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Lionel
GP7 Diesel Locomotive
Owner's Manual

Congratulations!

You purchased a tough, durable locomotive—the Conventional GP7 diesel locomotive built by Lionel. From the crisp detail and expert decoration on the outside to the brute power under the hood, this locomotive is ready for duty on your model railroad.

Features of this locomotive

- **Conventional transformer control with forward-neutral-reverse-neutral operation**
- **Headlights on both ends**
- **Powerful Pullmor motor**
- **Dual operating magnetic couplers**
- **Operating horn and bell sounds with volume control**
- **Lighted cab interior**
- **MagneTraction track gripping system**
- **Traction tires**
- **Minimum Curve: 0-31**

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Transformer operations

Running your locomotive with a Lionel transformer

1

Place your locomotive on Lionel or Lionel-compatible 0 gauge track.

2

Power up your locomotive with your transformer.

Your locomotive is designed to operate on 8-18 volts alternating current (AC). Virtually all Lionel and Lionel-compatible alternating-current transformers are suitable.

Caution!

Do not power your locomotive with direct current (DC). Damage to sensitive electronic components may occur.

3

Move 'em out!

Get your locomotive moving. Press the DIRECTION button on your Lionel transformer. This sequences the electronic reverse unit through the repeating sequence of forward, neutral, reverse, and neutral operation.

Adjust track voltage until your locomotive moves at your desired speed. To increase speed, increase track voltage. To decrease speed, reduce voltage. To stop the locomotive, turn-off track power, or cycle it to neutral.

Transformer operations

Locking your locomotive into forward-only operation

When the reverse unit switch is in the RUN position, your locomotive sequences through a repeating pattern of operations: forward, neutral, reverse, neutral, and so on.

To lock your locomotive into forward direction only operation, you can deactivate the reverse unit's sequencing function. Follow the steps below and refer to Figure 1 for the location of the switch.

Note! Always turn off track power before removing the locomotive from the track.

1. Turn off track power, wait three seconds, and remove the locomotive from the track. Now slide the reverse unit switch to the LOCK position. Your locomotive is now locked into forward direction only operation.
2. Place your locomotive back on the track. Power up the track and press the direction button on your transformer to confirm that the locomotive is now locked into forward direction only operation.

To restore the forward-neutral-reverse sequence, turn off power and remove your locomotive from the track. Slide the reverse unit switch back to the RUN position. Place the locomotive back on the track and restore track power.

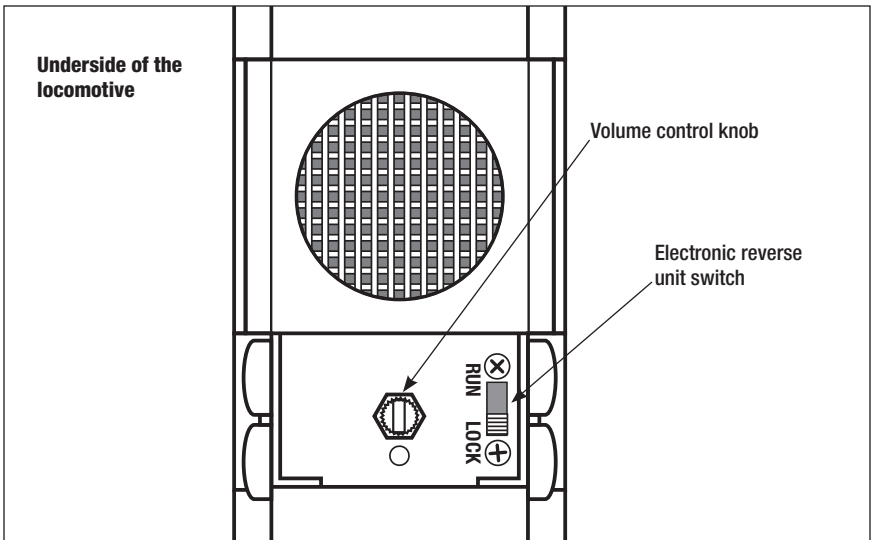


Figure 1. Switch locations

Transformer operations

Using your locomotive's magnetic couplers

Your Lionel locomotive is equipped with operating magnetic knuckle couplers, a revolutionary design first introduced by Lionel in 1945.

Lionel magnetic couplers react to the magnetic field generated by a Lionel Remote-Control Track section (available separately, 6-65149 or 6-12746 for 0-27 gauge; 6-65530 for 0 gauge; or 6-12020 and 6-12054 for FasTrack layouts).

Place your locomotive's coupler trigger disc over the central coil of a Remote-Control Track section and press UNCOUPLE on the controller. The magnetic field pulls the disc downward, and the knuckle opens.

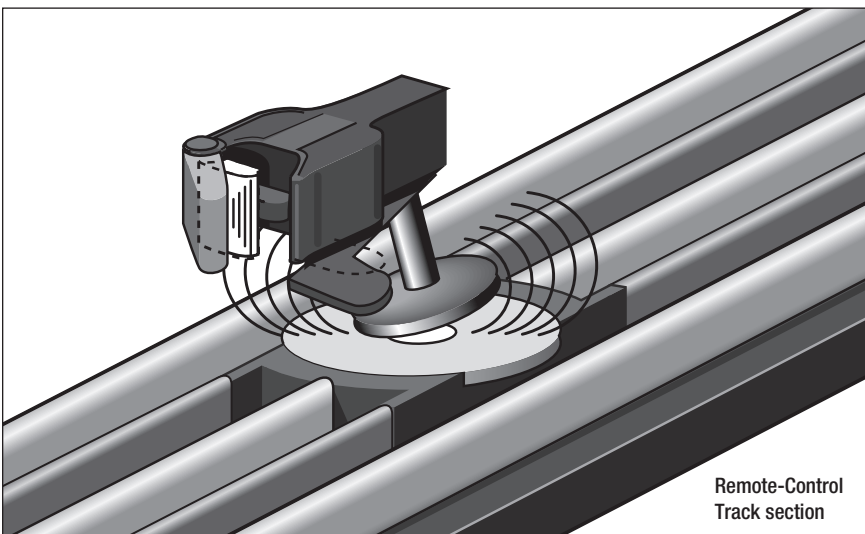


Figure 2. Trigger disc operation

Sounding your locomotive's horn and bell

Use the HORN and BELL buttons on your transformer to activate the locomotives horn and bell sounds. See the **Installing a Lionel Sound Activation Button** section of this manual if your transformer is not equipped with these buttons.

To adjust the volume of the horn and bell sounds, use the volume control knob located on the underside of the locomotive. See Figure 1 on page 5 for the location of the volume control knob.

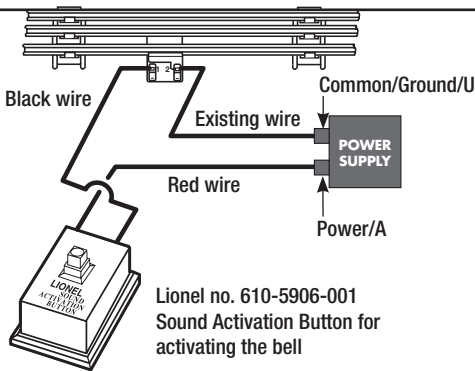
Transformer operations

Installing a Lionel Sound Activation Button

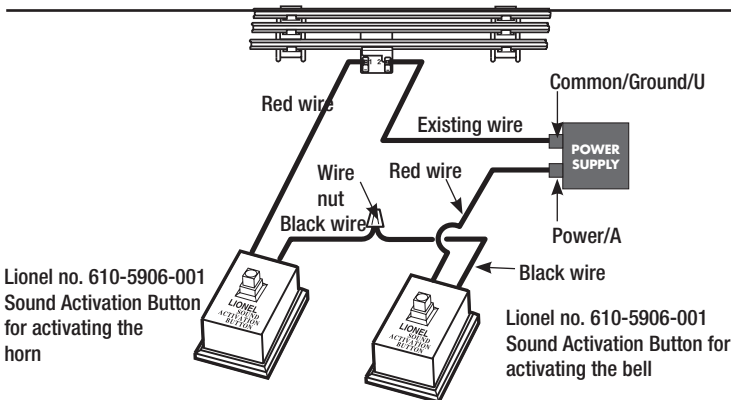
If your transformer lacks HORN and BELL buttons, you will need to install Lionel no. 610-5906-001 Sound Activation Buttons (available separately) to activate the locomotive's horn and bell sounds.

Connect the buttons as shown below. Be sure that all track power passes through the Sound Activation Button(s).

For AC transformers lacking a bell button



For AC transformers lacking bell and horn/whistle buttons



Maintaining and servicing your locomotive

Lubricating your locomotive

Help your Lionel locomotive lead a long and productive life on your railroad by maintaining it properly. To keep your locomotive lubricated, we recommend that you purchase a Lionel Lubrication and Maintenance Kit (6-62927), available from your authorized Lionel dealer or service station.

When you find that the lubrication points illustrated in Figure 3 appear dry, lubricate your locomotive after you have removed any accumulated dirt and dust. There are two basic rules to keep in mind when you are lubricating your locomotive: use only a small amount of lubrication and avoid getting grease or oil on your locomotive's wheels, roller pick-ups, or the track.

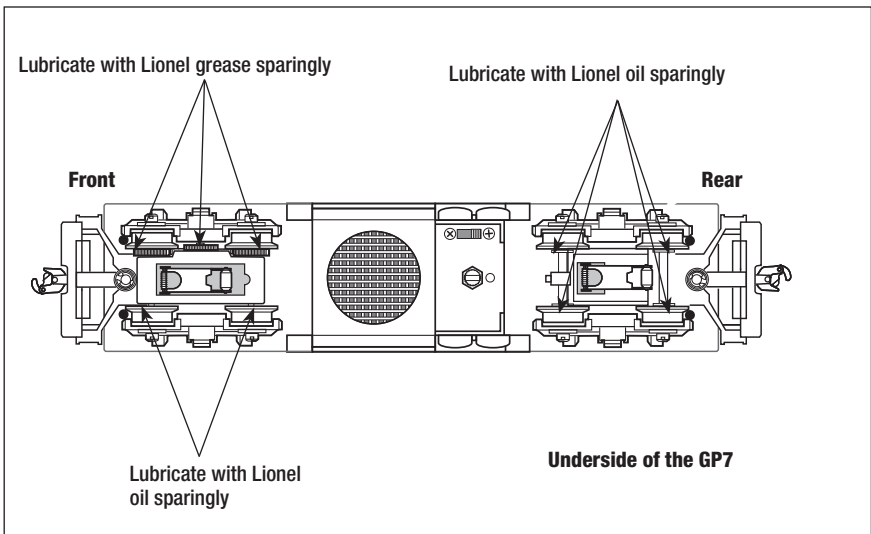


Figure 3. Underside details and lubrication points

Maintaining and servicing your locomotive

Lubricating your locomotive's Pullmor motor armatures

Your locomotive will require occasional lubrication of its Pullmor motor armatures. If you hear excess noise during operation, or if the locomotive slows down intermittently, you may need to oil the top armature bearings.

1. Remove the locomotive's body mounting screws from both ends of the body. Carefully lift the shell away from the frame.
2. Apply a small amount of Lionel oil (two drops) in the hole at the top of each motor. See Figure 4.
3. Replace the body, securing it with the two body mounting screws.

Note! To prevent damage to the locomotive body, do not overtighten the body screws.

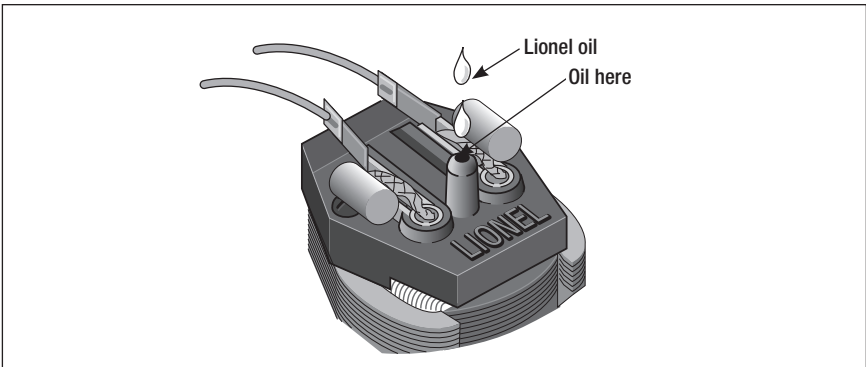


Figure 4. Pullmor motor lubrication

Maintaining and servicing your locomotive

Lubricating your locomotive's lamps

Your locomotive is illuminated by two 14-volt lamps. During the course of normal operations, they may require replacement

1. Remove the locomotive's body mounting screws from both ends of the body. Carefully lift the shell away from the frame.
2. To remove the lamp, gently push the lamp down and turn counter clockwise to disengage the lamp from the socket
3. Replace it with Lionel part no. 6000363300, available from your authorized Lionel dealer or service station, or from Lionel Customer Service. See **Instructions for Obtaining Service** on page 12 for more information.
4. Replace the body, securing it with the two body screws.

Note! To prevent damage to the locomotive body, do not overtighten the body screws.

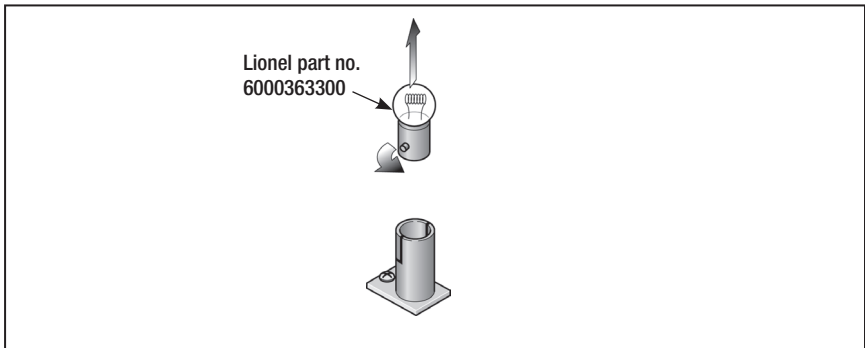


Figure 5. Lamp replacement

Maintaining and servicing your locomotive

Replacing the traction tires

Your locomotive is equipped with traction tires to increase the tractive effort of your locomotive and allow it to pull more cars at one time.

During the course of normal operations, the traction tires may become worn out. Replacement traction tires are included with the locomotive. We recommend that you have the traction tires (Lionel part no. 6106001065) replaced by an authorized Lionel dealer or service station because the truck and side frames must be removed to access the wheels. See

Instructions for Obtaining Service on page 12 for more information.

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-transferable) 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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