



78-2973-250
3/16



0-4-0 A5
Steam Locomotive
Owner's Manual

Congratulations!

Congratulations on your purchase of the LionChief Plus 0-4-0 A5 steam locomotive and tender! Equipped with the RailSounds RC sound system and ElectroCouplers, this LionChief Plus locomotive can be operated with the LionChief remote or the controls on a standard three-rail AC transformer.

Locomotive Features:

- Electric locomotive with user-selected operational modes: Conventional AC transformer control mode or LionChief wireless remote control with AC or DC power
- ElectroCouplers on the front of the locomotive and the rear of tender (compatible with LionChief Plus remote only)
- Operating headlight
- Synchronized fan-driven smoke
- RailSounds RC sound system with steam chuffing and background sounds, whistle, bell, and user-activated announcements
- On/off switches for smoke and background chuffing sounds
- Chuffing sounds in sync with speed of locomotive
- Powerful maintenance-free motor
- Die-cast metal locomotive body, frame, and trucks
- Die-cast metal tender body and trucks
- Metal frame on tender
- Engineer and fireman figures
- Traction tires
- Constant speed control

Remote Features:

- Forward and reverse speed control knob
- Buttons for whistle sound, bell, and special freight crew announcements
- Requires three AAA alkaline batteries (not included)
- Allows activation of the ElectroCoupler

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LionChief Plus system features

Locomotive control

You may choose to control your LionChief Plus locomotive with the included LionChief remote (using a transformer or power supply capable of supplying a constant 18 VAC or 18 VDC to the track) or using a conventional three-rail AC transformer with a throttle and whistle/horn and bell button. Use the TRANSFORMER/REMOTE control switch to select between LionChief remote operation or conventional three-rail AC transformer operation.

If you choose to run your locomotive in LionChief mode, slide the TRANSFORMER/REMOTE switch to the REMOTE position. Your locomotive runs on fixed 18 VAC or 18 VDC voltage, which is optimal for the sound system and smoke system. The locomotive listens to commands from its LionChief remote at a specific frequency to increase or decrease speed, change directions, trigger sounds, or operate the ElectroCouplers. That's why the locomotive and remote must be operated as a matched pair.

If you choose to run your LionChief locomotive with a transformer, slide the TRANSFORMER/REMOTE switch to TRANSFORMER position with the track power off. The locomotive responds to the transformer's throttle, direction, horn, and bell buttons.

Smoke

Your locomotive features an operating smoke unit that produces safe, clean, white smoke. Always keep a small amount of smoke fluid in the smoke unit when you are running your locomotive with the SMOKE switch in the ON position. Slide the SMOKE switch to the OFF position if you do not want to operate the locomotive with smoke. We recommend using only Lionel Premium Smoke Fluid (6-37841, available from your authorized Lionel dealer).

LionChief RC sound system

Your locomotive features a wide range of sounds to make operation even more realistic and interactive! The steam chuffing sounds are synchronized with the blasts of smoke from the smoke-stack, and they increase with the speed of the locomotive. You may choose to turn the chuffing sounds off by sliding the SOUND switch to the OFF position. See page 5 for switch locations.

Note! Keep in mind that the speaker is housed in the tender. The drawbar carries the signals to the speaker, so be sure that the drawbar is connected properly. See page 8 for more details.

LionChief Plus system features

ElectroCouplers

The ElectroCouplers can only be activated when the TRANSFORMER/REMOTE switch is in the REMOTE position. For more information on activating the ElectroCouplers, see page 9.

Switch locations

Refer to Figure 1 for the location of the switches on the underside of the locomotive's cab.

CHUFF switch: Turns background/chuff sounds on and off. Whistle, bell, and announcement are not affected.

TRANSFORMER/REMOTE switch: Toggles between Remote control mode and transformer control mode.

SMOKE switch: Turns the smoke unit on and off.

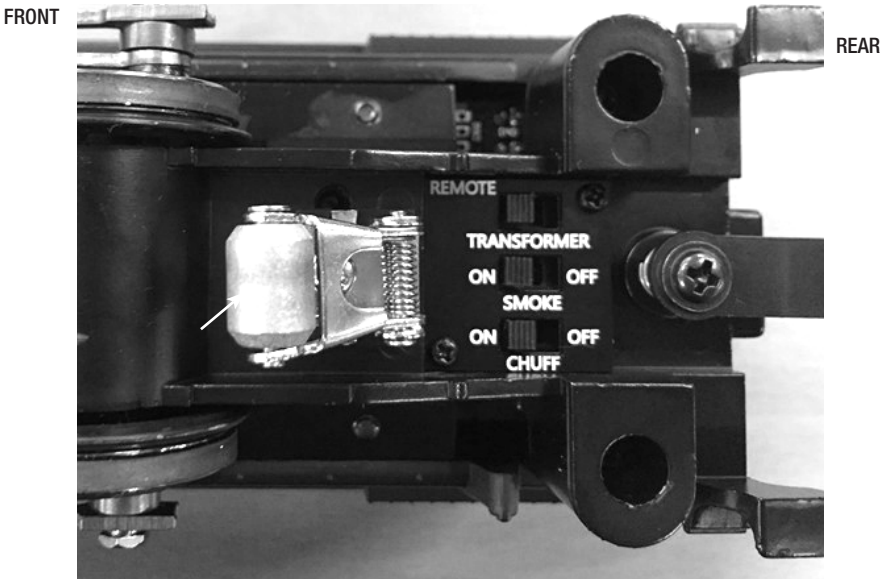


Figure 1. Switch locations

The LionChief Plus remote

Installing AAA batteries into the Remote Control

For safety purposes, you must use a Phillips screwdriver to access the battery compartment. Use a Phillips screwdriver to remove the screw that secures the battery compartment hatch and lift the hatch to access the battery compartment (as shown in Figure 2). Insert three AAA alkaline batteries orienting the +/- as shown in the bottom of the battery compartment. Replace the battery door and tighten the Philips head screw. Be careful to avoid overtightening the screw.

Important! Use only Alkaline AAA batteries. Use only new batteries. Never mix new and used batteries or use different types together.

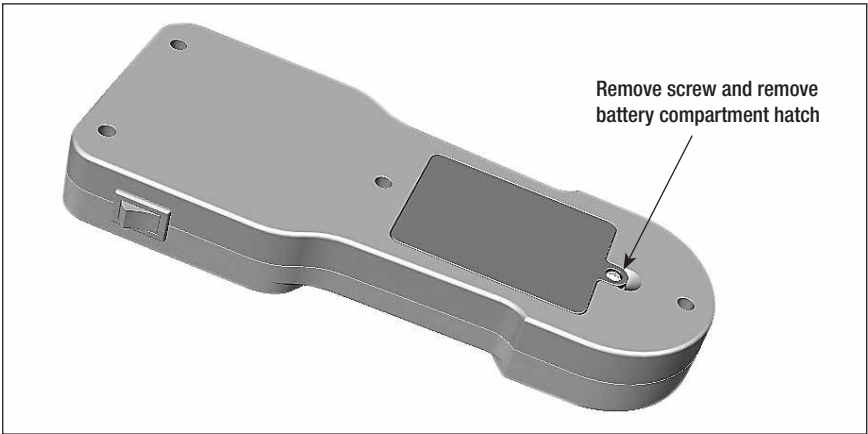


Figure 2. Opening and closing the battery compartment

Important! REMOVE ALL BATTERIES WHEN THE TRAIN WILL NOT BE USED FOR AN EXTENDED PERIOD OF TIME.

Important! When you are not operating the train, move the On/Off switch to the Off position to conserve the battery life.

The LionChief Plus remote

Operating your locomotive with your LionChief remote

THROTTLE

Turn the throttle knob clockwise to go forward and adjust the speed. Turn the throttle knob counter-clockwise to go reverse and adjust the speed. To stop the train, simply return the throttle knob to the center position.

SPEED INDICATOR LIGHT

The red light will remain on during normal operation. The light will begin to flash when the locomotive is in motion, and the flashing will vary with the locomotive's speed.

BELL

The BELL button will activate the bell sounds on locomotives equipped with this feature. Press the BELL button to begin the sounds; press the button again to turn off the bell. Press two times within two seconds to trigger the ElectroCoupler on the front of the locomotive.

ON/OFF SWITCH

To conserve your batteries, move the On/Off switch to the Off position when you are done operating your train.

WHISTLE

The WHISTLE button will activate your locomotive's whistle. Press two times within two seconds to trigger the ElectroCoupler on the rear of the tender.

ANNOUNCEMENTS

Press the center button for a variety of announcements. See page 10 for more information.



Remote operations

Running your locomotive with the LionChief remote

1

Slide the TRANSFORMER/REMOTE switch to the REMOTE position.

Refer to Figure 1 on page 5 for the location of this switch.

2

With track power turned off, place your locomotive and tender on the track.

Couple the locomotive to the tender as shown in Figure 3.

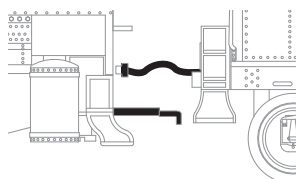


Figure 3. Drawbar connection

3

Power up the track to 18 volts (AC or DC) and move the remote power switch to ON. When the locomotive is powered up, it will beep until it syncs with the remote. When the locomotive is synced up with the remote, the locomotive start-up sounds will begin to play.

Caution!

If the smoke unit switch is in the ON position, add smoke fluid to your locomotive's stack to prevent damage to the smoke unit. Refer to page 13 for additional information.

Note!

When in remote mode and powered up on the track, the locomotive will continue to beep until it is synced up with its remote. If the locomotive beeps during operation, be sure that fresh batteries are installed properly in the remote and the TRANSFORMER/REMOTE switch is in the REMOTE position.

4

Move 'em out! Use your remote to run your train. You can adjust the speed in forward or reverse, blow the whistle, sound the bell, or trigger an announcement. Refer to page 14 for complete details.

5

Turn off the power supply when you are done running your trains. Switch off your remote control to conserve the batteries.

Remote operations

Operating the ElectroCouplers with the LionChief remote

In LionChief remote mode, press the Whistle/ElectroCoupler button two times within two seconds to open the rear ElectroCoupler. The WHISTLE button must be pressed quickly and then released in the period of one second to activate the ElectroCoupler.

Press the Bell/ElectroCoupler button two times within two seconds to open the front ElectroCoupler. The BELL button must be pressed quickly and then released in the period of one second to activate the ElectroCoupler.

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

Operating multiple LionChief Plus locomotives

You may choose to operate more than one LionChief Plus locomotive at the same time—including locomotives of the same type (e.g., two Hudsons with different road names and/or road numbers). Each locomotive is paired with a unique remote. A locomotive will only respond to commands from its corresponding remote.

If you attempt to operate two of the exact same locomotives (same type, roadname, and Lionel part number), then one remote will control both locomotives simultaneously.

Remote operations

Triggering sounds and announcements with the LionChief remote

Press the announcement on the LionChief remote to trigger the corresponding sounds. In addition, your locomotive plays a variety of announcements that are designed to match the way you operate the locomotive. You can trigger an announcement that corresponds to each part of the journey. See page 14 to silence the sounds or adjust the volume level.

When the locomotive is...

The announcement states...

Sitting still less than 30 seconds

“Stand by” announcement #1
Response #1

“Stand by” announcement #2
Response #2

Sitting still longer than 30 seconds

“Cleared out bound” announcement
Response

Running less than 30 seconds

“Departed” announcement #1
Response #1

“Departed” announcement #2
Response #2

Running more than 30 seconds

“All clear ahead” announcement
Response

Note that the dialog is different between locomotive types (e.g., between Hudsons, Pacifics, Mikados). As such, the actual announcements are not listed out in the table above.

Transformer operations

Running your locomotive with the transformer

1

Slide the TRANSFORMER/REMOTE switch to the TRANSFORMER position. Refer to Figure 1 on page 5 for the location of this switch.

2

With track power turned off, place your locomotive and tender on the track. Couple the locomotive to the tender as shown in Figure 3 on page 8.

3

Power up the track using your conventional AC transformer.

Caution!

If the SMOKE unit switch is in the ON position, add smoke fluid to your locomotive's stack to prevent damage to the smoke unit. Refer to page 13 for additional information.

4

Get your locomotive moving. Your locomotive goes through a repeating pattern of operations: neutral, forward, neutral, reverse, neutral, and so on. To sequence the reverse unit, press the DIRECTION button on your conventional three-rail AC transformer, or briefly bring the throttle all the way back to the OFF position and then forward. When track power is interrupted, the locomotive advances to the next operational state. Adjust track voltage until your locomotive moves at your desired speed.

Note!

The ElectroCoupler on the rear of the tender can only be activated using the LionChief remote (with the TRANSFORMER/REMOTE switch in the REMOTE position). The LionChief remote will not send any commands to the locomotive when operated in a conventional environment.

Transformer operations

Triggering sounds and announcements with the transformer

Using the HORN/WHISTLE button on your conventional three-rail AC transformer, you can trigger the sounds listed below. In addition, your locomotive plays a variety of announcements that are designed to match the way you operate the locomotive. To activate the announcements on your LionChief Plus locomotive, simply press the HORN/WHISTLE button for a period less than a second (there must not be any additional horn/whistle activations for another two seconds for the announcements to play.) See page 14 to silence the sounds or adjust the volume level.

When the locomotive is...

The announcement states...

Sitting still less than 15 seconds

“Stand by” announcement #1
Response #1

“Stand by” announcement #2
Response #2

Sitting still longer than 15 seconds

“Cleared out bound” announcement
Response

Running less than 7 seconds

“Departed” announcement #1
Response #1

“Departed” announcement #2
Response #2

Running more than 7 seconds

“All clear ahead” announcement
Response

Note that the dialog is different between locomotive types (e.g., between Hudsons, Pacifics, Mikados). As such, the actual announcements are not listed out in the table above. Announcements and responses will be selected at random by the internal electronics.

Three-rail AC transformers have a wide variety in their internal designs. As such, your specific transformer may not activate the sounds in the manner described above. If you find this is the case with your transformer, some experimentation may be required to find the correct timing, based on your transformer.

Locomotive operation and maintenance

Adding smoke fluid to your locomotive's smoke unit

Your locomotive is equipped with a synchronized fan-driven smoke unit that produces safe, clean white smoke during operation if the SMOKE unit switch is in the ON position. Refer to Figure 1 on page 5 for the location of the switch.

The smoke unit requires the periodic addition of Lionel smoke fluid in order to function. We recommend using only Lionel Premium Smoke Fluid (6-37841, available from your authorized Lionel dealer). Only add about four drops of fluid directly into the locomotive's stack at one time. Smoke production commences momentarily. The heating element turns off when the locomotive is at idle (or neutral) to prevent damage. It will take a few moments for smoke to appear once the locomotive begins moving. The smoke will remain at a constant volume throughout all speed ranges. When smoke production decreases, add more fluid (about four drops). An idle locomotive will not smoke.

Note! If you prefer to operate the locomotive without smoke, slide the SMOKE unit switch to the OFF position.

Caution! When the SMOKE switch is in the ON position, always keep a small amount of smoke fluid in the locomotive's smoke unit, as the element can become damaged if operated without smoke fluid.

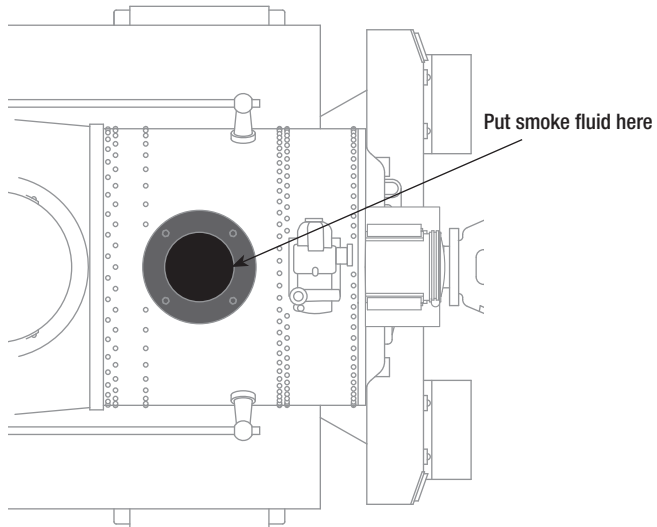


Figure 4. Stack

Locomotive operation and maintenance

Adjusting the volume using the LionChief remote

To turn off the locomotive's steam background sounds, slide the CHUFF switch to the OFF position. Refer to Figure 1 on page 5 for the location of this switch.

The overall volume of the sounds in your locomotive can be adjusted, but this requires the use of the LionChief remote (in remote operation mode). To enter Volume Control Mode, place the remote on a flat surface. Using one hand, press the WHISTLE **and** BELL buttons simultaneously. After three seconds, the remote's red LED will begin to flash, acknowledging that you are in volume adjustment mode. Keep the WHISTLE and BELL buttons depressed.

Using your other hand turn the speed control knob up or down to adjust the volume to your preference. Release the WHISTLE and BELL buttons to exit volume adjustment mode.

Locomotive operation and maintenance

Lubricating your locomotive

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

We recommend that you purchase a Lionel Lubrication and Maintenance Kit (part 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 locomotive wheels, contact rollers, *or* your track.

You'll know your locomotive requires lubrication when visual inspection reveals dryness on the parts indicated in Figure 5 or the locomotive and tender begin to squeak. Remove accumulated dirt and dust before lubricating, and always lubricate any locomotive emerging from prolonged storage. Also, lightly lubricate the locomotive side rods, drive rods, linkage, front and rear truck pivot points, and tender wheel bearings after each 25 hours of operation.

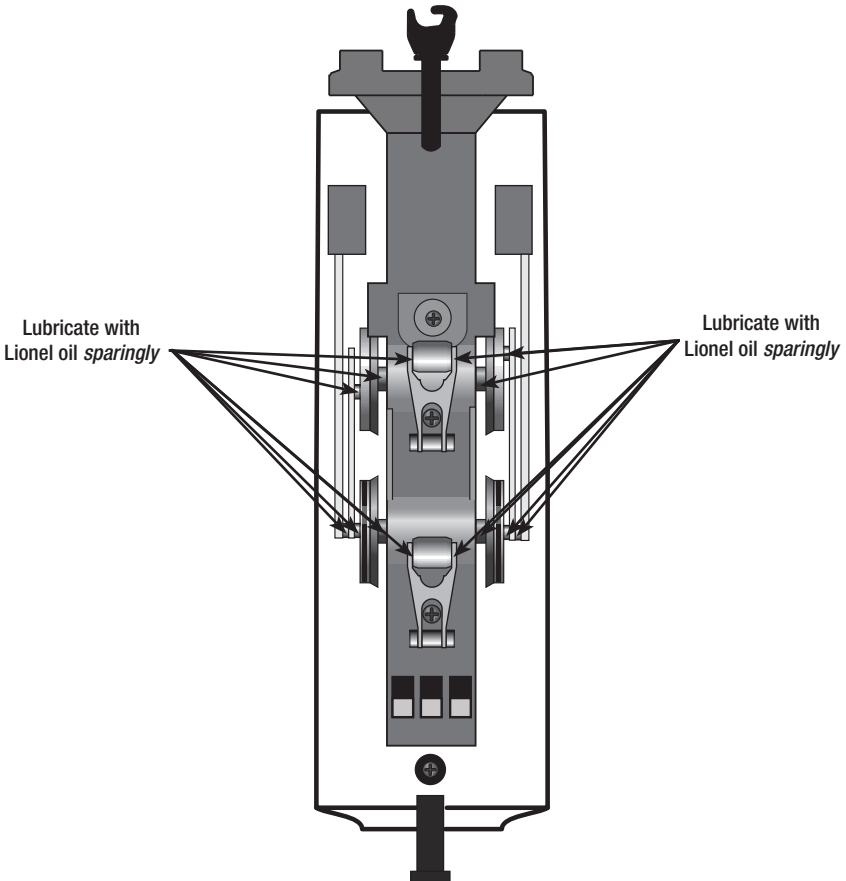


Figure 5. Lubrication points and screw locations

Locomotive operation and maintenance

Servicing your locomotive's LEDs

Your locomotive is equipped with an LED-style lamp for longer life. Please contact your Factory Trained Authorized Lionel Service Station or Lionel Customer Service if LED replacement is required.

FCC Statement

FCC Statement

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

.....

Notes: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Parents! The adaptor should be periodically examined for the conditions that may result in the risk of fire, electric shock, or injury to persons and that, in an event such conditions , the adaptor should not be used until properly repaired.

LionChief Troubleshooting

Problem: The locomotive stopped dead:

LionChief Plus locomotives are equipped with “motor lock out” technology. This means that if the internal electronics do not detect the motor feedback signal (a function of the constant speed control system) within a two-second period of being given a command to start moving (or has been underway for a period of time) the motor will lock itself out. This is done to prevent the locomotive from losing control.

Solution: Simply return the Lionchief dial to the center (stopped) position, if using Remote mode or cycle the power on your conventional transformer. Once you tell the locomotive to begin moving it will. If the problem persists you likely have a loose electrical connector inside the locomotive and it should be taken to a local Factory Trained Authorized Service Station or contact Lionel Customer Service directly.

Problem: The locomotive does not smoke

Resolution:

- Ensure the SMOKE switch is in the ON position. (You must cycle the power if you have to change the position of the switch.)
- The locomotive must be moving for the smoke to come out of the stack. If the locomotive is sitting in neutral (or idle) you must get the locomotive moving for about 5-10 seconds for the smoke to start coming out of the stack.
- Ensure you have four drops of smoke fluid in the smoke stack. Before getting the locomotive running.
- You may need to blow down the stack to clear any potential blockage that may have been created when you added smoke fluid.
- If you do not plan to use the smoke unit ensure the SMOKE switch is in the OFF position, failure to add smoke fluid can cause permanent damage to the smoke unit.

Problem: The LionChief Remote will not control the locomotive

Resolution:

- Ensure you have fully charged batteries in the remote. (The LED on the top of the remote will illuminate when the remote is turned on.)
- Ensure you are using the remote paired with the locomotive you are trying to operate (road name and road number match).
- Ensure the TRANSFORMER/REMOTE switch is in the REMOTE position. Turn the track power off, turn the remote OFF. Power up the locomotive with the track power. It will begin to beep when power is applied, now turn the remote on and wait. The remote is synced to the locomotive. When the sounds in the locomotive come alive you will know the locomotive and remote have synchronized.
- If the red LED on the top of the remote begins to blink when the throttle is turned and the locomotive does not begin to move it may be an instance of the “motor lock out” feature. See the first resolution of troubleshooting problem.

LionChief Troubleshooting (continued)

Problem: Sound volume is low

Resolution: Follow the volume adjustment directions found on page 14. If this does not correct the problem please contact Lionel Customer Service.

Problem: The locomotive continues beeping and will not respond to the LionChief Remote

Resolution:

- Ensure the remote you are using is matched to the locomotive you are trying to control (road name and road number). Follow the instructions on page 8.
- Ensure the TRANSFORMER/REMOTE switch is in the REMOTE position.
- Ensure the remote is powered on.

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 a 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 2 or write to Lionel Customer Service, 6000 Victory Lane, Concord, NC 28027. 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 _____



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