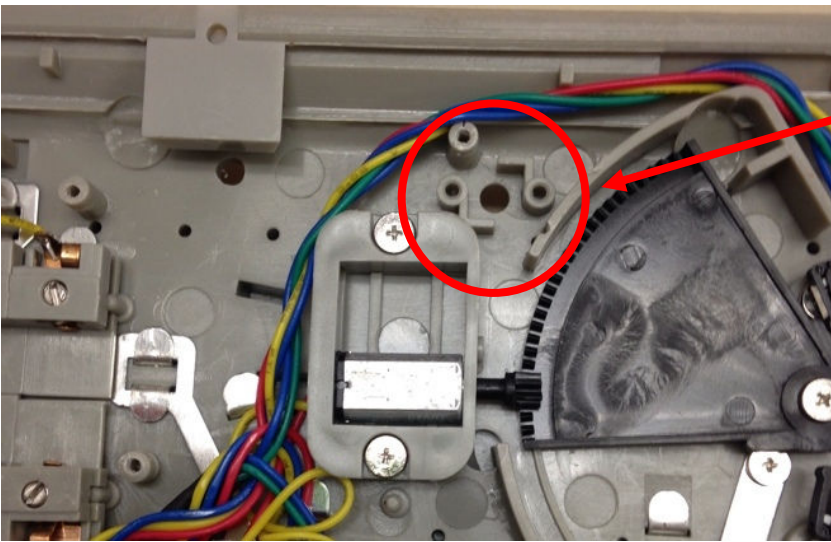
# Installation

Find a suitable location for the program/run push-button. Latter productions of the Fastrack™ remote control switches have a provision for a program/run push-button, showing the exact location where the hole should be drilled. Below are examples of the typical molded-in locations where the program/run push-button will be installed. Once you locate this mounting area, drill a 1/8 inch hole in the center.



Examples of the molded-in location for the program/run switch

Drill 1/8" hole in the center



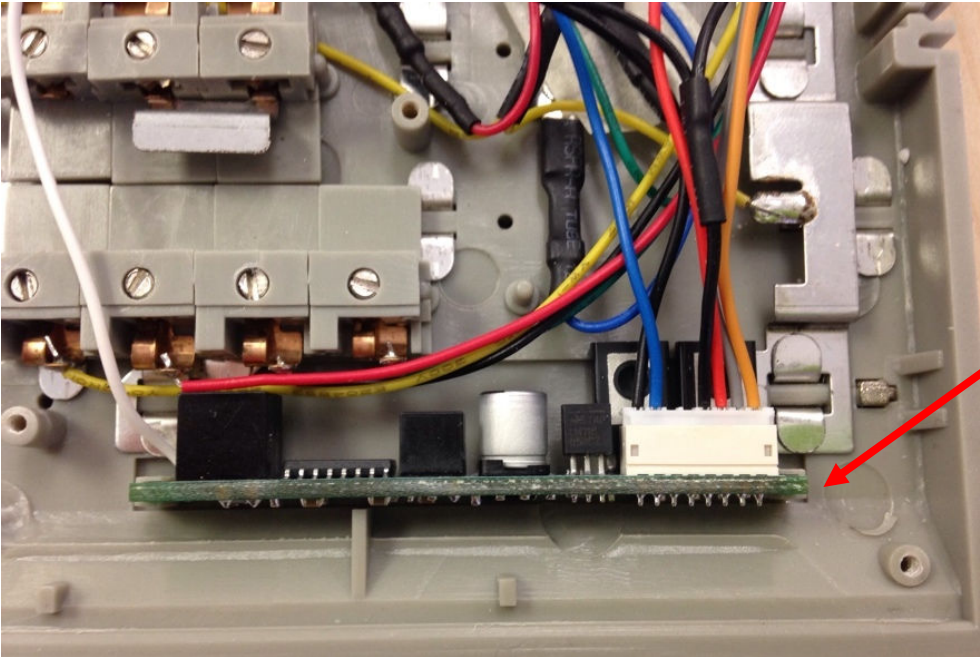
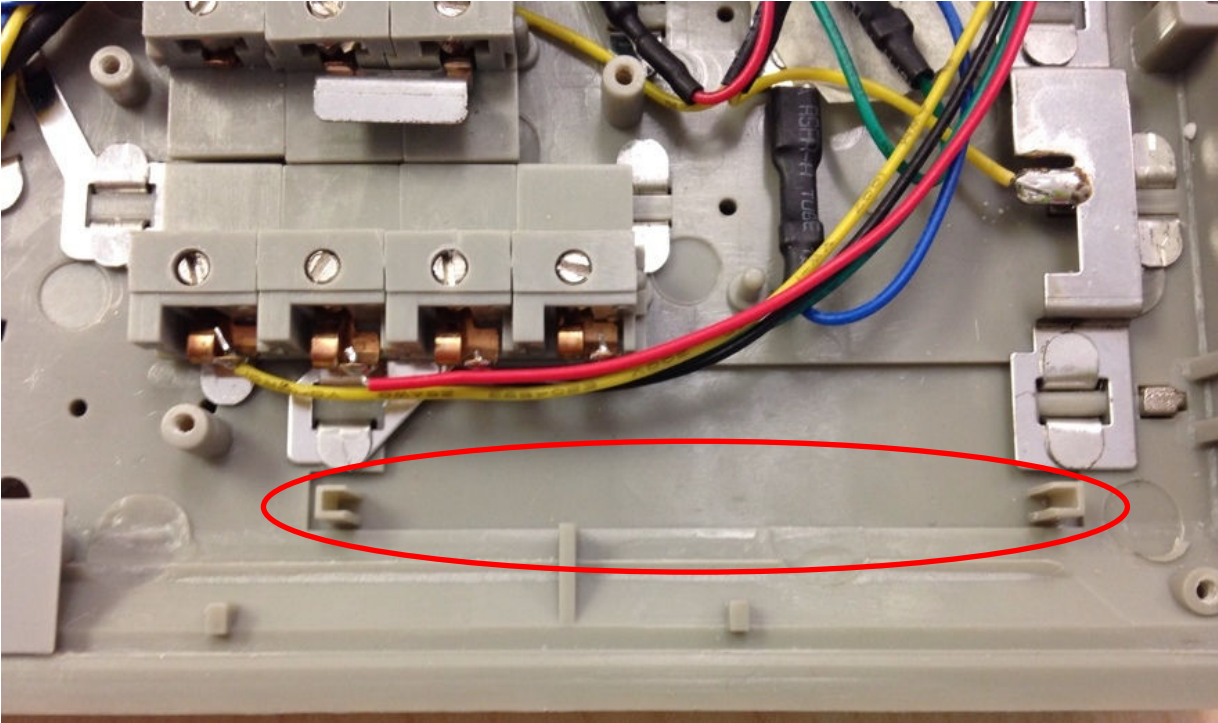
For switches without a pre-molded location, you will need to create a suitable mounting hole.

**Before drilling, look at both the front and back of the switch, make sure your proposed location will not go through a railroad tie, wires, components, etc.**

You can hold the switch up to the light to see where the hole should be drilled or you can drill the hole from the top side of the track.

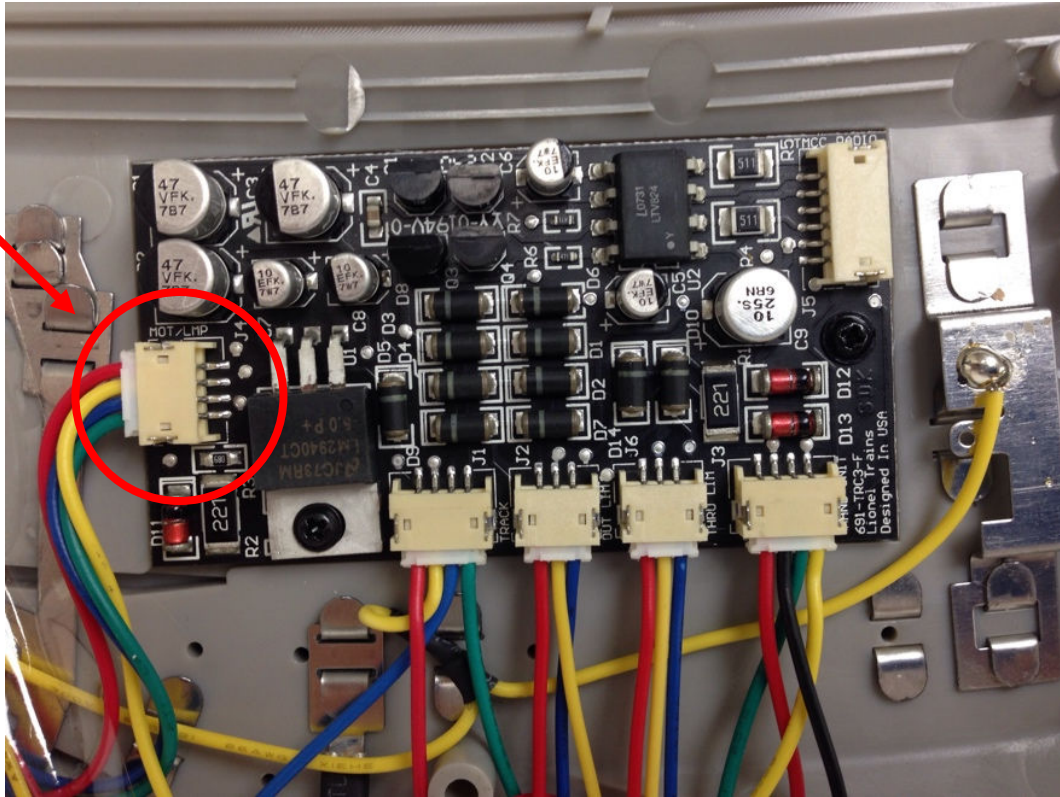
*See appendix A for location suggestions.*

Position switch commander PCB into designated slot, as shown in the photo below.

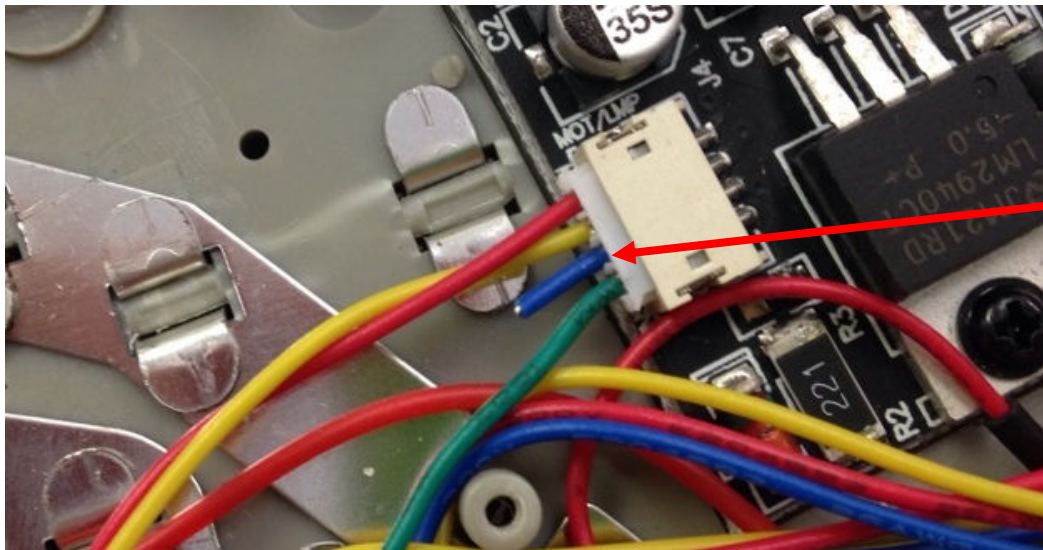


Slide the switch PCB into the slots inside of the switch.

Locate the 4-pin connector on the TRC3 board (with red, yellow, blue and green wires) as shown in the photo below.

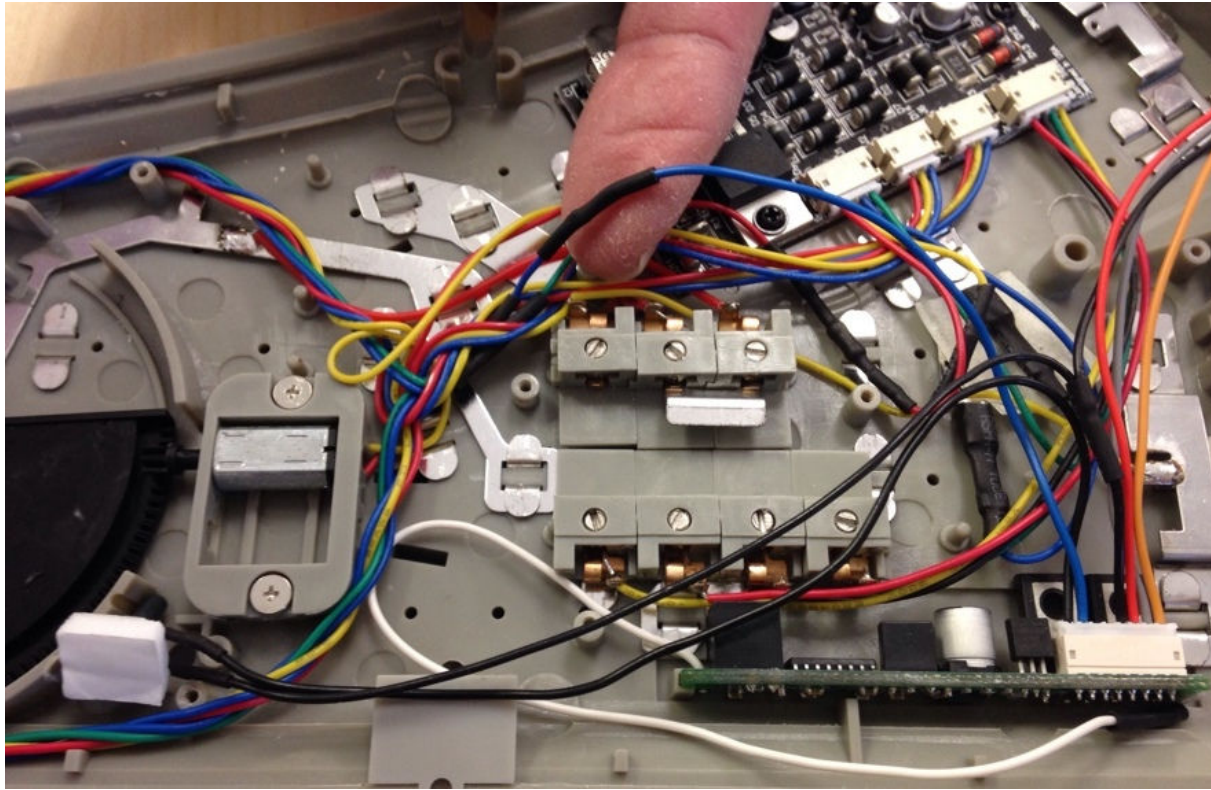


Cut the blue wire going to the white connector on the END of the TRC3 board as close to the connector as possible.

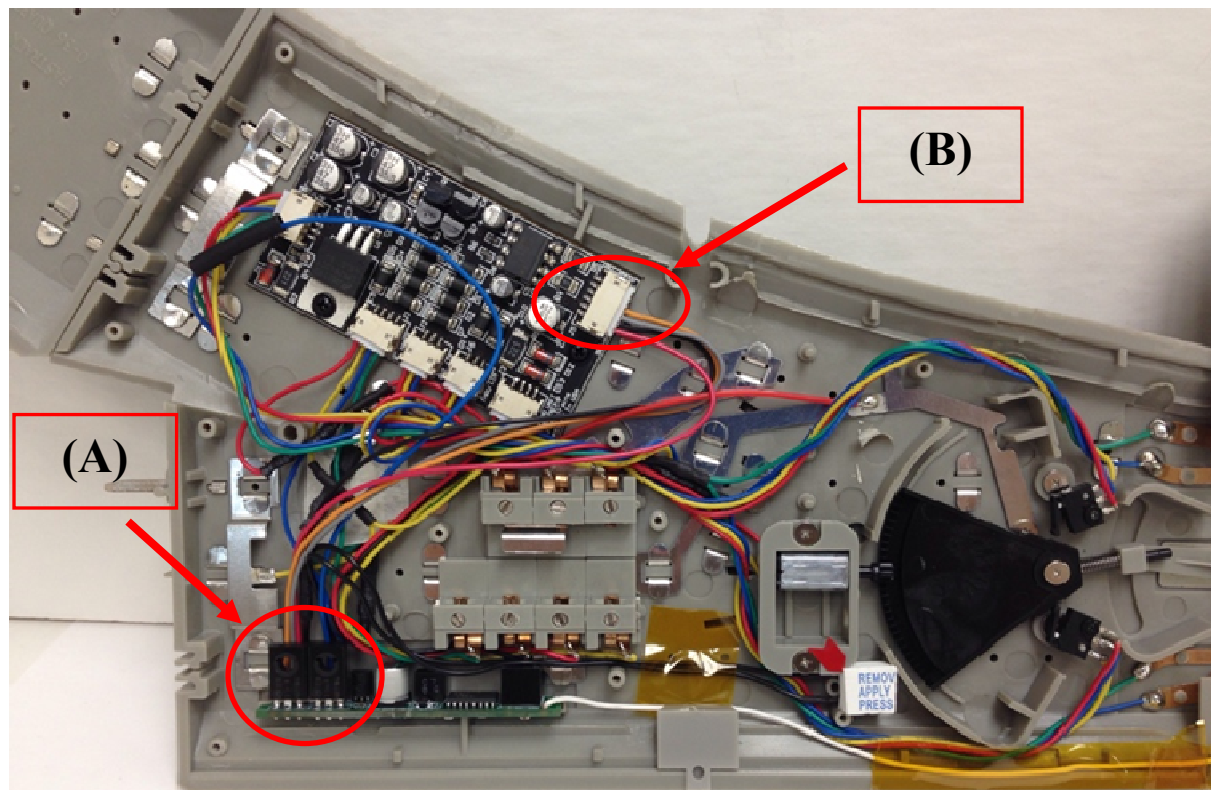


Cut the blue wire

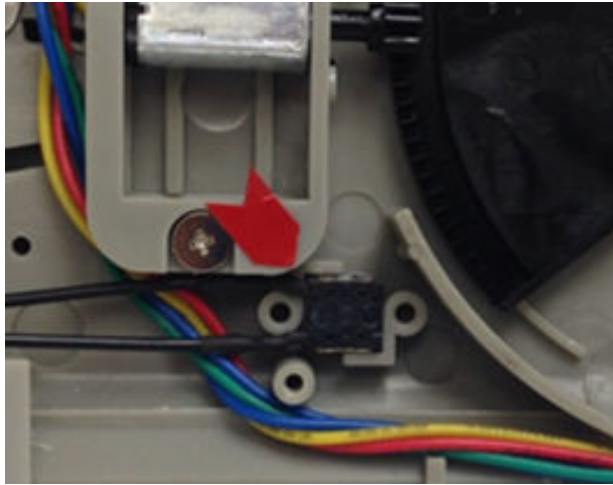
Then, splice (solder and shrink wrap) the blue wire from the new wiring harness to the blue wire you just cut from the TRC3 board.



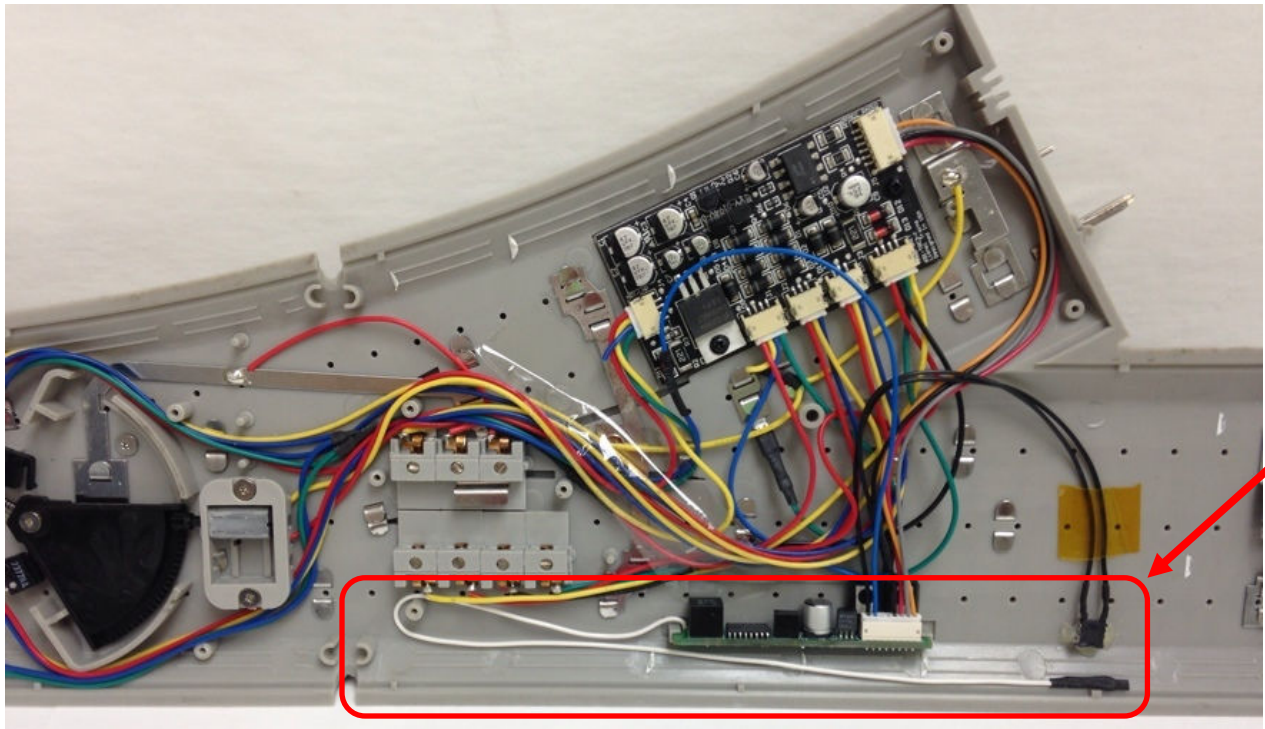
Plug the wiring harness from the Switch Commander PCB (A) into TRC3 board (B).



Insert the program/run push-button into the hole that was drilled into switch. Secure with double-stick tape. Peel off only one side of the double-stick tape and place it sticky side down over the program/run push button.



The white antenna wire coming from the Switch Commander PCB should be laid out of the way where it does not interfere with switch operation. Laying it along the edge of the track is suggested.



Check wires for placement to avoid pinched wires before you replace the cover on switch.



# Testing

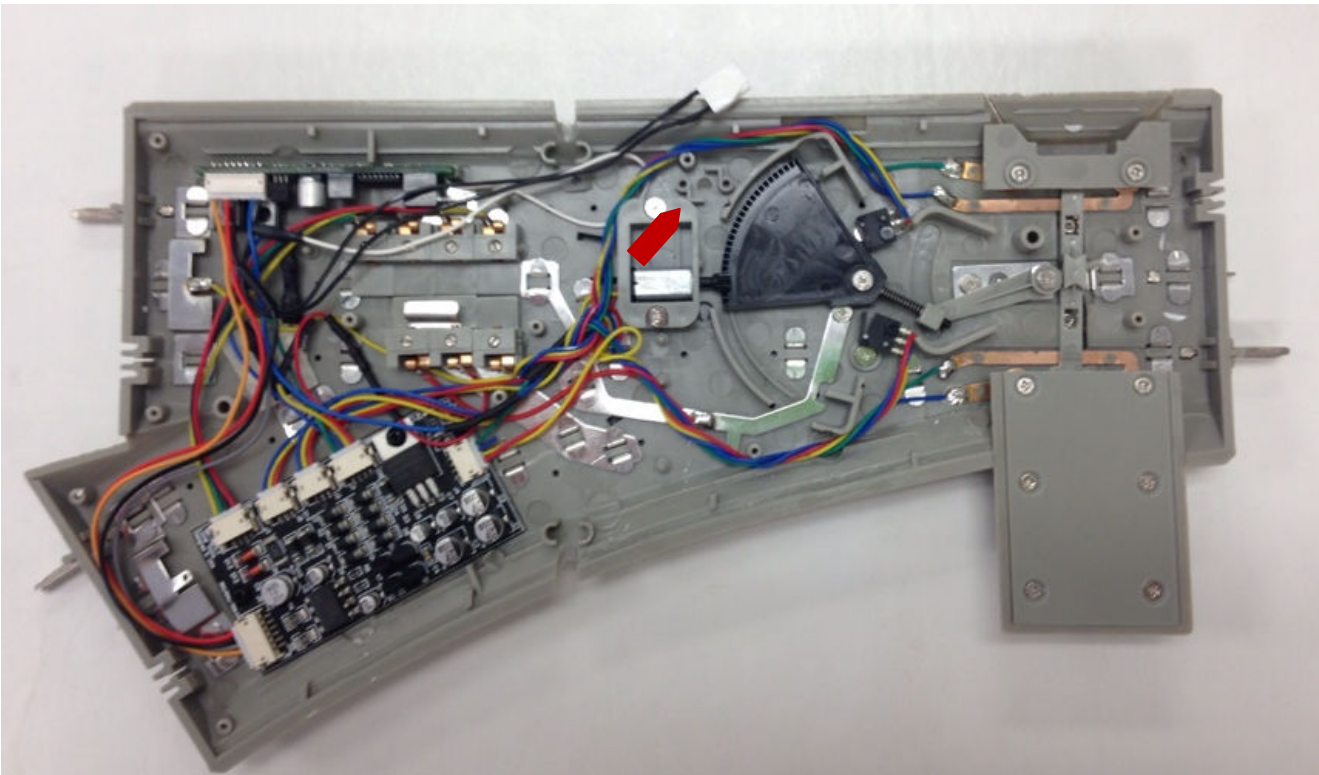
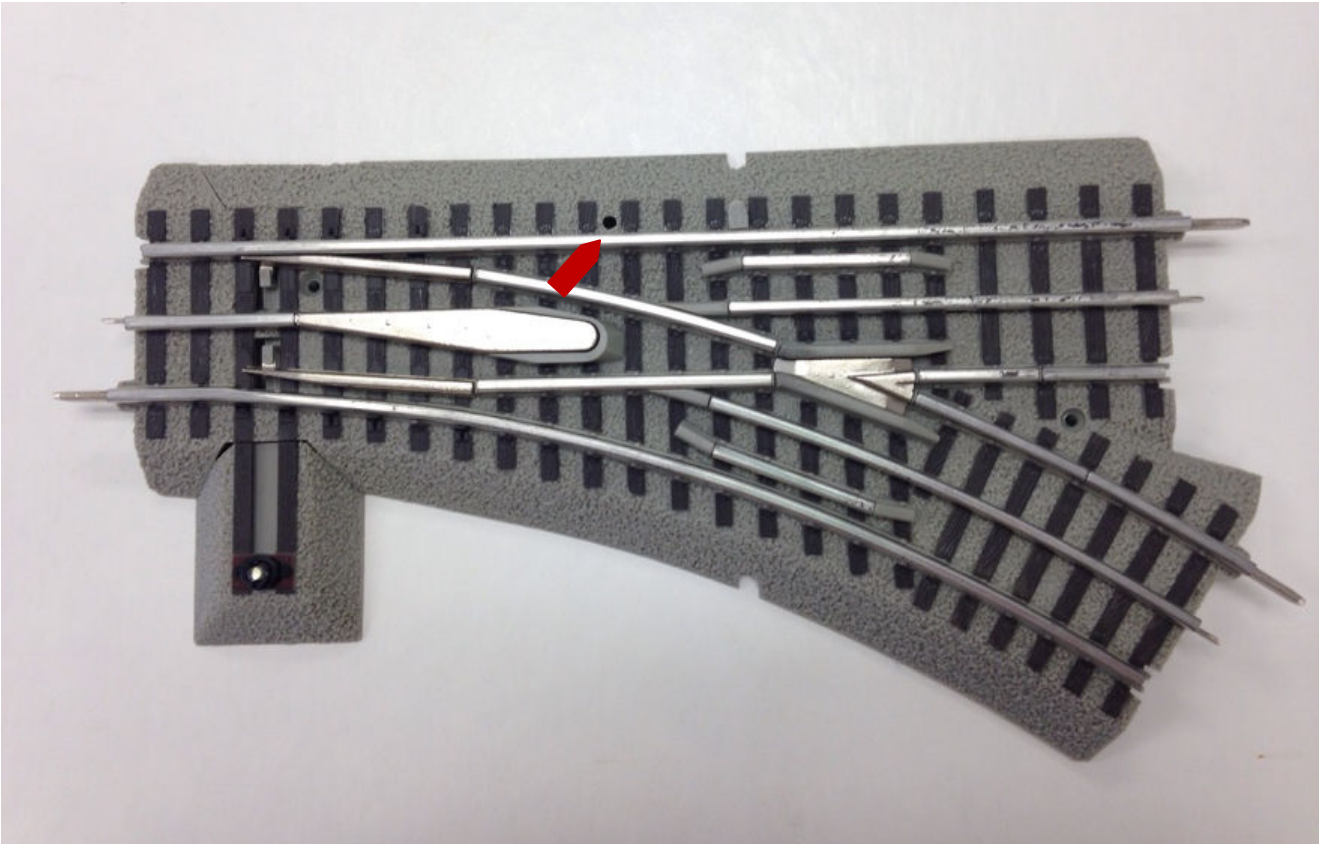
- Attach power to switch
- Ensure lantern comes on
- Attach command base “U” terminal to switch
- Press “SW on the remote, #1, and test Thru and Out

## Program / Run Switch

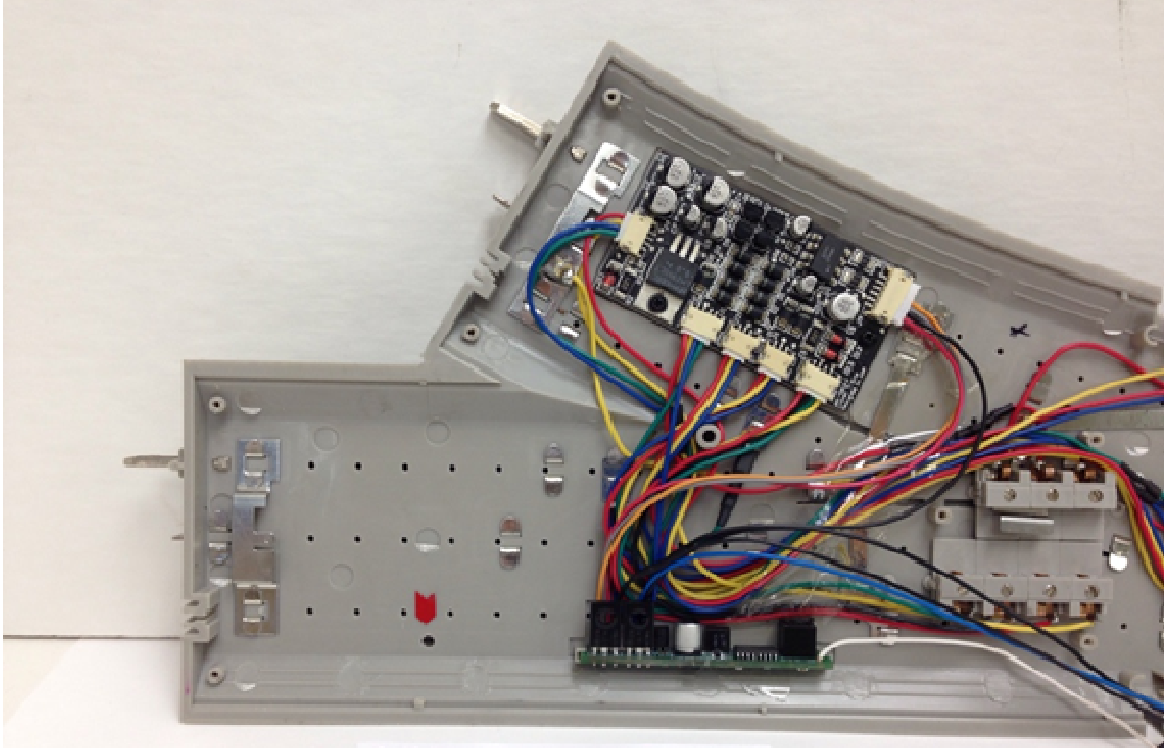
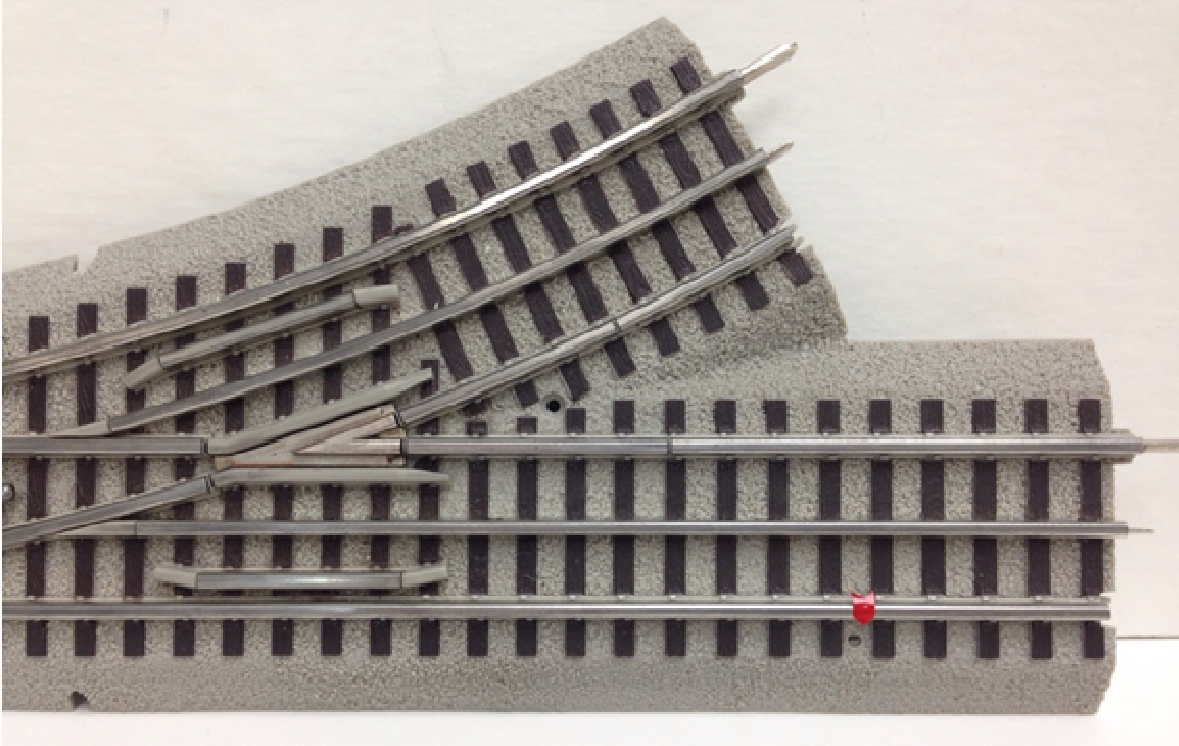
- Press and hold the program / run pushbutton switch
  - After about a second or so, the lantern will flash
- On the remote, press SW, ## (switch ID #), set
- Wait 5 seconds for the lantern to stop flashing
  - Programming the ID is now complete
- Check switch operation by pressing SW, ## (switch ID #) and use Thru and Out to operate the switch

*Appendix A - Drill Hole Mounting Location Guide*

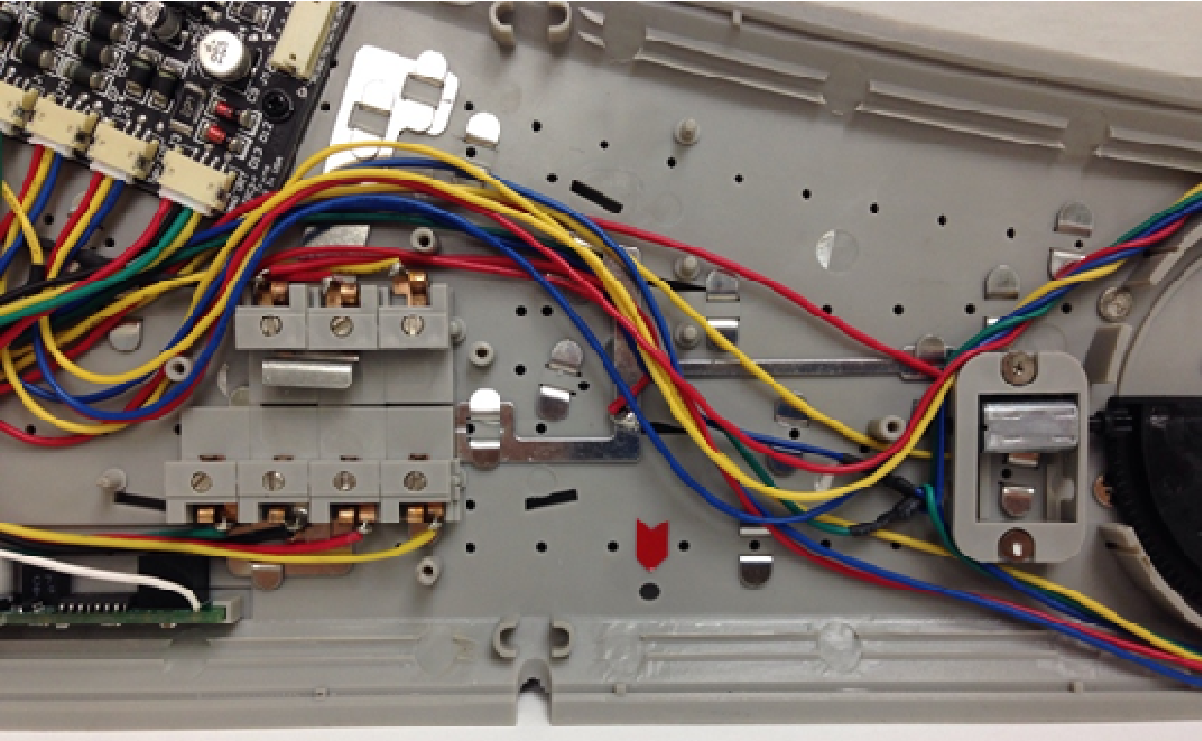
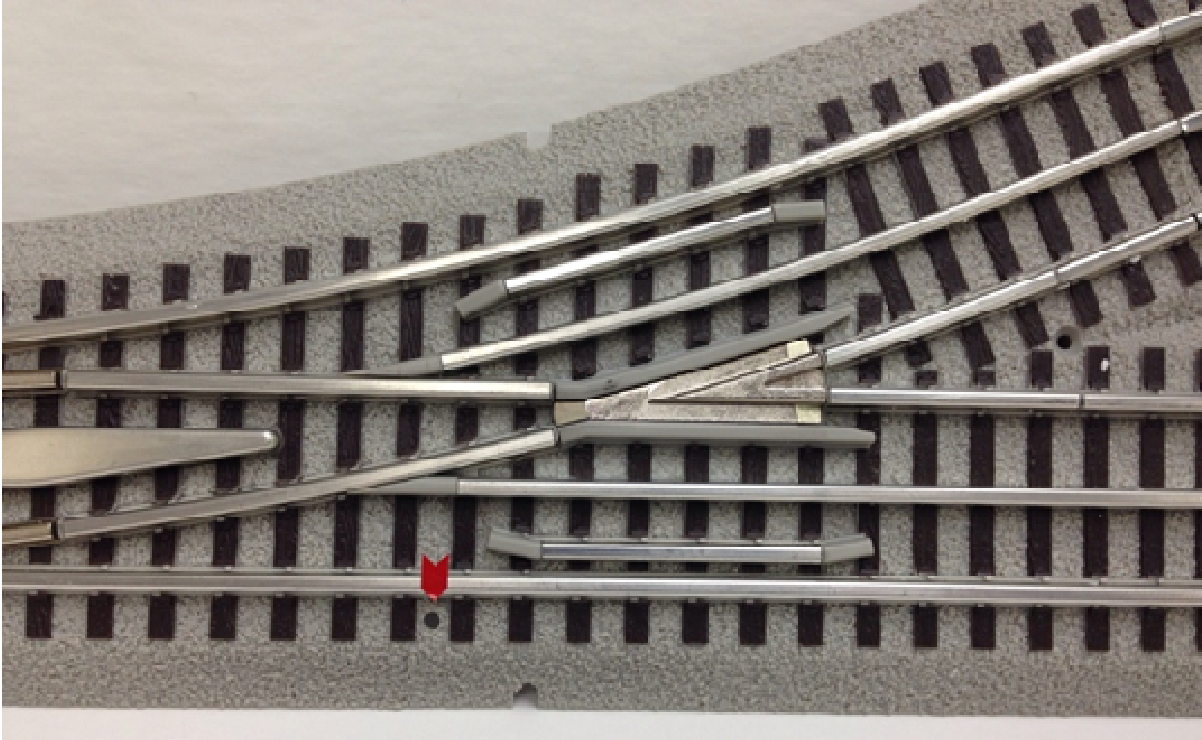
**0-36 Remote Switch - recommended drilling location:**



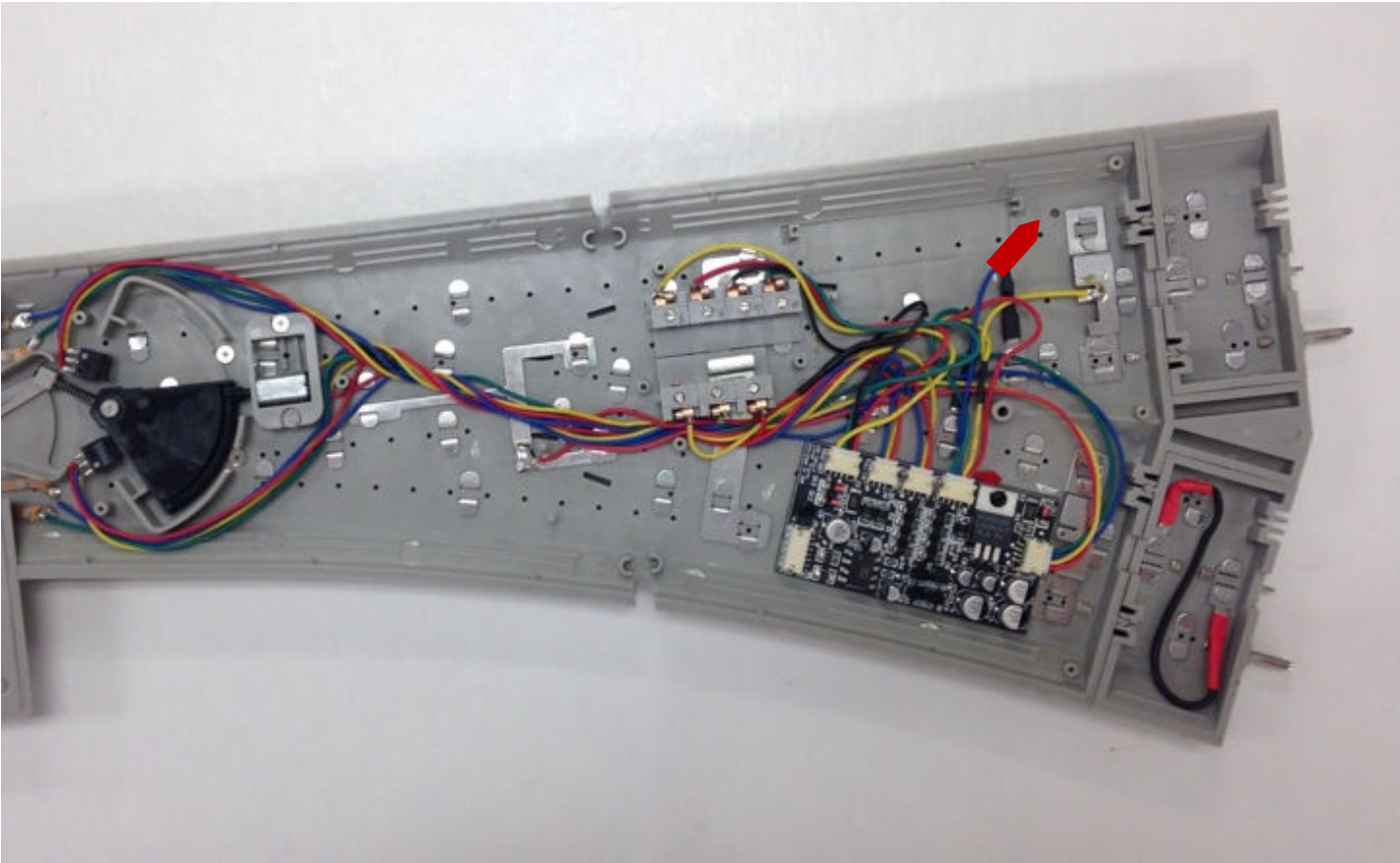
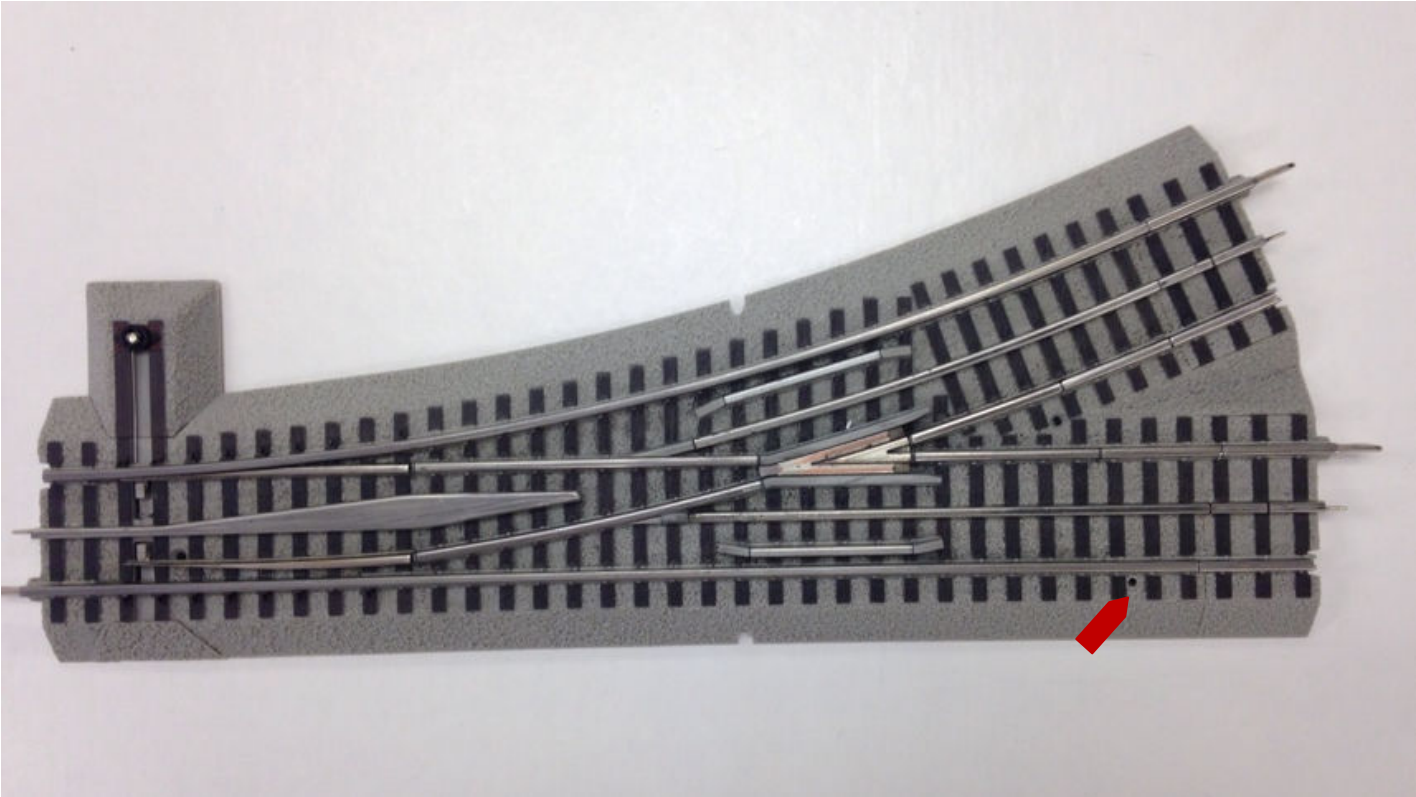
**0-48 Remote Switch - recommended drilling location:**



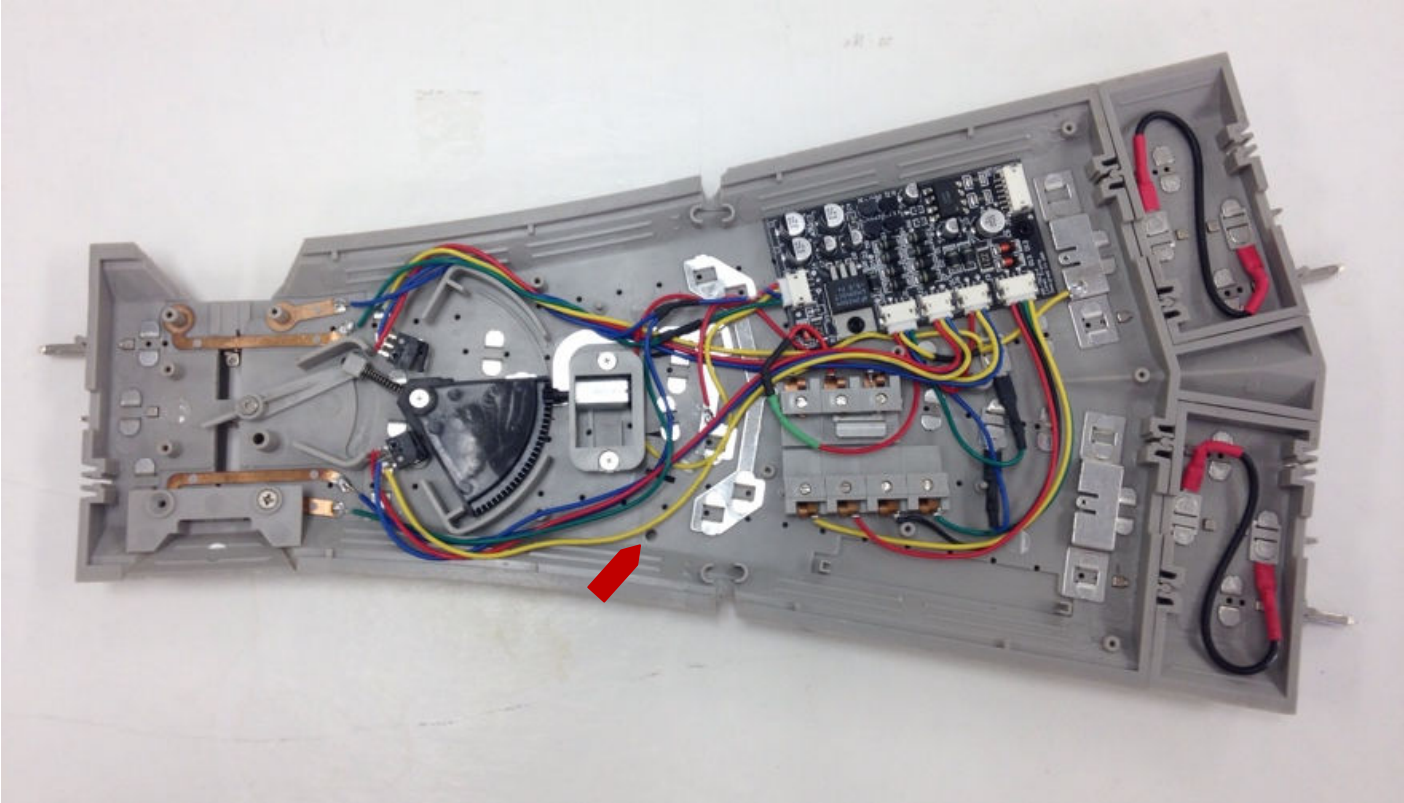
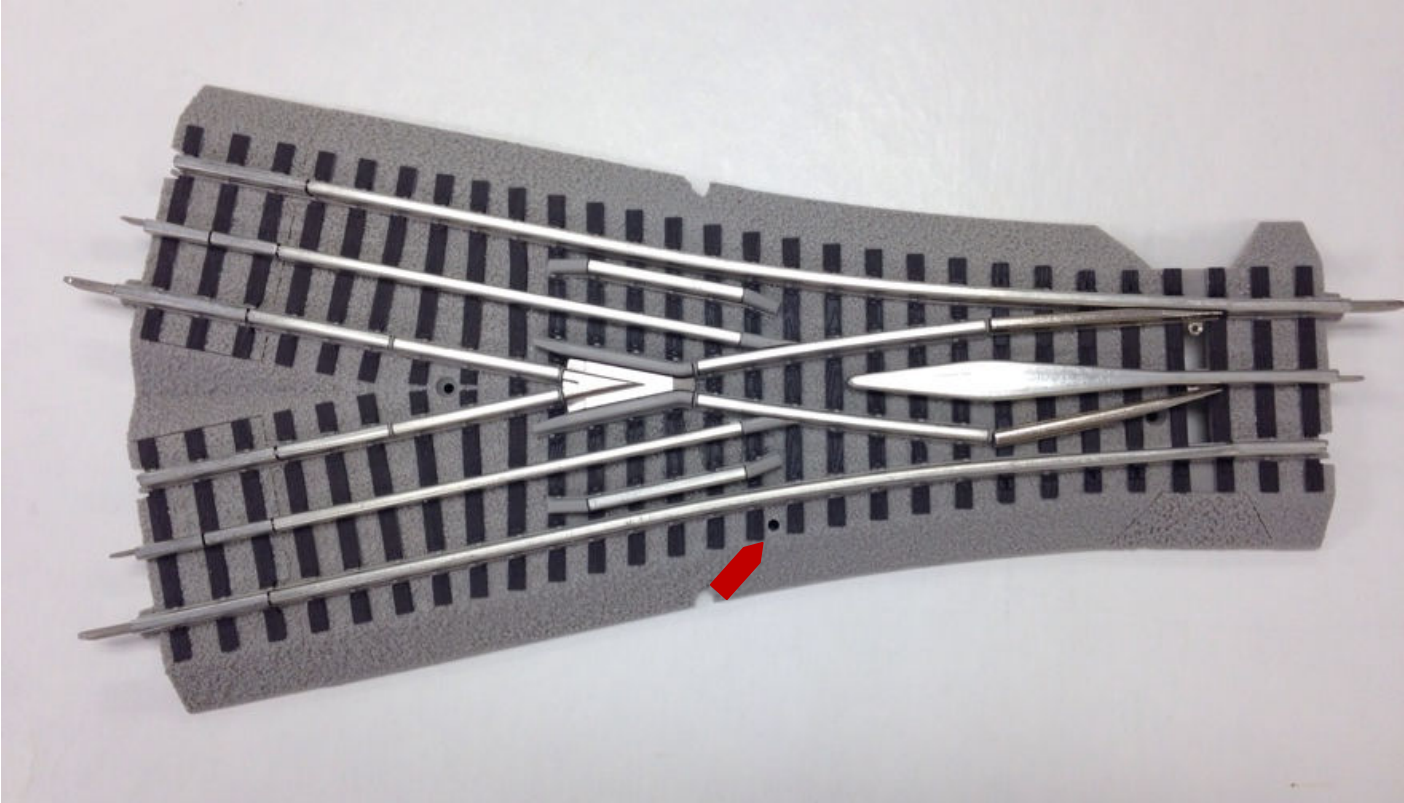
**0-60 Remote Switch - recommended drilling location:**



**0-72 Remote Switch - recommended drilling location:**



**0-72 WYE Remote Switch - recommended drilling location:**



## Limited Warranty

The Electric Railroad Company warrants to the original consumer purchaser that this product will be free of defects in materials and workmanship for a period of 90 days from the date of original purchase. This warranty does not cover service, repair, or replacement to correct any damage caused by improper installation, improper connection, external electrical fault, accident, disaster, misuse, abuse, or modifications to the product. All other express or implied warranties, including the implied warranty of merchantability and fitness for a particular purpose, are hereby disclaimed. If this product is not in good working order as warranted, the sole and exclusive remedy shall be repair or replacement. In no event shall The Electric Railroad Company, or any dealer, distributor, or authorized installation and/or repair service provider be liable for any damages in excess of the purchase price of the product. This limitation applies to damages of any kind, including but not limited to, direct or indirect damages, lost profits, lost savings or other special, incidental, exemplary or consequential damages whether for breach of contract, tort or otherwise, or whether arising out of the use of or inability to use the product, even if The Electric Railroad Company, or any dealer, distributor, or service provider has been advised of the possibility of such damages or any claim by any other party. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. During this warranty period, the product will either be repaired or replaced (at our option) without charge to the purchaser, when returned either to the dealer with proof of the date of purchase or directly to The Electric Railroad Company when returned prepaid and insured with proof of date of purchase. Some states do not allow limitations on how long an implied warranty lasts, so such limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

## Repairs

Each and every product is thoroughly tested before it is shipped. The likelihood that it is not working when it reaches you is very small. However, if after troubleshooting it yourself you cannot get it to work properly, contact us to help determine the problem.

Should your product ever need repair, return it postpaid directly to The Electric Railroad Company. If the product is within the warranty period, it will be repaired or replaced and returned to you free of charge. Units out of warranty will be repaired or replaced for a service charge of \$18.00 at our option.

Please email to [support@electricrr.com](mailto:support@electricrr.com) for return authorization before returning any product.

## Disclaimer

**Improper installation or configuration of the Switch Commander Board can cause overheating and fires! Since it is not possible to understand every installation, it is the consumer's responsibility to verify proper operation of the upgrade to prevent malfunction. If you are unsure of your install, please contact us first before taking any risks!**

All manual contents are Copyright ©2006, The Electric Railroad Company, 2326 Walsh Avenue, Santa Clara, CA. TMCC, CAB-1, R2LC, SignalSounds, & RailSounds are registered trademarks of Lionel, LLC.