



Tinplate Flying Colonel Electric Locomotive

OPERATOR'S MANUAL



TRADITIONAL MODEL

Compatibility

This engine will operate on any traditional Standard Gauge tubular track system, including M.T.H.'s tubular track. It is also compatible with most standard AC transformers. (See page 18 for a complete list of compatible transformers and wiring instructions.)

PLEASE READ BEFORE USE AND SAVE

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CAUTION: ELECTRICALLY OPERATED PRODUCT:

Not recommended for children under 10 years of age. M.T.H. recommends adult supervision with children ages 10 - 16. As with all electric products, precautions should be observed during handling and use to reduce the risk of 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.

Set Up Checklist

- Lubricate the locomotive
- Apply power to run as described in the Basic Operating Section of this manual
- Headlight bulbs and Couplers need to be installed by operator. Included, packaged separately

Lubrication

You should lubricate the engine to prevent it from squeaking. Use light household oil and follow the lubrication points marked “L” in

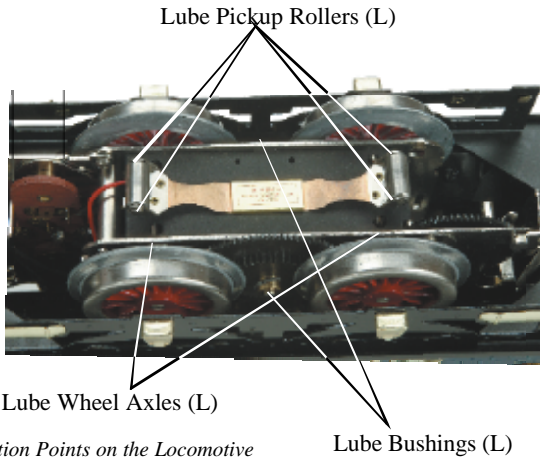


Figure 1. Lubrication Points on the Locomotive

Basic Operation

The Throttle knob controls how fast your train will travel.

Turn the throttle knob up ½-way, until the engine and caboose lights shine bright.

Put the engine into motion by pressing the Direction button on your transformer once. (hold it for approximately 1 second)

If the engine does not begin to move as soon as you firmly press the Direction button, you may not have sent enough voltage to the track to make the train move. Turn the throttle up a bit higher until the train begins to move.

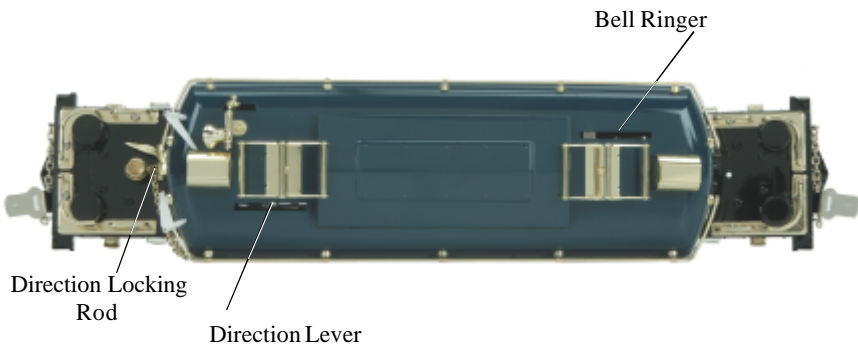
Traditional Reversing Unit and Ringing Bell

Mechanical Automatic Reversing Unit

The automatic mechanical reversing unit in the Flying Colonel does not have a neutral position. This reversing unit changes direction any time the power is interrupted.

The automatic mechanical reversing unit can be locked into either the forward direction or reverse direction by pulling out on the rod in the front of the cab while the engine is stopped. Pushing in the rod will allow the reversing unit to change direction of the engine at each power interruption.

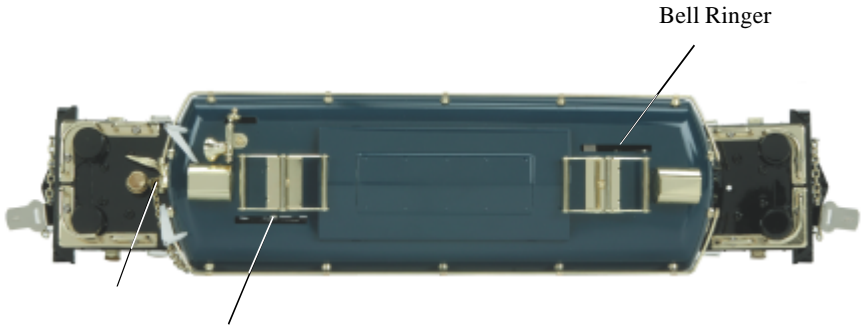
When the reversing unit is locked into forward or reverse, moving the lever that sticks through the left front roof section will change the direction of the engine. The lever should be moved only while the engine is stopped. Moving the lever forward will cause the engine to run backwards. Moving the lever to the rear will cause the engine to run forward.



Ringling Bell

The Flying Colonel is equipped with mechanical bell ringer. When activated, the bell will ring and the decorative bell on the roof will swing back and forth while the engine is moving in forward or reverse.

To activate the ringling bell, move the lever towards the rear of the engine. To turn off the ringling bell, move the bell lever towards the front of the engine.



Maintenance

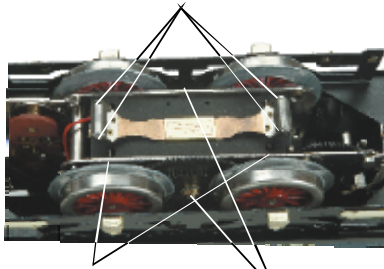
Lubricating and Greasing Instructions

The engine 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.



Lube Pickup Rollers (L)

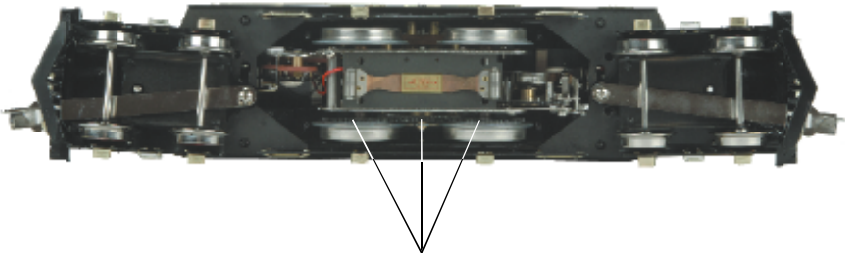


Lube Wheel Axles (L)

Lube Bushings (L)

Figure 3

The locomotive's internal gearing was greased at the factory and should not need additional grease. However, it will be necessary to lubricate the idler gears located next to the drive wheels with grease every 25 hours of operation. Follow the greasing points illustrated in Figure 4.



Grease Idler Gear (G)

Figure 4

Cleaning The Wheels and Track

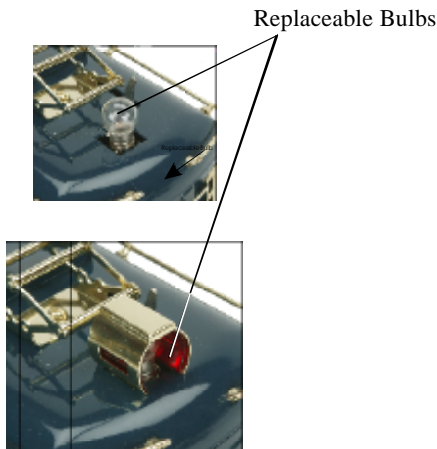
Periodically check the locomotive wheels and pickups for dirt and buildup, which can cause poor electrical contact and traction. Wheels can be cleaned using denatured (not rubbing) alcohol applied with a cotton swab.

To clean the track, use RailKing Track Cleaning Fluid and a clean rag or denatured (not rubbing) alcohol. 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.



Headlight Replacement Instructions

The locomotive's headlights are controlled by a constant voltage circuit in the engine. The headlight is easy to remove and replace when it burns out. The bulb(s) simply unscrew from their sockets. Replacement bulbs are available directly from the M.T.H. Parts Department.



Transformer Compatibility and Wiring Chart

Proto-Sound 2.0 is designed to work with most standard AC transformers. The chart below lists the many compatible transformers. Note the chart details how the terminals on these transformers should be attached to your layout.

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-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
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 trouble-shooting 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.mth-railking.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 1-888-640-3700. 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 Authorized M.T.H. Train Merchant are covered by this warranty.

See our website at www.mth-railking.com or call 1-888-640-3700 to identify an Authorized M.T.H. Train Merchant near you

M.T.H. products are warranted for one year from the date of purchase 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 or replace (at our option) the defective part without charge for the parts or labor, if the item is returned to an M.T.H. Authorized Service Center (ASC) or M.T.H. National Authorized Service Center (NASC) within one year of the original date of purchase. 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 Authorized M.T.H. Train Merchant**, 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.

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



PARTICIPATING N.A.S.C. RETAILER LIST

CANADA

TOY TRAIN WORKSHOP
CUMBERLAND
613-833-8331

THE TRAIN ROOM
FERGUS
519-787-3280

CALIFORNIA

TIN PLATE JUNCTION
OAKLAND
510-444-4780

COLORADO

MIZELL TRAINS INC
WESTMINSTER
303-429-4811

CONNECTICUT

NEW ENGLAND HOBBY
SUPPLY
MANCHESTER
860-646-0610

FLORIDA

ROUNDHOUSE SOUTH
PORT ORANGE
386-304-7002

MARYLAND

PLAZA HOBBY
CUMBERLAND
301-729-6424

ENGINE HOUSE HOBBIES
GAITHERSBURG
301-590-0816

CATOCTIN MOUNTAIN TRAINS
& HOBBIES
THURMONT
301-694-8331

MICHIGAN

MICHIGAN MODEL TRAIN
CENTER
PINCKNEY
734-426-1651

BRASSEUR ELECTRIC TRAINS
INC.

SAGINAW
989-793-4753

NEW HAMPSHIRE

TREASURED TOYS
SALEM
603-898-7224

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EAST AURORA
716-652-5718

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DAVIS ELECTRONICS
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513-831-6425

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419-478-0171

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BUSSINGER TRAINS
AMBLER
215-628-2366

FAIRCHANCE PHARMACY
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724-564-7817

TOBY TYLER'S HOBBY
CENTER
PITTSBURGH
412-653-5030

VIRGINIA

LOCUST GROVE TRAINS
LOCUST GROVE
540-854-8955

DAVIS HOBBY SUPPLIES
PORTSMOUTH
757-397-1983

T S G HOBBIES
WARRENTON
540-347-9212

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BUTLER
262-783-7797

GRAMPA'S TRAIN SHOP
RICE LAKE
715-234-2996



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613-833-8331

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519-787-3280

CREDIT VALLEY RAILWAY
COMPANY
STREETSVILLE
905-826-1306

B H TRAINS
TERREBONNE
450-492-0317

ALABAMA
SOUTHERLAND STATION
HUNTSVILLE
256-533-4720

LIL' BOBBY'S HOBBIES
MONTGOMERY
334-277-1715

ARIZONA

ARIZONA TRAIN DEPOT
MESA
480-833-9486

CALIFORNIA
CENTRAL COAST TRAINS
ATASCADERO
805-466-1391

TRAIN SHACK
BURBANK
818-842-3330

ROUNDHOUSE
NORTH HOLLYWOOD
818-769-0403

DOLLHOUSES TRAINS & MORE
NOVATO
415-883-0388

TIN PLATE JUNCTION
OAKLAND
510-444-4780

RON'S WORLD
SAN CLEMENTE
949-361-5596

TRUCKS & TRAINS HOBBIES
SANTA ROSA
707-537-6586

COLORADO

CUSTOM RAILWAY SUPPLY
COLORADO SPRINGS
719-634-4616

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954-921-2700

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LAKE WORTH
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COLONIAL PHOTO & HOBBY
ORLANDO
407-841-1485

WARRICK CUSTOM HOBBIES
PLANTATION
954-370-0708

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386-304-7002

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847-882-7728

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219-838-9999

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VALPARAISO
219-462-2708

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CABOOSE STOP HOBBIES
CEDAR FALLS
800-642-7012

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L&N TRAINS & THINGS
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502-897-9005

LOUISIANA

AMERICA'S TRAIN YARD
BATON ROUGE
225-926-5592

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207-532-6277

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PLAZA HOBBY
CUMBERLAND
301-729-6424

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FREDERICK
301-694-7395

ENGINE HOUSE HOBBIES
GAITHERSBURG
301-590-0816

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HAGERSTOWN
240-420-4930

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HAGERSTOWN
301-745-6681

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SYKESVILLE
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301-694-8331

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ATLANTIC RAILS
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609-567-8490

GRAND CENTRAL STATION
KEARNY
201-955-6200

J & B TRAINS, INC.
MAPLE SHADE
856-414-0092

HOBBY SHOP
MATAWAN
732-583-0505

HOBBYMASTERS, INC
RED BANK
732-842-6020

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RIDGEFIELD
201-943-2636

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COLLECTIBLES
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609-522-2379

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262-650-6675