

LIONEL

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12/01



Chessie GP-38 Diesel Freight *Ready-To-Run O-27 Set* *Owner's Manual*

CAUTION—ELECTRIC TOY

NOT RECOMMENDED FOR CHILDREN UNDER EIGHT YEARS OF AGE. AS WITH ALL ELECTRIC PRODUCTS, PRECAUTIONS SHOULD BE OBSERVED DURING HANDLING AND USE TO REDUCE THE RISK OF ELECTRIC SHOCK.

TRANSFORMER RATINGS—INPUT: 120 VAC; 60 HZ ONLY.

AC OUTPUT: 20 V; 54 VA

Congratulations!

You're now the proud owner of the Chessie GP-38 Diesel Freight ready-to-run O-27 train set. Everything you need to get started is included. You're already off to a great start by reading this instruction manual. It has important information on train setup and operation. This booklet also

covers proper maintenance procedures to help your Lionel trains live long, healthy lives.

If you have any questions after reading this booklet, contact your nearest Lionel Authorized Service Center or call Lionel Service at 586-949-4100. *And have fun!*

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Lionel®, *TrainMaster®*, *Odyssey®*, *RailSounds™*, *CrewTalk™*, *TowerCom™*, *DynaChuff™*, *StationSounds™*, *Pullmor®*, *ElectroCoupler™*, *Magne-Traction®*, *CAB-1 Remote Controller®*, *Powermaster®*, *Lionel ZW®*, *ZW®*

Track layout

Getting started

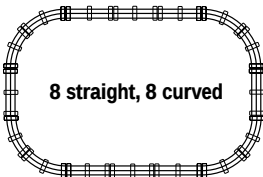
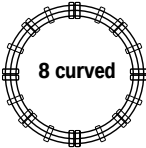
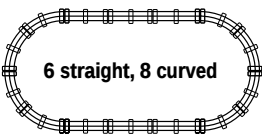
Before you do anything else, we recommend you check the contents of your set box to ensure all of the parts of your set have been included and that the quantities (when applicable) are correct.

The parts list below will tell you what's included and the correct quantities. If you find any discrepancies, contact the your Lionel dealer for more information or call 1-800-4-LIONEL for a Service Center near you.

• Chessie GP-38 locomotive	1	• 40-watt power pack	1
• Chessie Boxcar	1	• Lockon	1
• Chessie Caboose	1	• Straight track	8
• Chessie Hopper	1	• Curved track	8
• Chessie Searchlight Car	1	• Service Center list	1
• Tractor and trailer	1	• Warranty Card	1
• Controller	1		

Now comes the fun part—deciding what kind of layout you want. The only rule—let your imagination be your guide.

Suggested track layouts



Here are some examples of layouts you can build with 8 straight and 8 curved sections of track. Remember—the more track you own, the more variations you can create in your train layout. And that means more action and more fun!

Note! We recommend that you do not set-up your track layout on carpeted surfaces. Carpet fibers may collect on your engine's wheels and drive gears, and prevent your engine from operating properly. For best results, place track on a hard surface.

Track layout

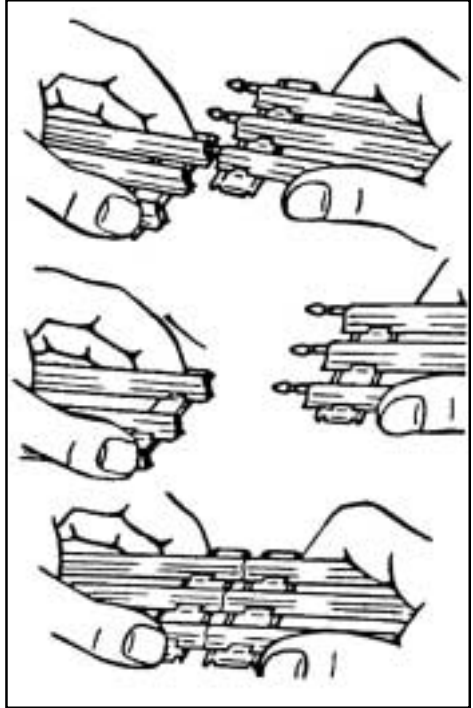
Joining the track sections

Join the track sections together by inserting the pins of one track section into the rail openings of another. For good electrical contact, pins must be carefully inserted and track joints tightly fitted.

If the track is difficult to connect, try this installation tip. You can “break in” O-27 track sections by inserting and withdrawing a track pin into one rail at a time before joining the entire track section.

If the openings become too open (causing the track to fit loosely), pinch the rail together around a track pin with a pair of pliers. If any pins fall out of the track and are missing, replace them with extras available from your Lionel dealer.

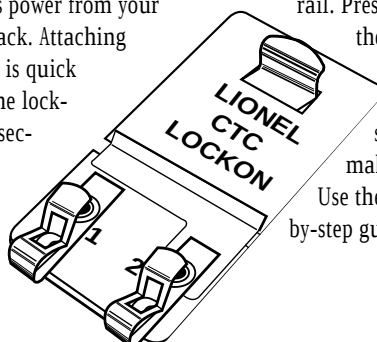
Maintenance tip: The rails should be kept clean, dry, and free from oil and grease. Clean rust and dirt spots with a track eraser. Wipe the track using a cloth dampened with track cleaner from the Lionel maintenance kit (no. 6-62927), available from your nearest Lionel Authorized Value Added Dealer.



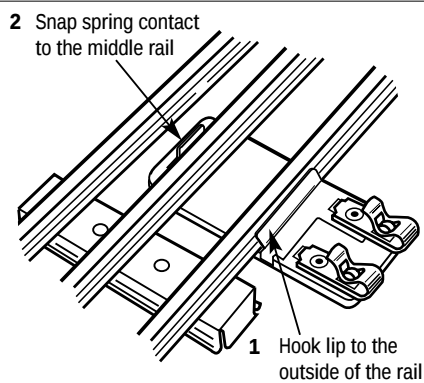
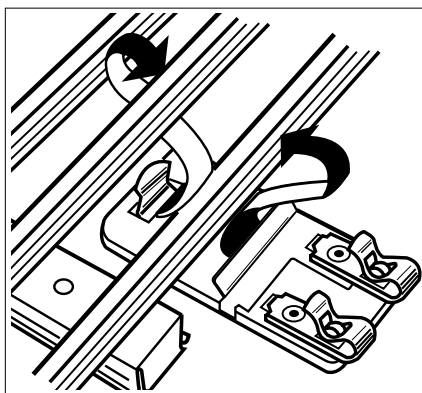
Track layout

Attaching the lockon to the track

The lockon connects power from your controller to the track. Attaching the lockon to the track is quick and easy. First, place the lockon under any straight section of track. Fit the center lip of the lockon onto the edge of an outside



rail. Press the lockon upward so that the spring contact snaps onto the center rail. The lockon should face outward when setting up your track and make sure it is *firmly* connected. Use the illustrations below as a step-by-step guide.



Once the lockon is securely attached to the track, it's time to insert the wires from the controller into the two spring clips on

the lockon. See page 6 for easy-to-follow steps.

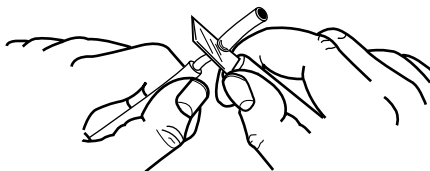
Controller operations

Stripping the wire

Once your track is assembled and the lockon is securely attached, you can connect the wires from the controller to the lockon.

First you'll want to check the ends of the wires to make sure that the insulation is

stripped back about 1/4" to 3/8". To strip the wires, use a pair of wire strippers or a sharp knife.



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

Attaching the controller wires to the lockon

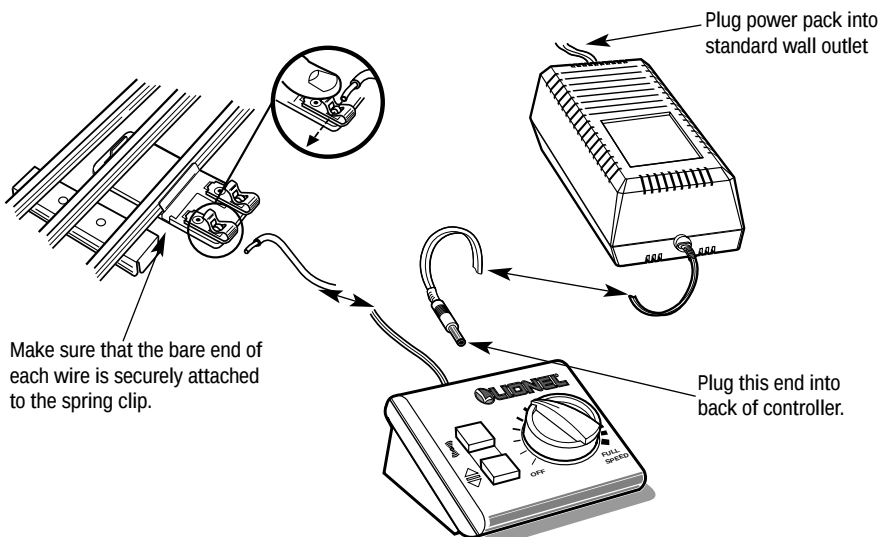
Now you'll need to insert a controller wire into each of the two spring clips on the lockon.

It's easy! Depress the spring clip with your finger and insert the bare end of the wire into the exposed opening. Release the spring clip. Give the wire a little tug to make sure it's secure. Repeat these steps with the other spring clip. Next, insert the small plug end of the power pack into the back of your con-

troller, and plug the other end into a standard outlet.

Note!

If the horn fails to operate when you press the horn button on your controller (see page 7), remove the wires from the lockon and reinsert each one into the opposite clip to reverse polarity.



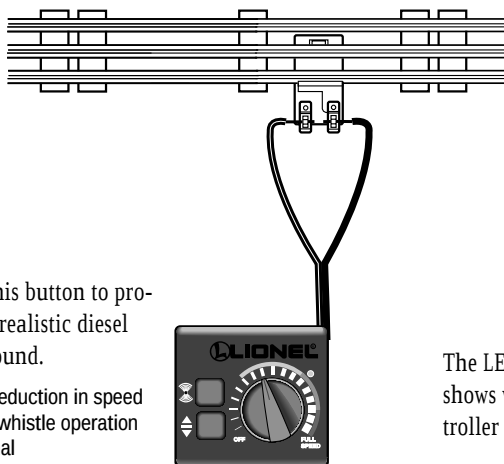
Controller operations

Controller functions

As you turn the throttle control knob to the right, power to the track is increased. When the indicator reaches the green band, there should be sufficient power to operate the locomotive. The further into the green area the knob is turned, the faster your train will go. Remember that the greater the load on the engine (adding more

cars for the engine to pull, for example), the farther into the green the knob must be turned before it will operate the locomotive.

The yellow band indicates the average power range that the train will be operating in. The red band represents maximum power output.



Press this button to produce a realistic diesel horn sound.

Note!

Slight reduction in speed during whistle operation is normal

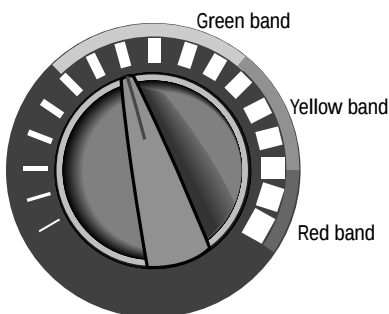


Press this button to go forward or reverse, or to place the locomotive in “neutral” (no movement, headlight is on).

The LED indicator shows when your controller is ON.



Turn the throttle control knob to the right for more power.



Controller operations

Controller and short circuits

Your Lionel power pack is listed by Underwriters Laboratories Inc. and has been carefully designed and tested to ensure peak performance. The controller is equipped with a built-in electronic circuit breaker that alternately cuts off and restores the flow of power to the track whenever a short circuit exists—for example, when the train derails. The circuit breaker's action continues until the cause of the short circuit is eliminated. This circuit breaker is incorporated into the controller to protect it from possible damage. It will not protect the locomotive or electrically operated accessories, so it's important to eliminate short circuits as soon as possible.

Note!

The power pack must be unplugged from the wall socket when a short circuit is noticed, and the short circuit must be corrected.

A short circuit is caused by a direct connection between the center rail and one of the outside rails or by a direct connection between bare wires. The axles of a derailed car or locomotive are the most frequent

cause of short circuits, so make sure that all wheels are properly set on the rails. Some other causes of short circuits might be staples, nails, paper clips, or other metallic objects lying across the rails, or two bare wires touching each other.

If too many cars or accessories are used, your controller will exceed its power limit and begin to cycle on and off. To correct this problem, cars or accessories must be removed before normal operation can resume. For more power, see the line of Lionel high-output transformers at your Authorized Lionel Value Added Dealer.

The same condition can occur if the power is turned up too quickly. This also could cause your train to move too fast and derail.

After your power pack has been operating for a while, you will find it warm to the touch. It is the nature of all electrical power equipment to become warm when in use. If your controller is loaded to capacity, it is a good idea to let it cool down after an hour or two of continuous use. Unplug the power pack from the wall when the controller is not in use.

Parents!

The transformer included with this set should be periodically examined for conditions that may result in the risk of fire, electric shock, or injury to persons (such as damage to the output cord, blades, housing, or other parts). In the event that such conditions exist, the transformer should not be used until properly repaired.

Train operation

Reverse unit procedure

The reverse unit (E-Unit) inside your Lionel locomotive is an electronic device that acts like the transmission in your car. When you apply power to the track, the locomotive moves in the direction specified by the reverse unit—or it sits in neutral, awaiting another power interruption. Power interruptions are the signal that tells the reverse unit to sequence to the next operational state.

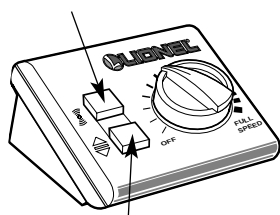
To interrupt power and sequence the locomotive's reverse unit, press the direction control button or turn the throttle to the OFF position and ON again. The reverse unit alternates between three states: forward, neutral, and reverse.

Also, the locomotive can be “locked” into a single direction by throwing the switch located on the underside of the frame (see illustration below). When the switch is thrown to the OFF position, the locomotive will be locked in

the next mode of operation in the sequence. For instance, if the locomotive is moving forward, then is stopped and the switch is thrown back, the locomotive will be “locked” in neutral. If the switch is thrown back while the locomotive is under power, the locomotive will remain in the mode it was in when the switch was thrown. The controller direction control will then have no effect on the direction of the locomotive.

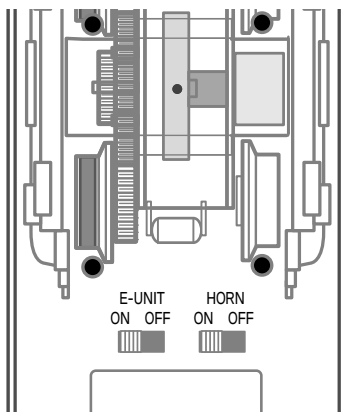
Additionally, this reverse unit has a “power-up reset” feature, which means that should the locomotive sit without power for a short period of time, the reverse unit will automatically reset and start in the forward direction when the transformer is turned on or “powered up,” regardless of the locking switch position. If the locking switch is in the Off position, the locomotive will start in the forward direction and be “locked” there.

Diesel horn control button



Direction control button

Move the horn switch to the “off” position to deactivate the horn sound.



Switch position information on the frame underside.

Train operation

Horn operation

The engine's horn is activated by the horn/whistle button on your transformer. The horn will sound as long as the button is depressed (See page 9 for button and switch location).

If the horn doesn't sound, reverse the leads to the track. Please make sure that the horn switch located on the underside of the frame is switched to the ON position.

Sometimes dirt or grease on the track, wheels, and rollers will accumulate and cause the horn to sound intermittently. Cleaning the wheels and track should eliminate this problem. We suggest using the Lionel Lubrication and Maintenance kit (no. 6-62927), available at your local Lionel Authorized Value-Added Dealer.

Tire-Traction™

Your locomotive is equipped with Tire-Traction. This means that two of the engine drive wheels on each motor truck are fitted with rubber traction tires to enhance tractive effort so your locomotive can pull

many cars at once.

Lionel locomotives with Tire-Traction grip the track, enabling them to pull heavy loads at higher speeds.

Train operation

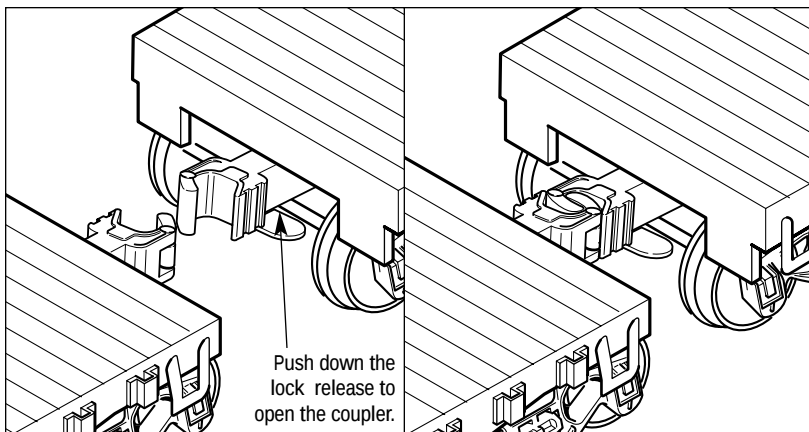
Coupling

After you have assembled the track, place the locomotive and rolling stock on the track. Before coupling the cars, make sure the wheels are properly set on the rails.

When coupling your cars, at least one of

the mating couplers must be open as shown below at the left. Now simply push the cars toward each other until they lock together.

Now you're ready to pull out of the station. *All aboard!*



Keep in mind that it's easier to couple cars on a straight stretch of track.

Maintaining and servicing your set

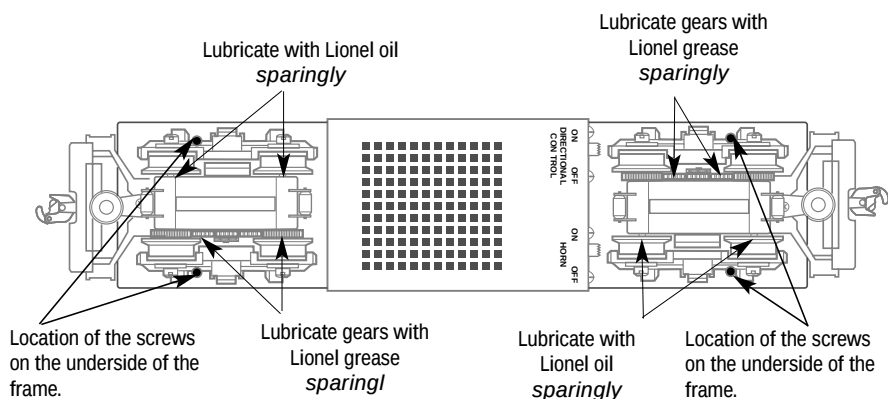
Lubricating your GP-38 diesel locomotive

Help your Lionel GP-38 lead a long and productive life on your railroad by maintaining it properly.

We recommend you purchase a Lionel Lubrication and Maintenance Kit (no. 6-62927), available from your Lionel dealer. Two basic rules to keep in mind: never over-lubricate (a small amount will

do), and avoid getting grease or oil on the GP-38's wheels or your track.

You'll know your GP-38 requires lubrication when visual inspection reveals dryness on the parts indicated in the illustration. Remove accumulated dirt and dust before lubricating, and always lubricate any locomotive emerging from prolonged storage.



Maintaining and servicing your set

Replacing your GP-38's lamps

Your GP-38 is illuminated by three 12-volt miniature lamps (Lionel no. 600-8352-311), located in both end and cab sections of the body. During the course of normal operation, they may require replacement.

To replace the lamps, start by separating the plastic body shell from the frame; remove the 4 Phillips-head screws on the underside corners of the frame as indicated in the illustration on page 12.

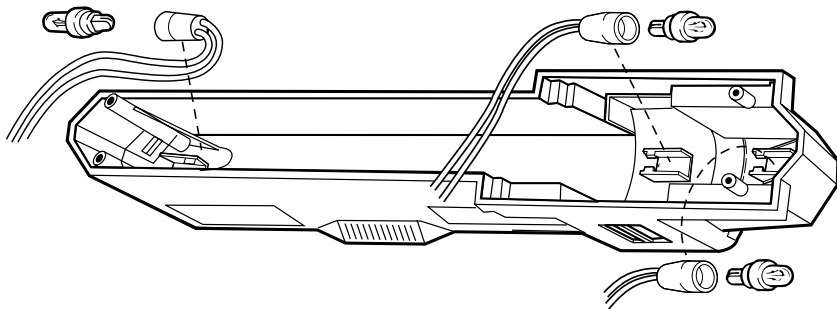
Now spread the handrails slightly and lift

the body carefully so that the paint is not scratched as you remove it.

After you have replaced the targeted lamp, reinstall the shell by lining up the screw holes on the frame and body shell, and reinserting the 4 screws. Make sure all the wires are inside the body before you tighten the screws. Now you're ready to roll.

These lamps are available from your local Lionel Authorized Service Center or Lionel Service. For more information, see Lionel Service on the back page.

View of the rear and cab lamp replacement using three Lionel no. 600-8352-311 lamps.



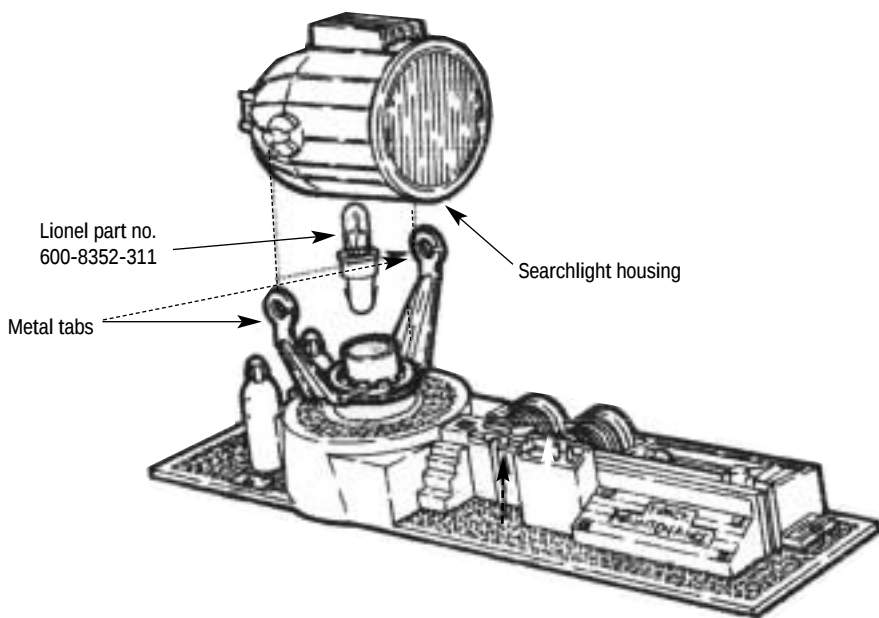
Maintaining and servicing your set

Replacing your searchlight car's lamp

To replace the lamp in your searchlight car, first remove the searchlight housing by spreading apart the metal tabs and carefully lifting the housing upwards. Pull the lamp straight up and replace it with

Lionel part no. 600-8352-311, available from your local authorized Lionel Service Center or Lionel Service.

Reinsert the searchlight housing into the metal tabs.

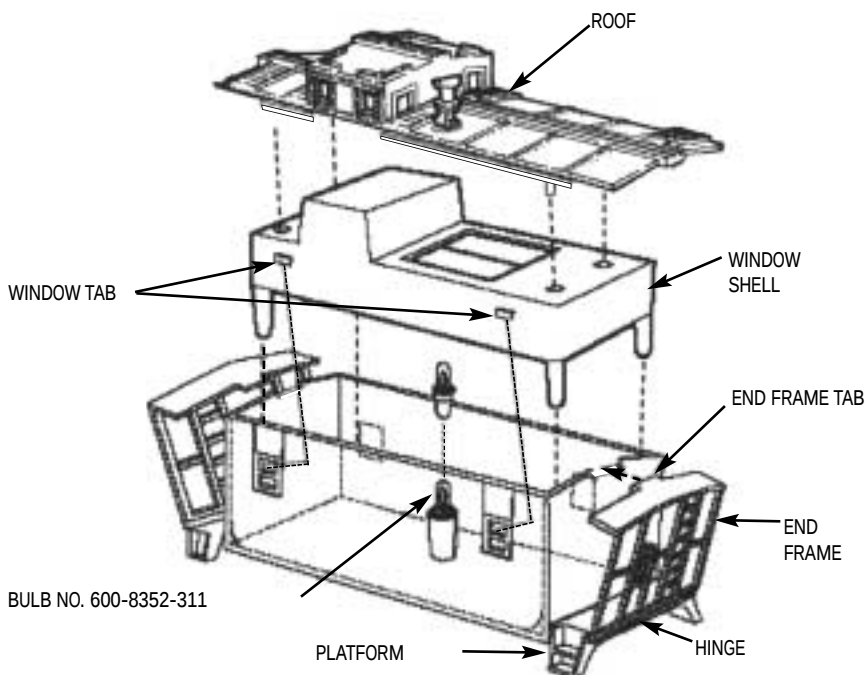


Maintaining and servicing your set

Replacing your Square Window Caboose's lamp

To replace the lamp inside the caboose, first pull out the two end frames tabs from the slot formed by the caboose body and roof. The end frame is hinged to the platform making it flexible. This allows the end frame to bend downward away from the body. Next, lift off the roof from the window shell and body. The window shell is held in place by four tabs on the sides of the shell (two on either side) that lock into the windows on the caboose. To remove the window shell, carefully separate the sides of the caboose while pulling up on the window shell until the tabs are released from the window. Pull the window shell out. To remove the lamp, pull it straight up and replace it with bulb No. 600-8352-311 available at your local Lionel Authorized Service Station or from Lionel Service.

Insert the window shell back into the body making sure that the tabs snap into the windows. Insert the roof into the window shell and fit the tabs on the end frames into the corresponding slots formed by the roof and body.



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 _____

