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11/08



The Polar Express Tender Owner's Manual

Featuring

LEGACY
R·A·I·L·S·O·U·N·D·S

Congratulations!

Congratulations on your purchase of The Polar Express tender! This tender is equipped with LEGACY RailSounds sound system and an ElectroCoupler. It can be operated with the Pere Marquette Berkshire (6-11146, available separately), or many other LEGACY steam locomotives

Features of this tender

- LEGACY RailSounds sound system
- Conductor announcements taken directly from The Polar Express movie
- Wireless Tether connection between locomotive and tender
- Directional back-up light
- * Dual 'FatBoy' speakers
- ElectroCoupler
- Minimum Curve: 0-54

Note! These instructions highlight the operation of the RailSounds Sound System included with The Polar Express tender. For more detailed information on the operation of LEGACY steam locomotives and the LEGACY RailSounds Sound System, refer to the instruction manuals provided with those products. Additional information is also available online at www.lionel.com.

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

Quick Start

Note! Power your locomotive with an alternating-current (AC) transformer only. Powering your locomotive with a direct-current (DC) transformer, or in excess of 19 volts AC, may result in damage to sensitive electronic components.

LEGACY Control operations

For the finest operating experience, your locomotive is fully compatible with the new LEGACY Control System.

To operate in LEGACY mode, you need a LEGACY Command Base and LEGACY CAB-2 Remote Controller. Both products are offered together in the LEGACY Command Set, 6-14295.

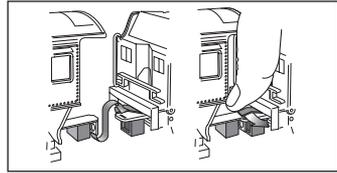


Figure 1. Drawbar connection

1. **Turn off track power and plug in the LEGACY Base.**
2. **Place your locomotive on Lionel or Lionel-compatible 0-54 or larger track and connect the drawbar between the locomotive and tender as illustrated in Figure 1.**
3. **Increase track power voltage to full power (no more than 19 volts AC).**
4. **Press ENG and 1 to address your locomotive with your LEGACY CAB-2 Remote Controller.**
5. **Throttle up and move 'em out.**

TrainMaster Command Control operations

To operate your locomotive in the Command Control environment, you need a Command Base (available separately, 6-12911) and a CAB-1 Remote Controller (available separately, 6-12868).

1. **Turn off track power and plug-in the Command Base.**
2. **Place your locomotive on Lionel or Lionel-compatible 0-54 or larger track and connect the drawbar between the locomotive and tender as illustrated in Figure 1.**
3. **Increase track voltage to full power (no more than 19 volts AC).**
4. **Press ENG and 1 to address your locomotive with your CAB-1 Remote Controller.**
5. **Throttle up and move 'em out.**

Transformer operations

1. **Place your locomotive on Lionel or Lionel-compatible 0-54 or larger track and connect the drawbar between the locomotive and tender as illustrated in Figure 1.**
2. **Power your locomotive at 12-18 volts with your alternating current (AC) transformer.**
3. **Wait three to eight seconds until the locomotive's headlight illuminates and the LEGACY RailSounds sound system starts up.**
4. **Move 'em out! Press the DIRECTION button on your controller, then throttle up.**

Conventional transformer operations

Coupling your tender in the conventional environment

The rear of the tender features an ElectroCoupler that is released by remote control at any point around your layout in the TrainMaster Command Control environment.

In the conventional environment, the ElectroCoupler will not open manually or by using a Remote-Control Track section. To couple your tender in the conventional environment, you must rely on a piece of rolling stock equipped with a magnetic coupler. Simply release the magnetic coupler and couple the rolling stock to the locomotive, even if the ElectroCoupler is closed.

Keep in mind that you may still make use of Lionel Remote-Control Track sections (6-65530 for O gauge; 6-12746 and 6-65149 for O-27 gauge; and 6-12020 for FasTrack layouts) with the magnetic couplers on the rolling stock. Place the trigger disc on the magnetic coupler over the central coil on the Remote-Control Track section, then press UNCOUPLE on the track section's controller. As illustrated in Figure 1, the magnetic field pulls the disc downward, releasing the coupler.

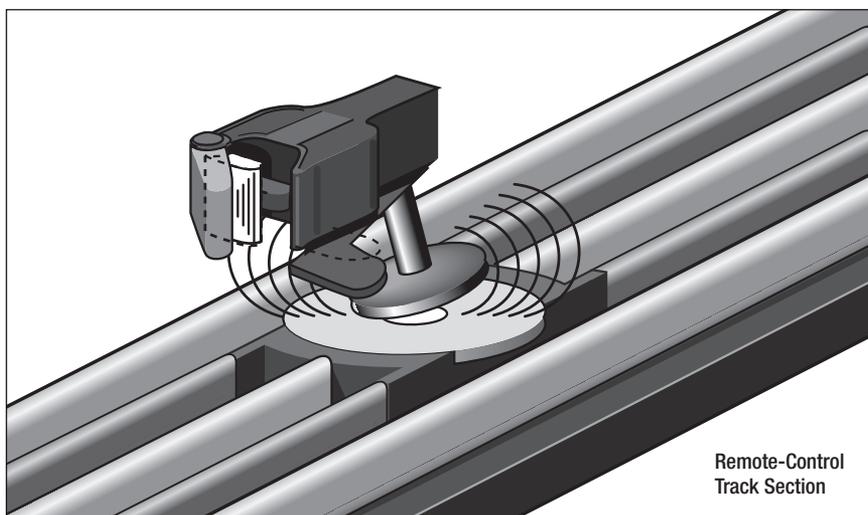


Figure 1. Magnetic coupler operation

LEGACY RailSounds sound system operations

LEGACY RailSounds sound system operations

Your locomotive is equipped with the Lionel LEGACY RailSounds sound system, the most realistic model railroad sound system in the world. The LEGACY RailSounds sound system brings the sounds of the railroad to your layout through high quality sound recordings of real locomotives.

When you operate your locomotive in the conventional environment, you get realistic chuffing sounds, which automatically increase through 15 levels as the speed of the locomotive increases. You can sound the locomotive's whistle or activate the ringing of the bell. When you are through with operations and power down the track, your locomotive's LEGACY RailSounds sound system starts a realistic steam shutdown sequence (a nine-volt battery is required for the operation of the LEGACY RailSounds sound system when the track is powered down).

When you operate your locomotive in the TrainMaster Command Control environment, you gain additional control of the LEGACY RailSounds sound system, including the whistle and bell sounds. The locomotive's chuffing sounds automatically increase, but you can also set a particular chuff intensity level using your CAB-1 Remote Controller. In the Command Control environment, the release of the ElectroCoupler is accompanied by a coupler release sound. Use the **BRAKE** button, and listen for the sound of squealing metal. You can also trigger CrewTalk dialog and TowerCom announcements, which simulate the interaction between the locomotive crew and the dispatcher. Whenever you choose to shutdown your locomotive, the realistic shutdown sequence commences (a nine-volt battery is required for the operation of the LEGACY RailSounds sound system when the track is powered down).

Operating your locomotive with the LEGACY Control system provides you control of all the features mentioned above as well as access to the new **quilling whistle** and **single hit bell** sounds.

LEGACY RailSounds sound system operations

Installing the battery

Although the LEGACY RailSounds sound system is powered through the track, we recommend that you install a nine-volt alkaline battery in the tender to prevent the sound system from shutting down during track power interruptions (for example, at a switch or a dirty section of track). Follow these steps and refer to Figure 2 on page 7 as you install the battery.

Note! If the RailSounds sound system turns off during interruptions in track power, you may need to replace the battery.

1. Remove the body screws from the underside of the tender. Refer to Figure 2 on page 7 for the location of the screws.
2. Lift the body off the frame. Be careful to avoid pulling on the wires that connect the body to the frame.
3. Remove the protective cover from the battery harness.
4. Snap the battery harness onto the nine-volt alkaline battery's terminals.
5. Slide the battery into the battery holder.
6. Replace the body on the frame and secure it with the body mounting screws. Be careful to avoid pinching wires between the body and the frame.

LEGACY RailSounds sound system operations

Installing the battery (continued)

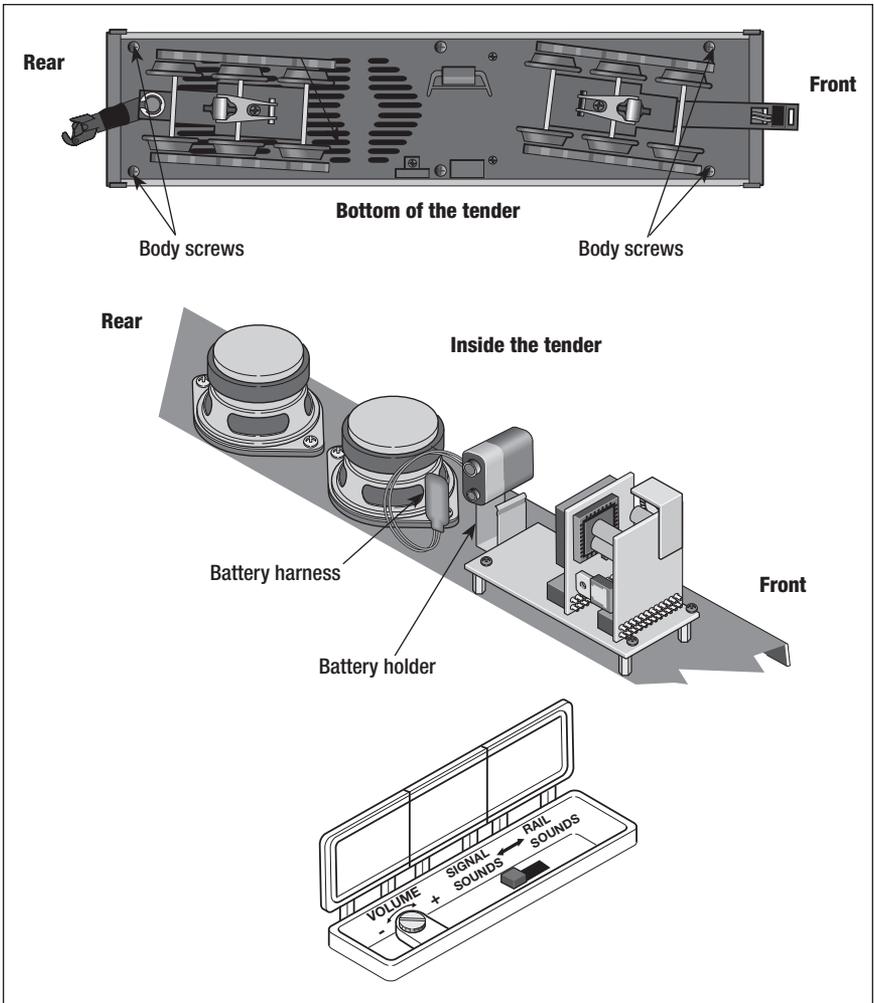


Figure 2. Installing the battery in the tender

LEGACY RailSounds sounds system controls

To silence the chuffing sounds and background sounds, slide the LEGACY RailSounds sound system switch located under the hatch on top of the tender to the SIGNALSOUNDS position before you power up the locomotive or after the locomotive has been powered down for a minimum of ten seconds. The whistle and bell sounds will still be active. To adjust the volume, use the volume control knob located under the hatch on top of the tender.

LEGACY RailSounds sound system operations

Using the LEGACY RailSounds sound system in the TrainMaster Command Control environment

Operating in the TrainMaster Command Control environment allows you access to many of the features of the LEGACY RailSounds sound system. The CAB-1 Remote Controller activates features such as TowerCom announcements, CrewTalk dialog, and coupler release sounds. Refer to pages 8, 9, 10 and 11 to learn how the LEGACY RailSounds sound system is integrated into TrainMaster Command Control operations.

Note! For proper operation of the LEGACY RailSounds sound system during track power interruptions and for the locomotive shutdown sequence, you must install a nine-volt alkaline battery. See pages 6-7.

In the TrainMaster Command Control environment, you will experience these features of the LEGACY RailSounds sound system.

- **DynaChuff.** Your locomotive's speed automatically determines the level of chuffing sounds. At low speeds, the chuffing is relaxed. When you highball down the mainline, the chuffing intensity is labored. You may also manually set the chuff sounds to a particular level using your CAB-1 Remote Controller.
- **Whistle.** A different whistle sound at different speeds.
- **Authentic bell.** Press **BELL** on your CAB-1 Remote Controller to begin the effect, then press **BELL** a second time to discontinue the effect.
- **Squealing brakes.** Press the **BRAKE** button and listen for the squealing of the locomotive's brakes as the locomotive slows down.
- **Coupler release sounds.** Use your CAB-1 Remote Controller to release the ElectroCoupler, and you get the sounds of the coupler opening.
- **TowerCom announcements.** TowerCom announcements are a dispatcher-initiated radio conversation with the engineer. Depending on the movement of the locomotive, the dialog will change. The LEGACY RailSounds sound system will often use different words and phrases when composing the conversation.
- **CrewTalk dialog.** CrewTalk dialog is an engineer-initiated radio conversation with the dispatcher. Depending on the movement of the locomotive, the dialog will change. The LEGACY RailSounds sound system will often use different words and phrases when composing the conversation.
- **Reverse unit reset sound.** Power down your track, wait three seconds, and listen for the air-release sound—that's the locomotive telling you that its Lionel Command reverse unit has reset to forward. (A nine-volt alkaline battery is required.)
- **Shutdown sequence.** When you turn off track power, you have two seconds to power up again after you hear the reverse unit reset sound. If you do not restore power, you will hear the realistic shutdown sequence. Because track power is off, a battery is required for this sequence to function.

LEGACY RailSounds sound system operations

Using the LEGACY RailSounds sound system in the conventional environment

When you first power up your locomotive, you will hear the sounds of the locomotive at rest. As the locomotive moves, the chuffing sounds automatically increase with the locomotive's speed. In the conventional environment, the whistle and bell sounds are activated by your transformer controls.

In the conventional environment, you will experience several features of the LEGACY RailSounds sound system.

- **DynaChuff.** Your locomotive's speed automatically determines the level of chuffing sounds. At low speeds, the chuffing intensity is relaxed. When you highball down the mainline, the chuffing intensity is labored.
- **Whistle.** A different whistle sound at different speeds.
- **Authentic bell.** Press **BELL** on your transformer to begin the effect, then press **BELL** a second time to discontinue the effect.
- **CrewTalk dialog and TowerCom announcements.** These brief conversations between the train crew and the tower are triggered by short whistle blasts.
- **Reverse unit reset sound.** Power down your track, wait three seconds, and listen for the air-release sound, which is the locomotive telling you that its Lionel Command reverse unit has reset to forward. (A nine-volt alkaline battery is required.)
- **Shutdown sequence.** When you turn off track power, you have two seconds to power up again after you hear the reverse unit reset sound. If you do not restore power, you will hear the realistic shutdown sequence. Because track power is off, a battery is required for this sequence to function.

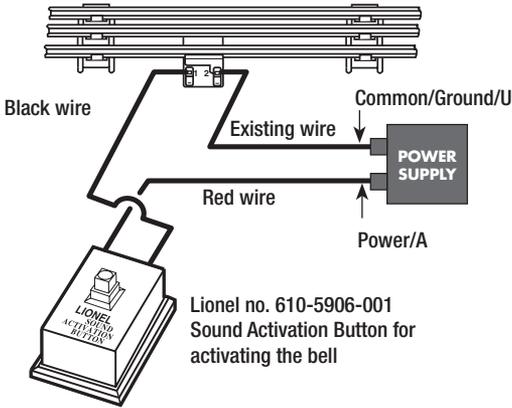
LEGACY RailSounds sound system operations

Installing a Lionel Sound Activation Button for conventional operation

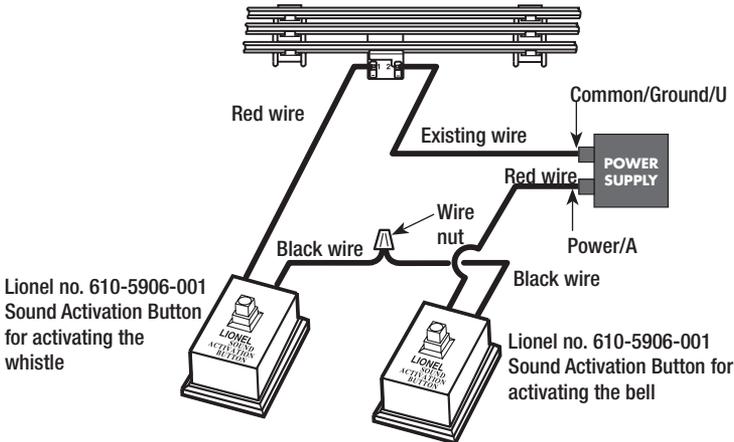
If your transformer lacks **WHISTLE** and **BELL** buttons, you will need to install Lionel no. 610-5906-001 Sound Activation Buttons (available separately) to activate the locomotive's whistle and bell sounds.

Connect the buttons as shown below. Be sure that all track power passes through the Sound Activation Button(s). Do not bypass the buttons.

For AC transformers lacking a bell button



For AC transformers lacking bell and horn/whistle buttons



LEGACY RailSounds sound system operations

Activating the CrewTalk dialog and TowerCom announcements in the conventional environment

In the conventional environment, CrewTalk dialog and TowerCom announcements are triggered by short whistle blasts and vary with the state of the locomotive.

- If the locomotive has been stopped for less than 15 seconds, a short whistle blast triggers a “please standby” dialog.
- If the locomotive has been stopped for longer than 15 seconds, a short whistle blast triggers a “cleared outbound” dialog.
- If the locomotive is moving, a short whistle blast triggers an “all clear ahead” dialog.
- If the locomotive is moving with the bell activated, a short whistle blast triggers a “slow to caution” dialog.

Tender Backup Light

The tender backup light is a LED (light emitting diode) and is not user serviceable. It can be replaced by your authorized Lionel Service Center if ever required.

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 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, or 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 **Lionel Authorized 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 **Lionel Authorized 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 5 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, 50625 Richard W. Blvd, 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 Verbal 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 5 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 _____

