

72-4111-250
3/04



***Lionel
Swing Bridge
Owner's Manual***

Congratulations!

Congratulations on your purchase of the Lionel Swing Bridge! Throw the lever and watch as the entire bridge span raises and pivots to allow boats to pass by. Red and green navigation lights indicate the bridge's position.

Note! Be sure to observe these guidelines.

- The Swing Bridge was designed for use with traditional O gauge track. For FasTrack users, the O Gauge Transition Sections (available separately, 6-12040) will allow you to join FasTrack and O gauge track sections.
- Be sure that your rolling stock and locomotives clear this accessory.
- Never operate the Swing Bridge with a locomotive or rolling stock on the moving bridge section.
- Be careful to stop your trains far enough away to avoid falling off the track when the bridge is open. Installing your bridge in its own electrically isolated block of track will add a margin of safety.
- Never attempt to rotate the bridge by hand.

Swing Bridge Inventory

- **Swing Bridge**
- **Two track platforms**
- **Two piers**
- **12 trestle piers with two spacers**
- **Controller**
- **Three green wires**
- **Three metal rail pins**
- **Two O Gauge fibre pins**

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The name FasTrack® is used with permission from Pitsco, Inc.

Installing the Swing Bridge

For proper operation, it is critical that the Swing Bridge and the platforms are positioned correctly. Follow these steps to install the Swing Bridge.

Note! Your Swing Bridge was factory-adjusted for proper operation. Do not attempt to remove the adjustment screw covers on the base and adjust the operation of the bridge yourself. Call Lionel Service in Chesterfield, MI for assistance.

1. Position the Swing Bridge on a flat, level surface on your layout. At this point, do not fasten the base to the layout.
2. Place the track platforms at both ends of the bridge. At this point, do not fasten the platforms to the layout.
3. Connect your power supply to the power terminals on the bridge. One terminal is connected to the Power/A terminal on the power supply. The other terminal is connected to the Common/Ground/U terminal on the power supply. Your Swing Bridge operates best at 12-18 volts (AC). Refer to Figure 1.

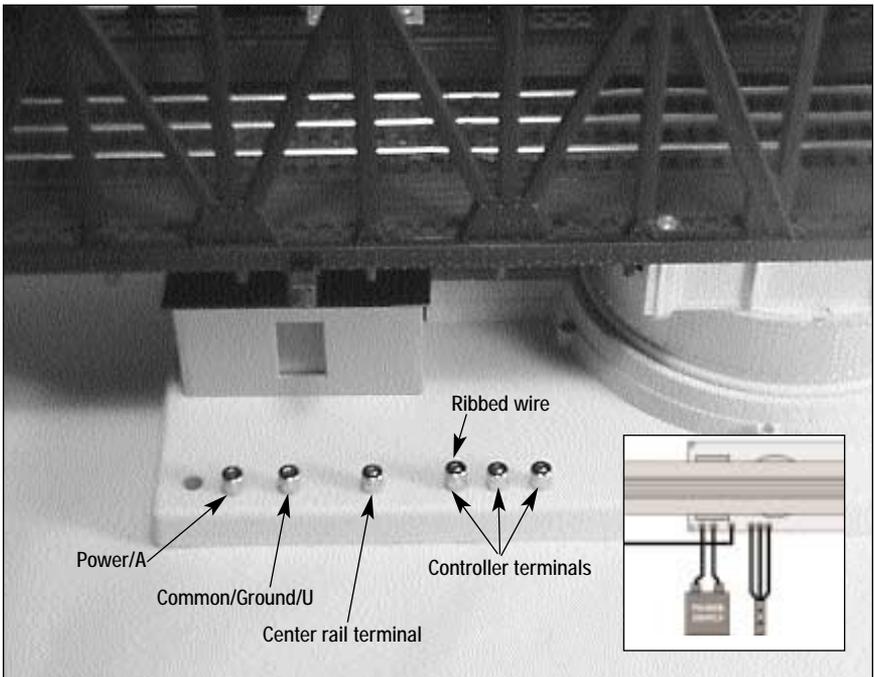


Figure 1. Swing Bridge connections

Installing the Swing Bridge (continued)

4. Connect the control lever. Attach the ribbed strand to the left CONTROLLER terminal, the middle strand to the middle terminal, and the remaining strand to the right terminal. Refer to Figure 1 on page 4. If the bridge does not operate in both directions, swap the wires at the outside controller terminals.
5. Use the control lever to operate the bridge a few times. Be certain that the rails on the moving bridge section come to rest on the platform pins after each cycle. Refer to Figure 2.

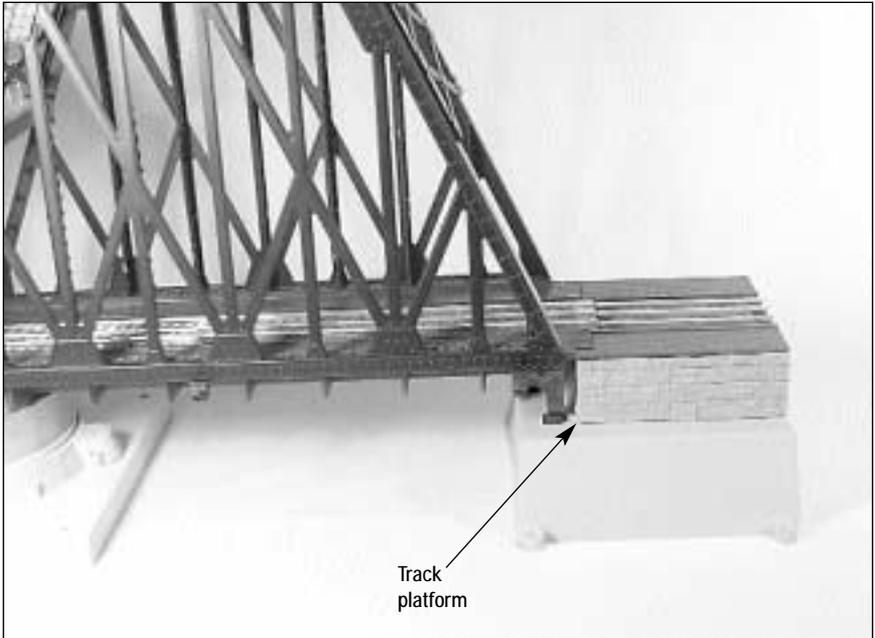


Figure 2. Track platform

Installing the Swing Bridge (continued)

6. Position the piers under the bridge when it is fully open and lowered into position. Refer to Figure 3.

Note! If the surface of your layout is uneven, you may choose to operate the bridge without the piers.

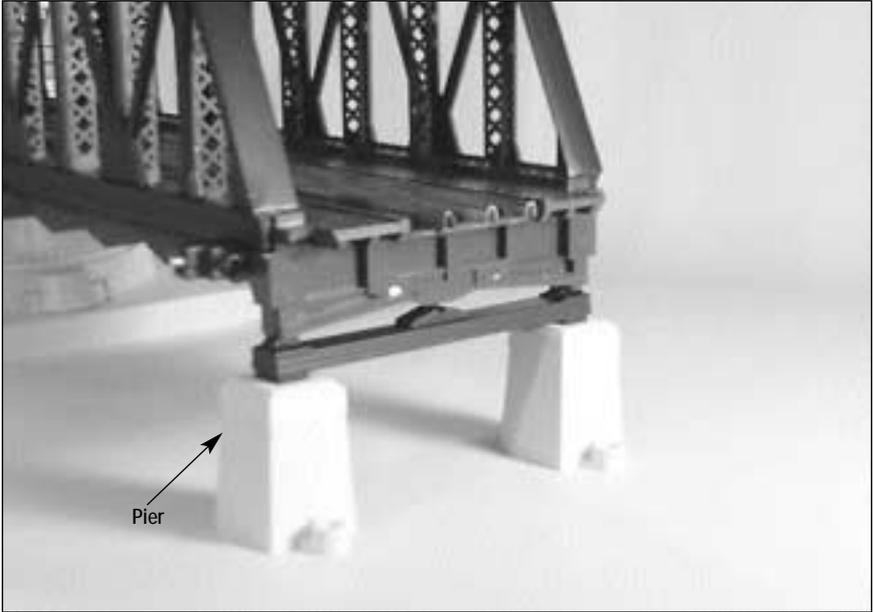


Figure 3. Piers

7. Secure the base of the bridge, the track platforms, and the piers to your layout. Mark the holes in the bases, drill pilot holes, and drive screws through the bases.

Caution! Only an adult should perform this task. Use care when creating holes in the layout.

Creating an isolated track block

Your Swing Bridge was designed for use with O gauge track. FasTrack users will need to use the O Gauge Transition Track (available separately, 6-12040) to join their FasTrack sections with O gauge track at the trestle.

To protect your trains from falling off the end of the track, we recommend that you create an electrically isolated block of track for the Swing Bridge. With the isolated block, the Swing Bridge is located on a section of track that can be turned off independently from the rest of your layout. When the bridge is open, the entire block of track will become “dead,” preventing trains from traveling over that track section. Refer to Figure 4.

To create a track block, simply remove the center pin from a section of track on both sides of the bridge and replace them with fibre pins. We recommend that you place each pin two or three track sections away from the bridge. To create a larger block, move the pins several additional track sections away from the bridge.

Finally, attach a Lionel Lockon (available separately, 6-62900) to the track outside of the block. Attach a wire to the #1 terminal on the Lockon and connect it to the center rail thumbscrew terminal on the base of the bridge. Refer to Figure 1 for the location of this terminal. This connection is illustrated in Figure 4.

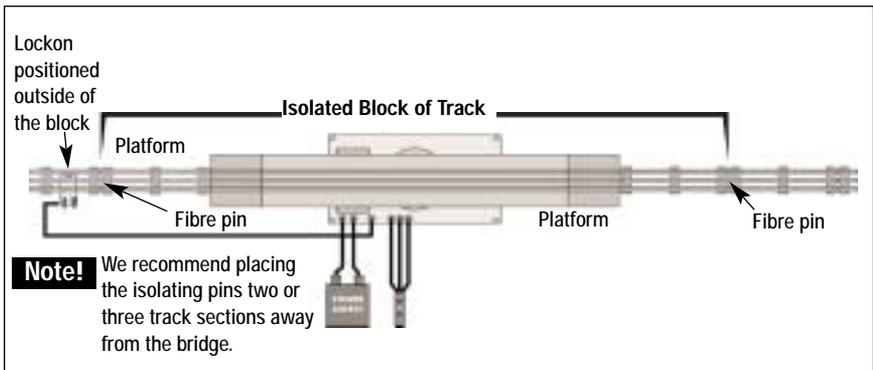


Figure 4. Swing Bridge terminals

Installing the track and trestle

Follow these steps and refer to Figure 5 to assemble the trestle. Six trestle piers and one spacer are used on each side of the bridge.

1. Join the track sections loosely.
2. Slide the track joints over the tie channels until the track is centered above the trestle piers.
3. Press the track sections firmly together.
4. You may choose to attach the track ties to the tie channels using two #4 sheet metal screws (not included).
5. Mount the trestle piers to your layout using two #5 pan-head wood screws (not included). We recommend that you position the flat trestle spacers under the shortest piers to create an even grade.

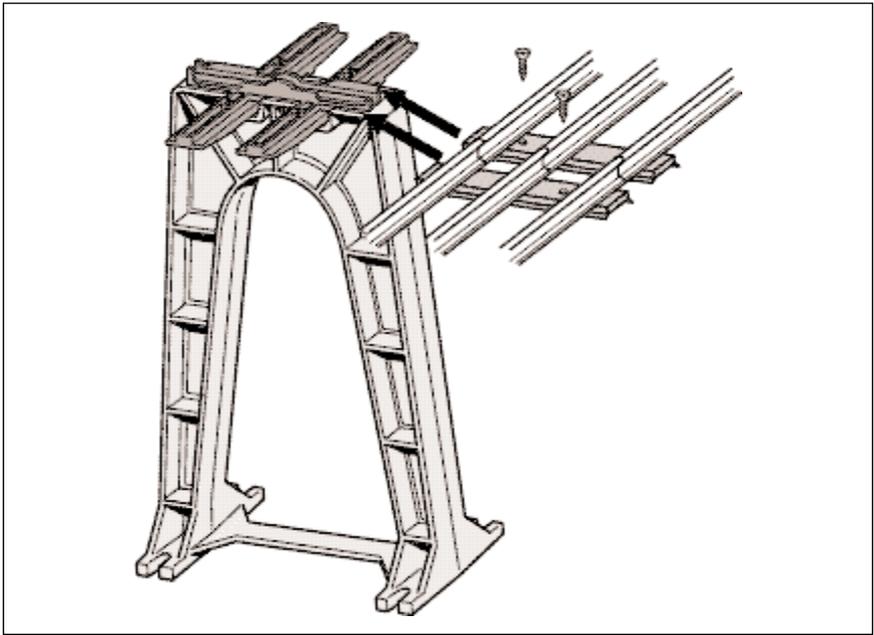


Figure 5. Trestle assembly

6. Connect the track to the track platforms. On one side, the track pins are inserted into the rails on top of the platform. On the other side, you will need to insert the metal pins (included) into the ends of the track. Once the pins are in place, you can join the track to the track platform.

Operating the Swing Bridge

Use the control lever to operate the Swing Bridge. Refer to Figure 6 for the control lever positions.

1. Check that the moving bridge section is clear. Do not operate the accessory with a locomotive or rolling stock on the bridge.
2. Pull the lever to the OPEN position. Hold the lever until the bridge comes to rest on the support piers.

Note! When the bridge is open (perpendicular to the track), power is turned off on the section of track between the insulating fibre pins to prevent your trains from falling off the end of the track.

3. Pull the lever to the CLOSE position. Hold the lever until the bridge comes to rest on the track platforms.

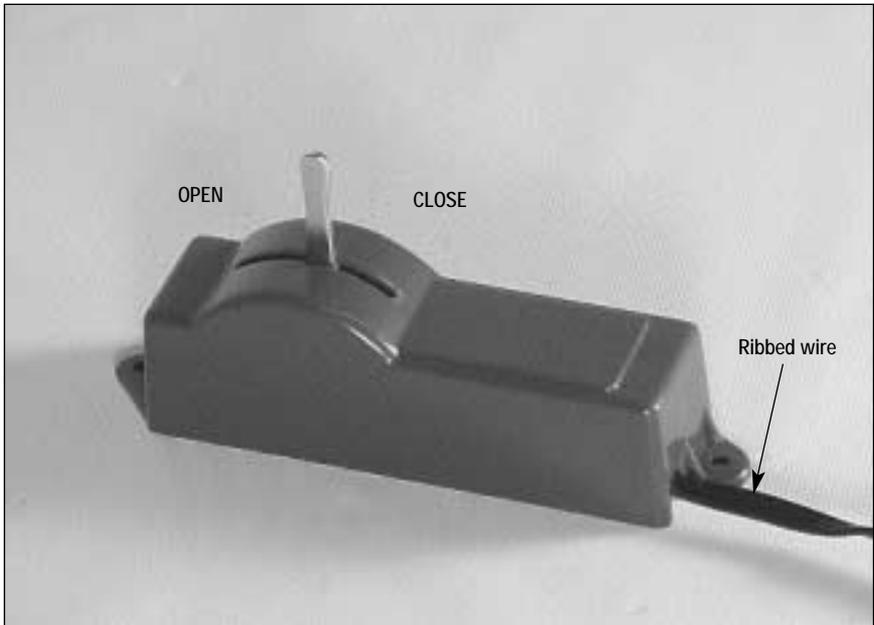


Figure 6. Control lever

Operating the Swing Bridge with TrainMaster Command Control

For operation in the TrainMaster Command Control environment, you may choose to wire your bridge with an SC-2 Switch and Accessory Controller (available separately, 6-22980) or the Accessory Switch Controller (available separately, 6-14182). Refer to these manuals for additional information.

SC-2 wiring and operation

Five wires (not included) are needed to connect your bridge to the SC-2. We recommend using 22-gauge wire. Refer to Figure 7.

1. Connect the power terminals on the bridge to your accessory power supply.
2. Connect the CENTER RAIL terminal to the #1 terminal on a Lockon that is positioned outside of the isolated block.
3. Attach a wire to the Common/Ground terminal on the bridge and connect it to the two COMM (common) positions on the SC-2 as illustrated in Figure 7.
4. Attach a wire to the CLOSED terminal on the bridge and connect it to the ACC 2 momentary position on the SC-2.
5. Attach a wire to the OPEN terminal on the bridge and connect it to the ACC 1 momentary position on the SC-2.

Address ACC 1 and use the **AUX1** button to open the bridge. Address ACC 2 and use the **AUX1** button to close the bridge.

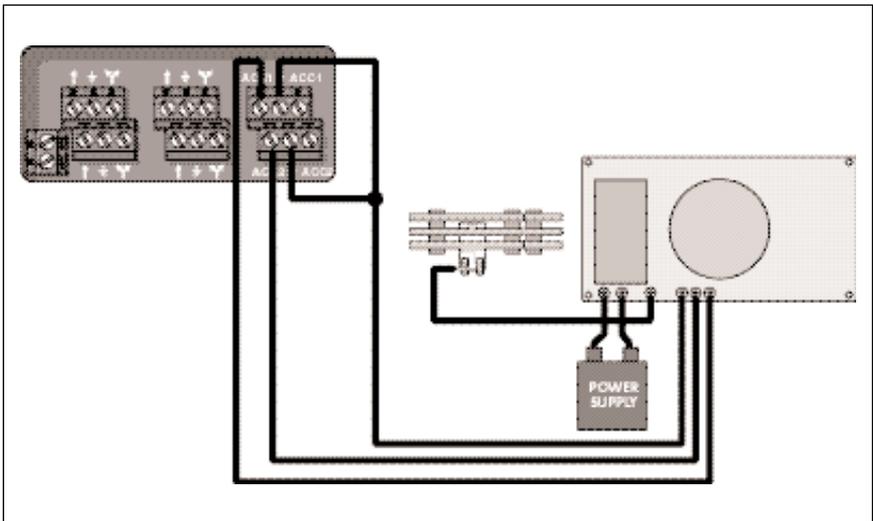


Figure 7. SC-2 connections

Operating the Swing Bridge with TrainMaster Command Control (continued)

ASC wiring and operation

Five wires (not included) are needed to connect your bridge to the ASC. We recommend using 22-gauge wire. Refer to Figure 8.

1. Connect the power terminals on the bridge to your accessory power supply.
2. Connect the CENTER RAIL terminal to the #1 terminal on a Lockon that is positioned outside of the isolated block.
3. Attach a wire to the Common/Ground terminal on the bridge and connect it to a COMM (common) positions on the ASC.
4. Attach a wire to the CLOSED terminal on the bridge and connect it to a numbered position on the ASC.
5. Attach a wire to the OPEN terminal on the bridge and connect it to a different numbered terminal on the ASC.

Address ACC 1 and use the **AUX1** button to open the bridge. Address ACC 2 and use the **AUX1** button to close the bridge.

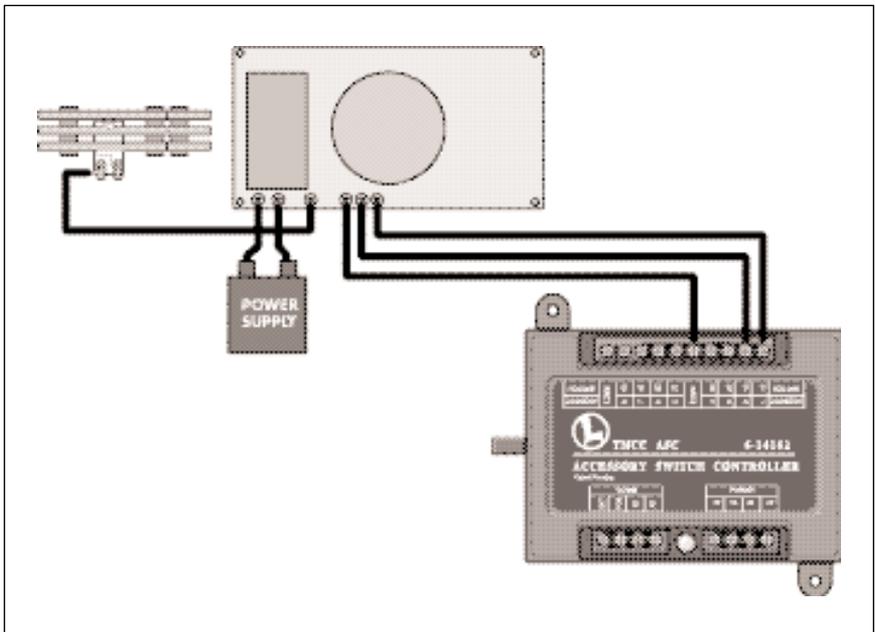


Figure 8. ASC connections

Replacing the lamps

The control cabin and mechanical building are illuminated by two lamps. During the course of normal operations, these lamps may require replacement. Replacement lamps (part no. 620-4111-300 for the mechanical building, part no. 620-4111-310 for the control cabin) are available at your authorized Lionel Service Center or from Lionel Service in Chesterfield, MI.

To access the expired lamp, simply lift off the roof. Unscrew the lamp and install the replacement. Refer to Figures 7 and 8 as you replace the lamps.

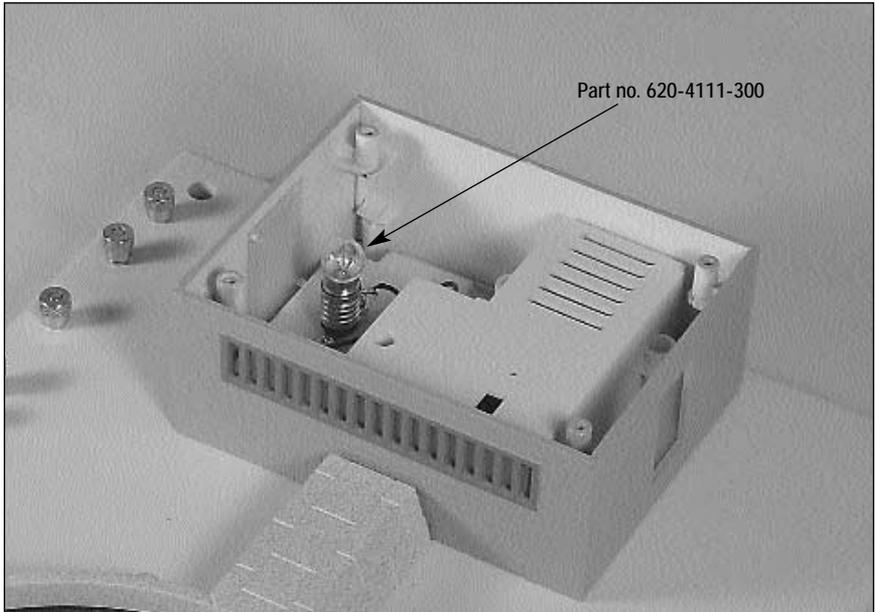


Figure 7. Mechanical building interior lamp

Replacing the lamps (continued)



Figure 8. Control cabin interior lamp

Servicing the LEDs

Your Swing Bridge features several red and green LEDs. The LEDs are expected to last for the life of this accessory. The LEDs should be serviced only by an authorized Lionel Service Center or Lionel Service.

Limited Warranty/Lionel Service

This Lionel product, including all mechanical and electrical components, moving parts, motors and structural components, except for light bulbs, is warranted to the original consumer-purchaser, for **one year** against original defects in materials or workmanship when purchased through an authorized Lionel merchant.

This warranty does NOT cover normal wear and tear, light bulbs, defects appearing in the course of commercial use, or damage resulting from abuse or misuse of the product by the purchaser. Transfer of this product by the original consumer-purchaser to another person voids this warranty. Modification of this product voids this warranty.

Any warranted product which is defective in original materials or workmanship and is delivered by the original consumer-purchaser to Lionel L.L.C. or an authorized Lionel L.L.C. Service Center, together with proof of original purchase will, at the option of Lionel L.L.C., be repaired or replaced, without charge for parts or labor. In the event the defective product cannot be repaired, and a replacement is not available, a refund of the original purchase price will be granted. Any products on which warranty service is sought must be sent freight or postage prepaid, as transportation and shipping charges are not covered by the warranty.

In no event shall Lionel L.L.C. be 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 limited 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 L.L.C. product is required, bring the item, along with your dated sales receipt and completed warranty information to the nearest Authorized Lionel Service Center. Your nearest Lionel Service Center can be found by calling 1-800-4-Lionel, or by accessing our Website at www.lionel.com.

If you prefer to send your product back to Lionel L.L.C. for repair in Michigan, you must first call 586-949-4100 or FAX 586-949-5429, or write to Customer Service, P.O. Box 748, New Baltimore, MI 48047-0748, stating what the item is, when it was purchased and what seems to be the problem. You will be sent a return authorization letter and label to ensure your merchandise will be properly handled upon receipt.

Once you have received your return authorization and label, make sure that the item is packed to prevent damage during shipping and handling. We suggest that you use the product's original packaging. This shipment must be prepaid and we recommend that it be insured.

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 our Authorized Lionel Service Centers after its warranty has expired. A reasonable service fee will be charged.

Warranty Information

Please complete the information below and keep it, along with your dated sales receipt. You must present this and your dated sales receipt when requesting warranty service.

Name _____

Address _____

Place of Purchase _____

Date of Purchase _____

Product Number _____

Product Description _____



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