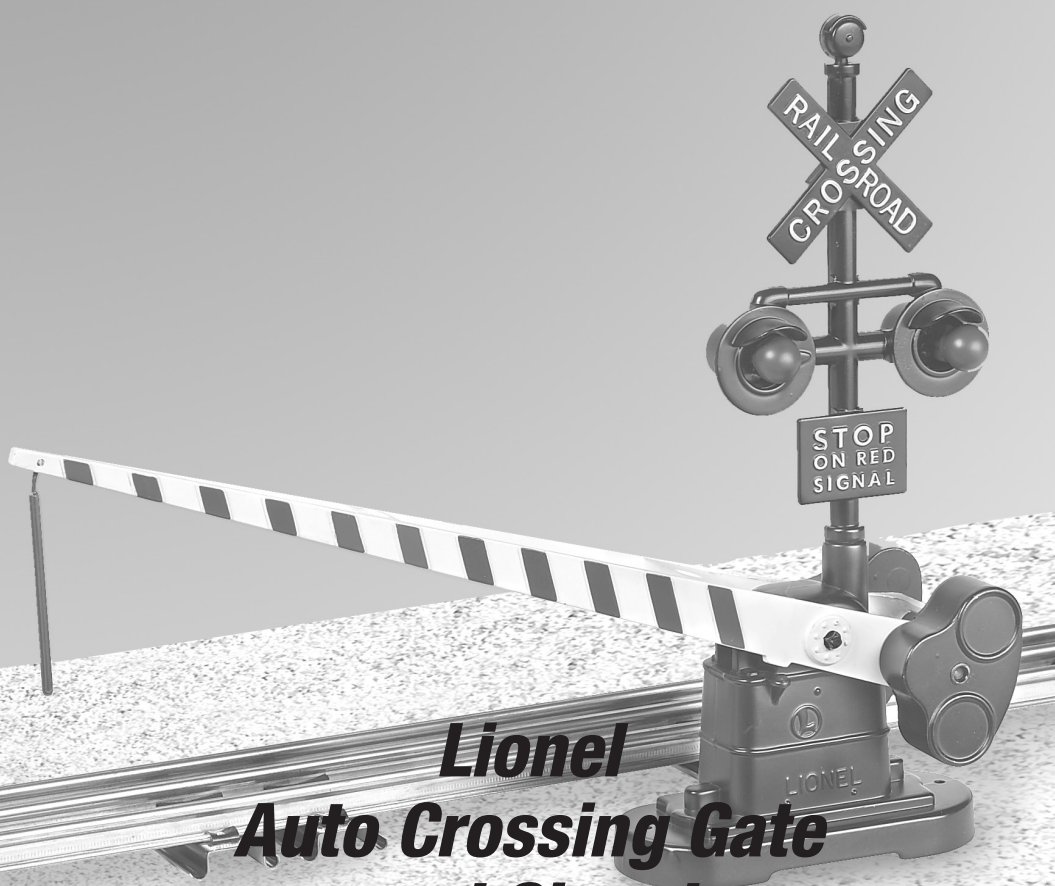




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***Lionel
Auto Crossing Gate
and Signal
Owner's Manual***

Congratulations on your purchase of the Lionel Auto Crossing Gate and Signal. Place the signal at any grade crossing on your Lionel railroad, and passing trains will automatically cause the lights to illuminate and the gate to drop.

Table of contents

Installing the 153C Contactor (included)	3
Wiring your Auto Crossing Gate and Signal to a power source	4
Adjusting the 153C Contactor	5
Operating the Auto Crossing Gate and Signal	5
Connecting your Auto Crossing Gate and Signal to a 153IR Controller	6
Connecting your Auto Crossing Gate and Signal with the FasTrack track system	6-7
Servicing the LEDs	7
Limited Warranty/Lionel Service	8

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Installing the 153C Contactor (included)

The 153C Contactor is activated by the weight of a passing train. Place the Contactor under any O or O-27 gauge track section, as shown in Figure 1.

One of the track ties should rest firmly upon the top of the pressure plate. If your layout is fastened to a board, loosen several sections on either side of the Contactor so that the track is able to bend under the weight of the train.

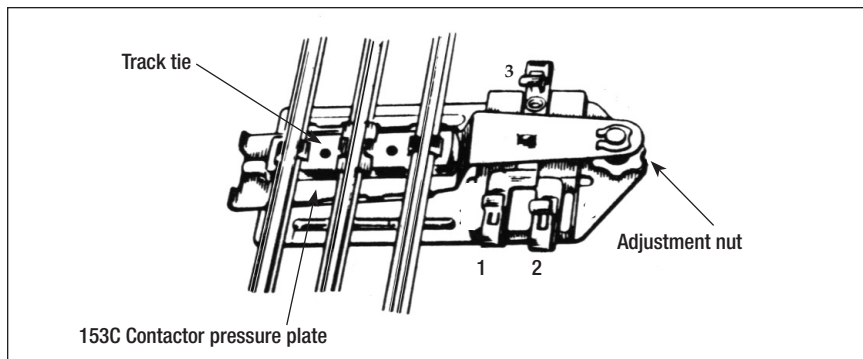


Figure 1. 153C Contactor

Wiring your Auto Crossing Gate and Signal to a power source

Your Auto Crossing Gate and Signal operates best at 10-14 volts (AC). Have an adult strip 1/4" of insulation from both ends of the four wires included with the Auto Crossing Gate and Signal, if they have not already been stripped.

Caution! Only an adult should perform this task. Always use care when stripping wires.

Connect one wire to each terminal post on the base of the accessory, then connect the other ends to the #153C Contactor and transformer as shown in Figure 2 below.

To connect the wire to the spring clips, press down the upper half of the spring clip terminal until the lower part projects through the slot. Insert the bare wire end into the loop, then release the upper part of the clip. Spring tension will hold the wire tight.

Note! This accessory will also operate using an insulated track section (available separately).

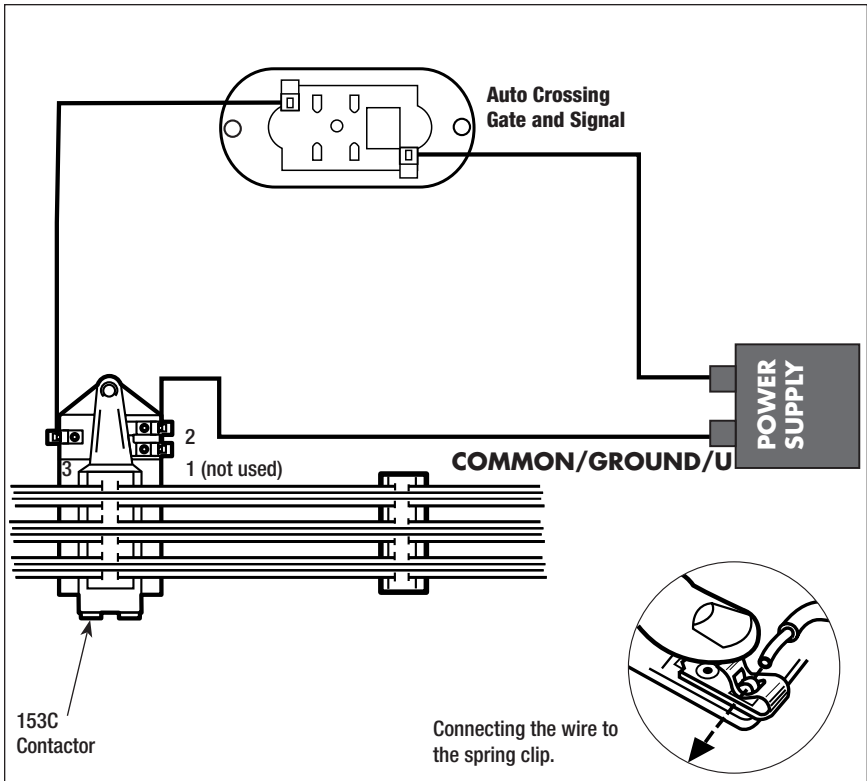


Figure 2. Accessory connection

Adjusting the 153C Contactor

After all the connections are made and your layout is powered up, the Contactor must be adjusted so that the train will properly trigger the accessory.

1. Stop the train several sections away from the Contactor so that it does not press on the Contactor plate.
2. Turn the adjustment nut either up or down until the accessory's lights flash and the gate drops. Refer to Figure 1 for the location of the adjustment nut.
3. Back up the adjustment nut just enough to cause the signal to turn off.

Operating the Auto Crossing Gate and Signal

When properly adjusted, the 153C Contactor will respond to light pressure on the track. The signal will turn on as long as any part of the train is passing over the Contactor plate.

Connecting your Auto Crossing Gate and Signal to a 153IR Controller

The 153IR Controller (available separately, 6-14111) is an alternative to the 153C Contactor. While the 153C Contactor relies on the weight of the train to activate the accessory, the 153IR Controller is triggered by an Infrared motion sensor. The 153IR Controller also allows you to set the length of time that the accessory remains on. Consult the 153IR Controller's owner's manual for more information and refer to Figure 3 below.

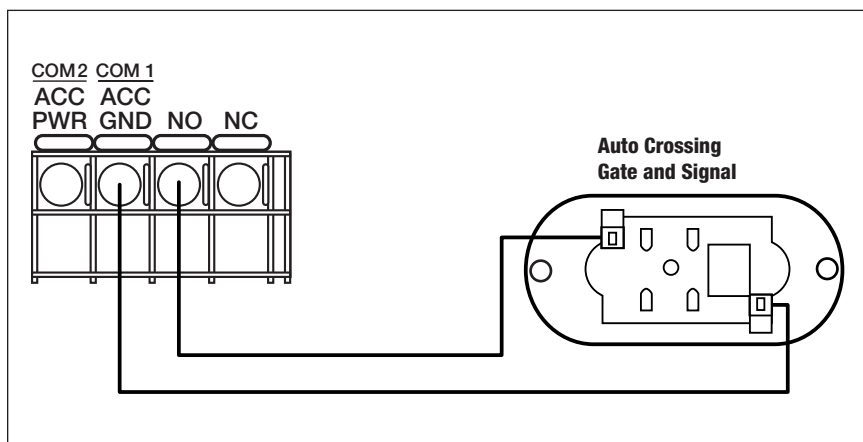


Figure 3. 153IR connections

Connecting your Auto Crossing Gate and Signal for operation with the FasTrack Track System

To operate this accessory with the FasTrack track system, you will need the Accessory Activator Pack (available separately, 6-12029). To make the proper connections, the ends of the wires should be stripped back 1/8" to 1/4".

Caution! Only an adult should perform this task. Use a pair of wire strippers to strip the wires. Always use care when stripping wires.

Simply connect the two wires from the Insulated Track section directly to your accessory's power terminals. Refer to Figure 4. The accessory receives power from the track and operates at track voltage. You must be sure that the track is given enough power to operate the trains and your accessory. The accessory will operate only when the track is powered up and the train is between the breaks in the rail.

Connecting your Auto Crossing Gate and Signal for operation with the FasTrack Track System (continued)

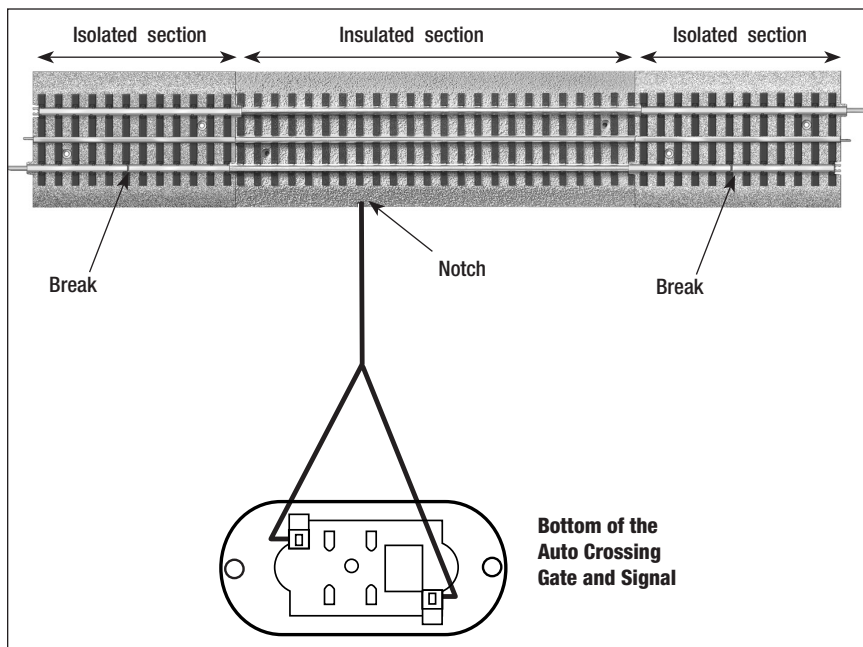


Figure 4. Track power connections

Servicing the LED

Your accessory is illuminated by an LED (light emitting diode). While the LED is expected to last for a long time, it should be replaced only by a Factory Trained Authorized Lionel Service Station or Lionel Service in the event that it becomes necessary. Please see the **Instructions for Obtaining Service** section on the Lionel Limited Warranty & Service Policy page of this instruction sheet.

Lionel Limited Warranty Policy & Service

This Lionel product, including all mechanical and electrical components, moving parts, motors and structural components, with the exception of **LIGHT BULBS, LED's & TRACTION TIRES** are warranted to the original owner-purchaser for a period of **one year from the original date of purchase** against original defects in materials or workmanship when purchased through a **Lionel Authorized Retailer***.

This warranty does **NOT** cover the following:

- Normal wear and tear
- Light bulbs or LED's
- Defects appearing in the course of commercial use
- Damage resulting from abuse/misuse of the product

Transfer of this product by the original owner-purchaser to another person voids this warranty in its entirety. Modification of this product in any way; visually mechanically or electronically, voids the warranty in its entirety.

Any warranted product which is defective in original materials or workmanship and is delivered by the **original owner-purchaser** (this warranty is non-transferrable) to Lionel LLC or any Lionel Authorized Service Station **MUST** be accompanied by the original receipt for purchase (or copy) from an **Authorized Lionel Retailer***, will at the discretion of Lionel LLC, be repaired or replaced, without charge for parts or labor. In the event the defective product cannot be repaired, and a suitable replacement is not available, Lionel will offer to replace the product with a comparable model (**determined by Lionel LLC**), if available. In the event a comparable model is not available the customer will be refunded the original purchase price (requires proof of purchase from the **Authorized Lionel Retailer*** it was originally purchased). Any products on which warranty service is sought must be sent freight or postage prepaid (Lionel will refuse any package when postage is due).

Transportation and shipping charges are not covered as part of this warranty.

NOTE: Products that require service that do not have a receipt from an LIONEL AUTHORIZED RETAILER* will be required to pay for all parts required to repair the product (labor will not incur a charge) providing the product is not older than 3 years from date of manufacture and is within 1 year from date of purchase. A copy of the original sales receipt is required.

In no event shall Lionel LLC be held liable for incidental or consequential damages.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Instructions for Obtaining Service

If service for this Lionel LLC product is required; bring the item, along with your DATED sales receipt and completed warranty information (at the bottom of this page) to the nearest Lionel Authorized Service Station. Your nearest Lionel Service Station can be found by calling 1-800-4-LIONEL or by accessing the website at www.lionel.com.

If you prefer to send your Lionel product directly to Lionel, for repair you must FIRST call 586-949-4100 extension 9105 or FAX Lionel at 586-949-5429 or write to Customer Service, 26750 Twenty Three Mile Road, Chesterfield, MI 48051-2493. Please have the 6-digit Lionel product number, the date of original purchase, the dealer where the item was purchased and what seems to be the problem. You will receive a return authorization (RA) number to ensure your merchandise will be properly tracked and handled upon receipt at Lionel LLC.

Once you have your Return Authorization (RA) number, make sure the item is packed in its original Styrofoam inner container which is placed inside the original outer display box (this will help prevent damage during shipping and handling). This shipment **MUST** be prepaid and we recommend that it be insured with the carrier of your choice.

Please make sure you have followed all of the above instructions carefully before returning any merchandise for service. You may choose to have your product repaired by one of Lionel LLC's Authorized Service Stations after its warranty has expired. A reasonable service fee should be expected once the product warranty has expired.

Warranty Information

Please complete the information below and keep it, along with your **DATED ORIGINAL SALES RECEIPT**. You **MUST** present this form **AND** your **DATED SALES RECEIPT** when requesting warranty service.

*A complete listing of Lionel Authorized retailers can be found by calling 1-800-4-LIONEL or by visiting our website at www.lionel.com.

Products that are more than 3 years old, from date of manufacture, are not applicable for warranty coverage, even if they have never been sold prior to this date. (Under no circumstance shall any components or labor be provided free of charge.)

Name _____

Address _____

Place of Purchase _____

Date of Purchase _____

Product Number _____

Product Description _____



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