



GGI ELECTRIC

World's Largest Die-Cast GGI Electric

OWNERS MANUAL



1:29 Scale

USA TRAINS
P.O. BOX 100
MALDEN,
MA 02148, USA
www.usatrains.com



Dear Customer,

Congratulations on your purchase of the world's largest die-cast GGI Electric locomotive.

The Engineering and Design staff at USA Trains has spent many hours reviewing blueprints and developing a locomotive that looks authentic and will provide you with many hours of operating enjoyment. We believe that our customers deserve

the high level of detail of this die-cast model and strive every day to provide you with the latest technologies that give more "realism" at a reasonable price. This locomotive will enhance the appearance of any modeler's railroad.

Please read the following instructions which will help you understand and operate the numerous features of this locomotive.

Happy Railroading
USA TRAINS

HISTORY OF THE GGI ELECTRIC LOCOMOTIVE

In the mid 1930's, the depression had the nation's railroads in economic stagnation and disaster. However, Pennsylvania Railroad was the self-proclaimed "Standard Railroad of the World" and was moving forward an electrification program that would stretch for 2677 track miles or 40% of all the electrification in the United States by the end of the decade. A new locomotive was needed for this program and in 1935 Pennsy had selected one that would remain the symbol of passenger operations under wire for decades - the GGI.

The initial order was for 57 locomotives which represented one of the largest locomotive orders in the history of American railroading. The 57 locomotives were produced jointly by General Electric, Westinghouse, Baldwin and PRR's own Altoona Works. The original prototype was built with overlapping metal sheets riveted together. Raymond Loewy, a noted industrial designer, made the decision to weld the entire exterior into a single, sleek, unbroken shell, removing all the rivets and the seams between the plates. Other cosmetic changes were made such as teardrop marker lights and a sleek paint job with five narrow, elegant gold stripes which ran the length of the locomotive and curved down over the nose forming the famous "cat's whiskers." This design would make Loewy famous. The GGI was recognized as one of the most reliable locomotives for passenger service reaching speeds of 100 mph. A grand total of 139 GGI locomotives were produced and remained in service for 42 years.

The accurate reproduction of this locomotive by USA Trains will allow the modeler to have an authentic GGI locomotive running among the other locomotives on his/her railroad.

SERVICING

This locomotive is built with pride by USA Trains and is covered by a limited warranty. (See limited warranty terms). Please follow these instructions carefully before sending your locomotive for service:

1. Return locomotive in its original box with the proper foam inserts and then pack the original box in a proper shipping carton so it is well protected in shipment. The package must be fully insured and prepaid. USA Trains is not responsible for damage or loss during shipment.
2. Include a note explaining the problem and servicing you need performed. Be sure to include your name, street address, (NO P.O. BOXES PLEASE) City, State, Country (if outside U.S.A) and zip code along with a daytime phone number including area code. If the locomotive service is not covered by warranty, a reasonable service fee will be charged. For any locomotives to be returned outside the continental U.S.A., please include \$100.00 U.S. currency to cover return postage. Any locomotives returned to customers in the continental U.S.A. will be pre-paid by USA Trains.

3. Ship your item to:

USA TRAINS
662 CROSS STREET
MALDEN, MA. 02148

LIMITED ONE YEAR WARRANTY

This USA Trains locomotive is warranted for one year from the date of purchase against defects in material or workmanship. We will repair or replace (at our option) the defective part without charge for parts or labor within one year of the original date of purchase provided the warranty registration card has been received by USA Trains. This warranty does not cover items that have been abused or damaged by careless handling or improper operation such as a train derailment, modification or repair by non-factory technicians. Parts that "wear out" due to excessive use are also not covered under warranty. USA Trains reserves the right to determine "excessive use". Transportation costs incurred by the customer are not covered under this warranty.

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MAINTAINING AND SERVICING

LUBRICATION

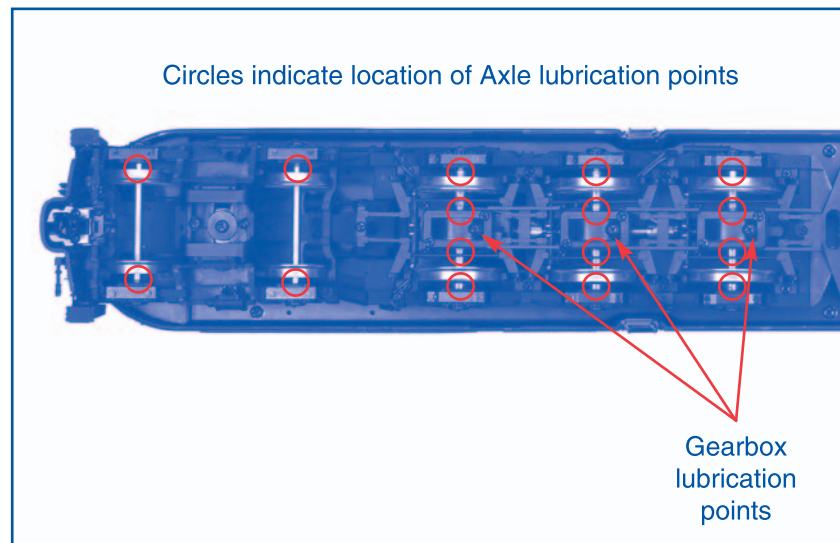
Your locomotive was lubricated at the factory and under normal operating conditions will not need to be lubricated during the first 50 hours of operation. The locomotive has two lubrication points. (See diagram below)

1. Axle lubrication.

Periodically apply a few drops of light oil such as Hob-e-lube (#HL653) to each axle where it enters the side frame journal. The six driving axles should also be lubricated where the axles enter the gear box.

2. Gearbox lubrication.

Under normal operating conditions, the gearbox should be lubricated after each 100 hours of operation. There are six lubrication points for the GGI locomotive which are indicated in the diagram below. Remove one screw at a time and apply moly grease by Hob-e-lube into the hole until all six gearboxes are lubricated.



FEATURES

- Highly detailed die-cast metal construction
- Operating motorized pantographs with overhead power pickup
- Operating steam exhaust (fan driven)
- Dual Pitman motors
- Operating directional headlight and marker lights
- Automatic cab light "dimming" after startup
- Working drop coupler
- Metal hand rails
- Separately cast metal detail parts
- Die-Cast metal truck frames
- Authentic articulated chassis
- Detailed cab interior with engineer figures
- Authentic GGI sound system
- Operates on either analog or DCC track systems utilizing the QSI Quantum System™
- Operates on eight foot diameter track or larger.

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OPERATION

POWER REQUIREMENTS

The locomotive is designed to operate on direct current (DC) with output of 0-22 volts and is equipped with the QSI Quantum System™ which allows for operation in basic analog mode or DCC mode. Prior to operating your locomotive, we recommend you take a few minutes to read through the operating manual from QSI as well as the remainder of this manual to familiarize yourself with the operations of the locomotive.

CONTROL SWITCHES

The control panel is located on the topside of the locomotive near the steam generator and is accessed by lifting up on the panel. There are three slide switches to operate ON/OFF smoke generator, ON/OFF lights, and ON/OFF motor. The fourth slide switch is to switch your locomotive from track power to pantograph power if your layout has overhead power. There are also three push button switches to control the volume of the sound system and the raising/lowering of the pantographs. Before operating your locomotive, we suggest you familiarize yourself with the operation of these features by reading pages 19-21 of the QSI operation manual.

SMOKE GENERATOR

The locomotive contains a fan driven smoke unit which produces "steam exhaust" through the stack on the topside of the cab body. The smoke generator requires the periodic addition of smoke fluid in order to operate properly. Add 25-30 drops of USA Trains smoke fluid (USA Trains part # R50001) into the smoke generator hole. Never overfill the smoke generator and promptly wipe up any excess smoke fluid that may have spilled onto any painted surfaces. Begin operation. Smoke production will begin when the fluid becomes heated and should last approximately 20 minutes. It may take longer to generate the smoke if the unit is full. When the smoke chamber is empty the unit will shutdown automatically until more fluid is added. By following these directions the smoke generator will provide hours of enjoyment and enhance the realistic operation of your GGI locomotive.

CAUTION! Even though your locomotive is equipped with an automatic shut-off when the smoke generator runs out of fluid, we suggest you shut off the smoke switch on the topside of the locomotive to prevent accidental burning out of the smoke generator.

OPERATION

SOUND

Your locomotive is equipped from the factory with a QSI Quantum Sound System™. The sound system is equipped with the following sounds:

- Horn
- Bell with shutdown and turn on effects
- Electric traction motor
- Automatic cooling fans
- Doppler shift
- Brake or flange squeal
- Air pumps and air release
- Sound of Power™
- Idle

The volume of each individual sound may be adjusted to you liking. Please refer to the QSI owners manual for volume adjustment instructions.

DCC OPERATION

Your locomotive is equipped with a DCC decoder that automatically senses DCC on your track. Please refer to the QSI owner's manual for DCC operation instructions.



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