

“American Flyer”

American Flyer Std. Gauge President Special Electric Locomotive

OPERATOR'S MANUAL
(TRADITIONAL)

Compatibility

This engine will operate on any traditional 42" diameter STD. Gauge track system, including M.T.H.'s traditional tubular track. It is also compatible with most standard AC transformers. (See page 7 for a complete list of compatible transformers and wiring instructions.)

PLEASE READ BEFORE USE AND SAVE
www.lionelcorporation.com

Table of Contents

Set Up Checklist.....	3
Lubrication.....	3
Basic Operation.....	4
Activating Features.....	5
Maintenance.....	6
Lubricating and Greasing Instructions.....	6
Applying the Gold Eagle and Wings.....	7
Cleaning The Wheels and Track.....	8
Headlight Replacement Instructions.....	9
Transformer Compatibility and Wiring Chart.....	10
Service & Warranty Information.....	11
Limited One-Year Warranty.....	11

CAUTION: ELECTRICALLY OPERATED PRODUCT:

Recommended for Ages 14 and up. Not recommended for children under 14 years of age without adult supervision. As with all electric products, precautions should be observed during handling and use to prevent electric shock.

WARNING: When using electrical products, basic safety precautions should be observed, including the following:
Read this manual thoroughly before using this device.

- M.T.H. recommends that all users and persons supervising use examine the hobby transformer and other electronic equipment periodically for conditions that may result in the risk of fire, electric shock, or injury to persons, such as damage to the primary cord, plug blades, housing, output jacks or other parts. In the event such conditions exist, the train set should not be used until properly repaired.
- Do not operate your layout unattended. Obstructed accessories or stalled trains may overheat, resulting in damage to your layout.
- This train set is intended for indoor use. Do not use if water is present. Serious injury or fatality may result.
- Do not operate the hobby transformer with damaged cord, plug, switches, buttons or case.

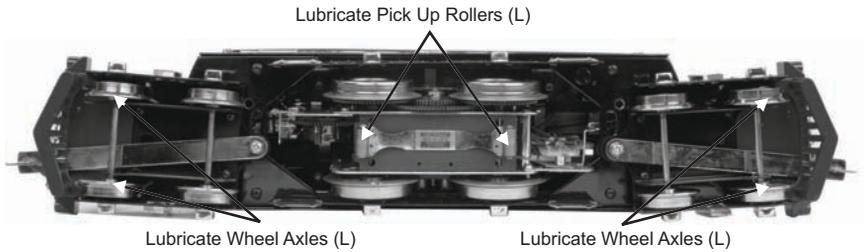
This product may be protected by one or more of the following patents: 6,019,289; 6,280,278; 6,281,606; 6,291,263; 6,457,681; 6,491,263; 6,604,641; 6,619,594; 6,624,537; 6,655,640.

Set Up Checklist

- Lubricate the locomotive
- Apply power to run as described in the Basic Operating Section of this manual.

Lubrication

You should lubricate the engine to prevent it from squeaking. Use light household oil and follow the lubrication points marked "L" shown below. Do not over-oil. Use only a drop or two on each pivot point. Make sure you lubricate all leading and trailing trucks and drive wheel axles.



Lubrication Points on the Locomotive

Basic Operation

The Throttle knob controls how fast your train will travel.

Reversing Mechanism

The Engine is equipped with a automatic reversing mechanism the can be set to run in Forward only, Reverse only, or alternate between Forward and Reverse each time the track power is interrupted. The engine does not have neutral between forward and reverse.

There is a rod and a lever that control the operation and direction of the locomotive.

The rod extends through the front of the cab. Pushing the rod in will set the locomotive in automatic operation so that each time that the track power is interrupted the direction of the locomotive will change when the track power is re-applied.

Pulling the rod out will set the locomotive in manual operation. This means that an interruption in track power will not change the direction of the locomotive when the power is re-applied. The direction is determined by the setting of the direction lever.

Direction Lever

The direction lever is located on the left side of the front headlight. Moving the lever toward the front of the locomotive will set the locomotive in the reverse direction.

Moving the lever toward the rear of the locomotive will set the forward direction.

If your engine does not move with track power applied and the headlight is shining, check the control rods. One or both of the rods may not be positioned at the far ends of travel.



Direction Lever

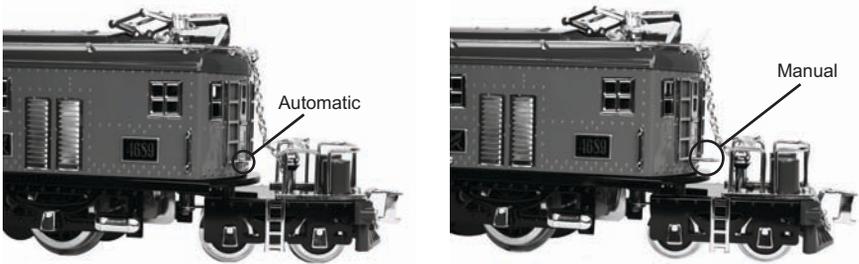
Activating Features

Throttle

To increase or decrease track voltage, and therefore train speed, turn the throttle control knob.

Turning clockwise will increase voltage and speed, while turning counterclockwise will decrease voltage and speed.

The engine will maintain the speed you set after you release the throttle until you turn it again to change the voltage and speed.



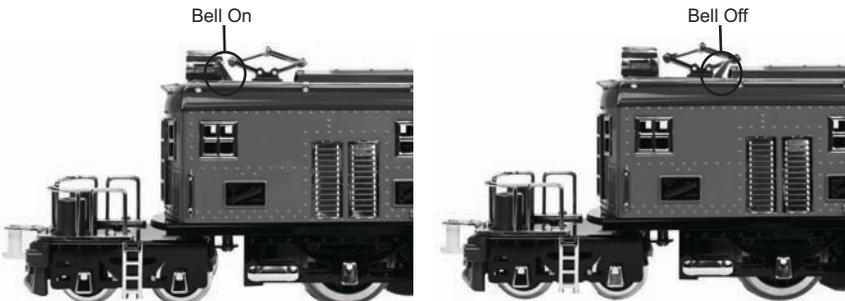
Automatic/Manual Direction Control

Mechanical Bell Ringer

The Engine features a mechanical bell ringer. When activated the bell will ring while the engine is moving.

The mechanical bell ringer is controlled by the movement of the locomotive and the on off lever. The control lever is located on the right side of the rear headlight. When the lever is on the on position, the bell will ring while the locomotive is in motion.

In order to activate the bell ringer move the lever towards the rear of the locomotive. To stop the bell from ringing while the locomotive is in operation, move the lever towards the front of the locomotive.

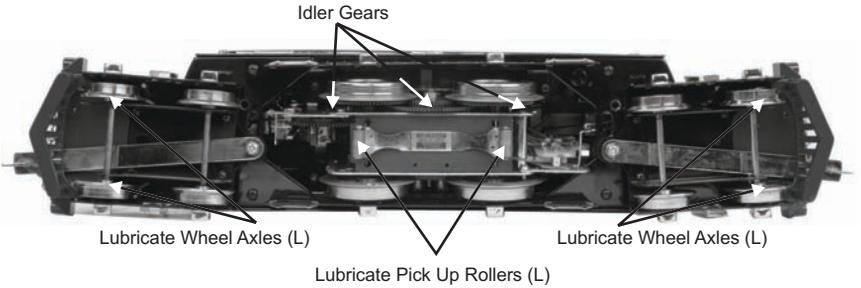


Maintenance

Lubricating and Greasing Instructions

The engine and tender should be well oiled and greased in order to run properly.

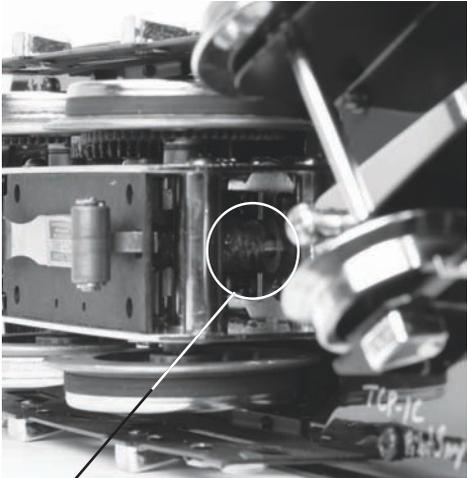
Regularly lubricate all axles and linkage components and pickup rollers to prevent squeaking. Use light household oil, such as that found in M.T.H.'s maintenance kit. Do not over oil. Use only a drop or two on each pivot point.



Lubrication Points on the Locomotive



It is recommended to grease the drive gear and worm gear every 25 hours of operation with white lithium grease. Use the end of a screwdriver to reach the gear to grease. Follow the greasing points illustrated below.



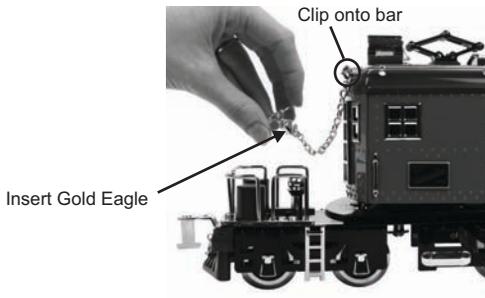
Grease

Applying the Eagle and Flags

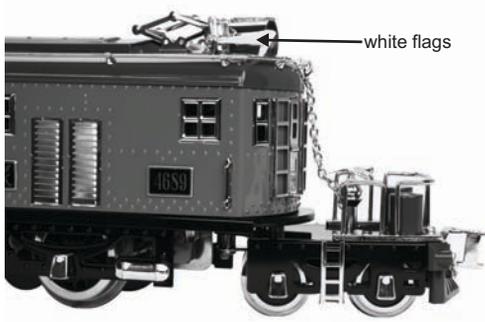
Your Engine comes with a removable magnetized gold eagle, and two white flags.



Applying the gold eagle and flags is fairly simple. To apply the gold eagle you need to first clip the chain link portion onto the top bar. Then insert the gold eagle into the designated circle. The magnet will keep the gold eagle in place.



To apply the flags simple place the base of the flag into the hole provided above the bar.



Cleaning The Wheels, Tires, and Track

Periodically check the locomotive wheels and pickups for dirt and buildup, which can cause poor electrical contact and traction and prematurely wear out the neoprene traction tires. Wheels and tires can be cleaned using denatured (not rubbing) alcohol applied with a cotton swab.



To clean the track, use RailKing Track

Cleaning Fluid found in Maintenance Kit (30-50010) or denatured (not rubbing) alcohol and a clean rag. Unplug the transformer and wipe the rails of the track, turning the rag frequently to ensure that you are using clean cloth on the rails. Thereafter, keep an eye on the track and clean it when it gets dirty to ensure good electrical contact and to lengthen the life of the tires.

Clean any type of track with this heavy-duty track cleaning block (40-1099). Durably constructed from ABS plastic, the block includes a built-in cleaning pad. For really stubborn track, you can insert sandpaper into the block in just a few quick steps.



Track Cleaning Block (40-1099)



Maintenance Kit (30-50010)

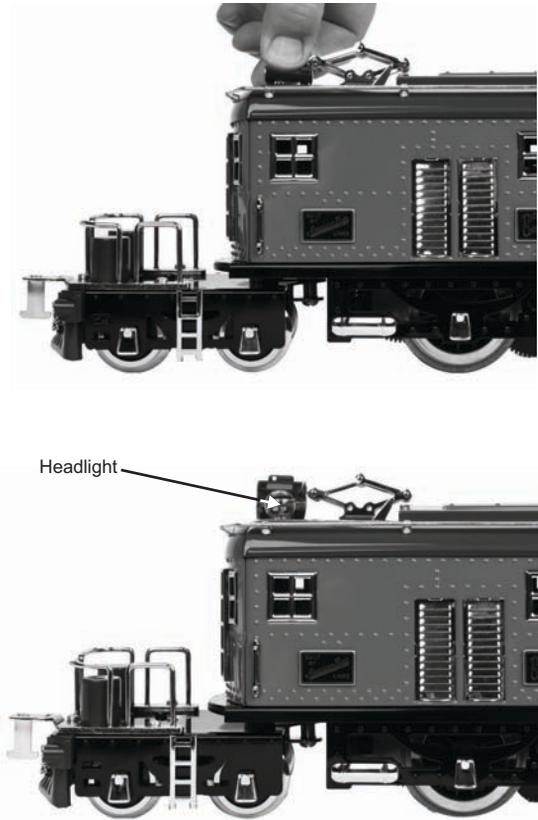
Headlight Replacement Instructions

The locomotive headlight is controlled by the track voltage. The brightness will vary with a change in the track voltage.

Should the headlight bulb need to be replaced, access to the bulb is gained by removing the headlight bezel. Remove the headlight bezel by squeezing the bezel while wiggling the bezel back and forth. Then unscrew the headlight bulb from the socket.

Install the new bulb by following the above instructions in reverse order. Gently unscrew the bulbs from the socket on the mounting bracket and replace the bulb.

Replacement bulbs are available directly from the M.T.H. Parts Department. (Order online: www.mthtrains.com, e-mail: parts@mth-railking.com, Fax: 410-423-0009, Phone: 410-381-2500, Mail: 7020 Columbia Gateway Drive, Columbia MD 21046-1532,).



Transformer Compatibility and Wiring Chart

The chart below lists the many compatible transformers. Please follow the chart details for how the terminals on these transformers should be attached to your layout.

RECOMMENDED AC TRANSFORMERS					
Transformer Model	Center Rail	Outside Rail	Min/Max. Voltage	Power Rating	Transformer Type
MTH Z-500	Red Terminal	Black Terminal	0-18v	50-Watt	Electronic
MTH Z-750	Red Terminal	Black Terminal	0-21v	75-Watt	Electronic
MTH Z-1000	Red Terminal	Black Terminal	0-21v	100-Watt	Electronic
MTH Z-4000	Red Terminal	Black Terminal	0-22v	390-Watt	Electronic
Lionel 1032	U	A	5-16v	90-Watt	Standard
Lionel 1032M	U	A	5-16v	90-Watt	Standard
Lionel 1033	U	A	5-16v	90-Watt	Standard
Lionel 1043	U	A	5-16v	90-Watt	Standard
Lionel 1043M	U	A	5-16v	90-Watt	Standard
Lionel 1044	U	A	5-16v	90-Watt	Standard
Lionel 1053	U	A	8-17v	60-Watt	Standard
Lionel 1063	U	A	8-17v	60-Watt	Standard
Lionel LW	A	U	8-18v	75-Watt	Standard
Powermaster	U	A	8-18v	135VA	Electronic
All-Trol	Left Terminal	Right Terminal	0-24v	300-Watt	Electronic
Dallee Hostler	Left Terminal	Right Terminal			Electronic
Lionel LW	A	U	8-18v	75-Watt	Standard
Lionel KW	A or B	U	6-20v	190-Watt	Standard
Lionel MW	Outside Track Terminal	Inside Track Terminal	5-16v	50V.A.	Electronic
Lionel RS-1	Red Terminal	Black Terminal	0-18v	50V.A.	Electronic
Lionel RW	U	A	9-19v	110-Watt	Standard
Lionel SW	U	A	Unknown	130-Watt	Standard
Lionel TW	U	A	8-18v	175-Watt	Standard
Lionel ZW	A,B,C or D	U	8-20v	275-Watt	Standard
Lionel Post-War Celebration Series ZW	A,B,C or D	Common	0-20v	135/190 Watt	Electronic

* Conventional Mode Only

Service & Warranty Information

How to Get Service Under the Terms of the Limited One-Year Warranty

When you suspect an item is defective, please check the operator's manual for standard operation and troubleshooting techniques that may correct the problem. Additional information may be found on the M.T.H. Website. Should you still require service, follow the instructions below to obtain warranty service. First, e-mail, write, call or fax a M.T.H. Authorized Service Center (ASC) in your area to obtain Repair Authorization. You can find the list of ASCs on the M.T.H. Website, www.mthtrains.com. Authorized Service Centers are required to make warranty repairs on items sold only from that store; all other repairs may or may not be done at the store's own discretion. If you did not purchase the item directly from the ASC, you will need to select a National Authorized Service Center (NASC). These centers are compensated by M.T.H. to perform warranty service for any customer whose repair qualifies for warranty service. A list of NASC retailers can be located on the M.T.H. Website or by calling 410-381-2580. Should the warranty no longer apply, you may choose either an ASC or NASC retailer to service your M.T.H. Product. A reasonable service fee will be charged.

CAUTION: Make sure the product is packed in its original factory packaging including its foam and plastic wrapping material to prevent damage to the merchandise. There is no need to return the entire set if only one of the components is in need of repair unless otherwise instructed by the Service Center. The shipment must be prepaid and we recommend that it be insured. A cover letter including your name, address, daytime phone number, e-mail address (if available), Return Authorization number (if required by the service center, a copy of your sales receipt and a full description of the problem must be included to facilitate the repairs. Please include the description regardless of whether you discussed the problem with a service technician when contacting the Service Center for your Return Authorization.

Please make sure you have followed the instructions carefully before returning any merchandise for service. Authorized M.T.H. Service Centers are independently owned and operated and are not agents or representatives of M.T.H. Electric Trains. M.T.H. assumes no responsibility, financial or otherwise, for material left in their possession, or work done, by privately owned M.T.H. Authorized Service Centers.

If you need assistance at any time email MTH Service at service@mth-railking.com, or call 410 381-2580.

Limited One-Year Warranty

All M.T.H. products purchased from an M.T.H. Authorized Retailer are covered by this warranty provided the product was manufactured within five years of the date of purchase. This warranty is for the original purchaser and is non-transferable.

See our website www.mthtrains.com to identify an M.T.H. Authorized Retailer near you.

M.T.H. products may be registered online in advance of warranty work at www.mthtrains.com/warranty. The original sales receipt and the conditions below must be met regardless of whether the product is registered on the M.T.H. website in order to obtain warranty service.

M.T.H. products manufactured within five years from the date of purchase are warranted for one year against defects in material or workmanship, excluding wear items such as light bulbs, pick-up rollers, batteries, smoke unit wicks, and traction tires. We will repair, replace, or credit (at our option) the defective part without charge for the parts or labor if the following conditions are met: (1) the item is returned to an M.T.H. Authorized Service Center* (ASC) or M.T.H. National Authorized Service Center (NASC) or M.T.H. Electric Trains Service Department, (2) was manufactured within the previous five years and (3) was purchased within one year of the original date of purchase from an M.T.H. Authorized Retailer. Products manufactured after the five year cutoff from the date of purchase are not covered under any warranty by M.T.H. Electric Trains. The manufacture date of an item can be verified on the item's detail page "shipping date field" on the M.T.H. website (www.mthtrains.com). This warranty does not cover damages caused by improper care, handling, or use. Transportation costs incurred by the customer are not covered under this warranty.

Items sent for repair must be accompanied by a return authorization number, a description of the problem, and a **copy of the original sales receipt from an M.T.H. Authorized Retailer**, which gives the date of purchase. If you are sending this product to an Authorized Service Center, contact that Center for their return authorization.

This warranty gives you specific legal rights, and you may have other rights that vary from state to state. Specific questions regarding the warranty may be forwarded to M.T.H. Directly.

* Authorized Service Centers (ASC) are only obligated to provide warranty service for any consumer who has purchased the specific M.T.H. item from them that requires service work.

Service Department:
M.T.H. Electric Trains
7020 Columbia Gateway Drive
Columbia MD 21046-1532