

# MTH MILLENNIUM PRESIDENT'S SPECIAL PASSANGER SET TRADITIONAL VERSION OPERATING INSTRUCTIONS



The M.T.H. Millennium President's Special Locomotive is a replica of the #4689 Standard gauge locomotive. This locomotive runs on standard gauge three rail track and runs on 10 to 20 volts (AC) Alternating Current.

#### UNPACKING YOUR LOCOMOTIVE

After removing your President's Special Locomotive from the box, you will notice that the locomotive has been mounted to a steel support shipping plate. To remove the shipping plate, lay the locomotive on Its side and using a Phillips screwdriver remove the four long Phillips screws securing the plate to the bottom of the engine. Carefully remove the foam packing blocks above each pilot truck. Please put the foam blocks, the long screws, the screw spacers, and the steel support back into the box and store them away should you ever need to ship your locomotive back for service.

#### REMOTE CONTROL UNIT

The engine is started and reversed by a remote control unit. The remote control unit directs the engine either forward or reverse. Whenever voltage to the locomotive is interrupted and the locomotive is in motion. This can be done by operating the direction controller on the transformer, or by moving the transformer voltage control to the OFF position. Note that any voltage interruption, intentional or otherwise, will cause the locomotive to reverse direction. Typical causes of unwanted voltage interruption to the locomotive are dirty track or dirty wheels.

If you want to operate the train in one direction only, which is necessary if you have automatic stations or insulated blocks, you must lock-out' the remote control unit Make sure that the locomotive is moving in the desired direction. Stop the locomotive without interrupting the power (turn down the voltage control, or hold it back with your hand) and pull out the remote control lockout arm located at the front of the cab behind the eagle pedestal.

Note: When the remote control unit is locked out, the locomotive's speed will increase. Less voltage is required to maintain the locomotive's speed. To reactivate the remote control unit, stop the locomotive and push the remote control 'lock-out' arm back in.

If you have a predetermined direction for your locomotive you can manually set that direction using the remote control arm (See Figure 1). Move the arm toward the red headlight to allow the locomotive to go in the forward direction (towards the green headlight). Placing the arm in the opposite position will allow the locomotive to travel in the reverse direction.

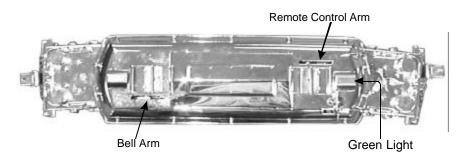


Fig. 1 Location of the Direction Switches on the Engine

#### DIRECTIONAL HEADLIGHTS

When the locomotive is in Forward, the headlight with the green shield will light. When the locomotive is in Reverse the headlight with the red shield will light.

#### **OPERATING BELL**

Your Presidential Locomotive is also equipped with an operating bell. To activate the bell move the bell arm (See Figure 1) toward the rear of the cab (toward the red headlight). The bell will toll as the train travels around your layout while travelling in either forward or reverse. To turn the bell off, just move the bell arm towards the front of the locomotive (towards the green headlight).

#### LUBRICATING THE LOCOMOTIVE

Use motor oil (1OW-40 or 1OW-30) for lubrication. Apply oil sparingly using a toothpick or similar applicator. Before beginning, please be sure to have several toothpicks and cotton swabs to apply oil and clean up excess spills. Familiarize yourself with the location of the oiling points before beginning (See Figure 2). Apply oil before operating the locomotive and after every seven hours of operation.

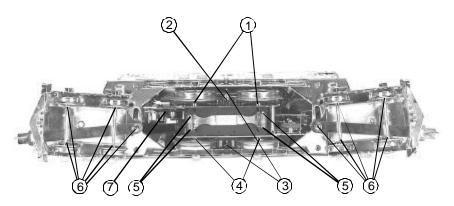


Fig. 2 Lubricating the President's Special Engine

### LUBRICATING THE WHEEL GEARS (Figure 2, #1)

Slowly turn the drive wheels (Traditional model only) by hand and apply oil to the wheel gears until all teeth on both gears are moist. Wipe away excess oil using a cotton swab.

### LUBRICATING THE COMPOUND GEAR (Figure 2, #2)

Slowly turn the drive wheels by hand and oil the compound gear until all gear teeth on both the upper and lower gears are moist. Wipe away excess oil with a cotton swab.

# LUBRICATING THE ENDS OF THE ARMATURE SHAFT & ARMATURE GEAR (Figure 1, #3)

On the geared end of the armature shaft place a single drop of oil at the point where the shaft just protrudes through the bearing. On the other end of the shaft place a single drop of oil where the shaft extends through the insulating plate between the brass brush holders. Do not put oil on the brush holders. Wipe away any excess oil with a cotton swab.

Slowly turn the drive wheels (Traditional model only) by hand and oil the armature shaft gear until all of the gear teeth are moist. Wipe away any excess oil with a cotton swab

## LUBRICATING THE DRIVE AXLES (Figure 2. #4)

Position one end of the locomotive downward so that you can see one of the drive axles. Using a toothpick or length of wire, carefully apply two drops of oil to the axle at the bronze bearings. Now turn the locomotive around with the other end downward so that you can see the other axle. Carefully apply two drops of oil on the axle at the bronze bearings.

#### LUBRICATING THE PICKUP ROLLERS (Figure 2. #5)

Apply a small drop of oil at the axles of the pickup rollers. Wipe away excess oil with a cotton swab. The rolling surface should be free from oil.

# LUBRICATING THE LEADING AND TRAILING TRUCKS (Figure 2, #6)

Apply a drop of oil to the axles at each of the axle holes in the leading and trailing trucks. Wipe away any excess oil with a cotton swab. Apply a drop of oil to each side of each pivot slot on the leading and trailing trucks.

# LUBRICATING THE BELL GEARS (Figure 2. #7)

Slowly turn the drive wheels by hand and apply oil to the large and small bell gears until all of the teeth on both gears are moist Wipe away any excess oil with a cotton swab.

#### REPLACING THE LAMPS

To replace the headlamps, carefully squeeze the bottom of the headlight housing and lift to remove. Replace the lamp with a clear lamp (MTH p/n TP-MS00016), then reinstall the headlight housing.

#### PASSENGER CAR LUBRICATION

Use a light household oil for lubrication. Apply oil sparingly, using a toothpick or small applicator. Add a drop of oil to the axle holes in the front and rear of each wheel, to each side of the pickup roller axle, and above and below the clip on the coupler arm pivot (see Figure 3, below). Wipe away excess oil with a cotton swab.

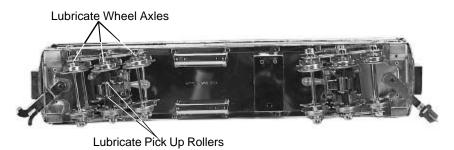


Fig. 3 Lubricating the Passenger Car

#### LIGHT BULB REPLACEMENT

First, pull the latches outward on either end to release the roof. The roof will be freed from the car body, exposing the interior of the car (see Figure 4, below).



Fig. 4 Pulling the latches outward on either end of the Passenger Car to release the roof

After the car interior is exposed, simply unscrew the light bulb from its socket mounted under the center light bracket and replace it with a new one (See Figure 5). Replacement 18 Volt, screw-based bulbs can be purchased directly from MTH Electric Trains, Inc. Ensure when replacing the roof that the lip of the roof goes over the latches to secure the roof.

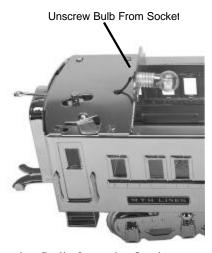


Fig. 5 Unscrewing the Bulb from its Socket

### MAINTAINENCE AND CARE

Do not use any forms of abrasives to clean the locomotive and cars. Use only a clean, soft and non-abrasive cloth to avoid scratching the finish. You may want to wipe down the engine and cars with a damp cloth to remove finger prints, then buff with a dry clean cloth.

Routine maintenance of the finish requires only that the surfaces be wiped from time to time with a water-dampened, lint free cloth. This will keep this superb model of the Presidential Set in top show room condition.

#### **WARNING**

Do not lift the locomotive by its handrails. They cannot support the weight of the locomotive

# HOW TO GET SERVICE UNDER THE TERMS OF THE LIMITED ONE YEAR WARRANTY

For warranty repair, do not return your product to the place of purchase unless it was purchased from MTH Electric Trains in Columbia, MD. Instead, follow the instructions below to obtain warranty service, as our dealer network is not prepared to service the product under the terms of this warranty.

- 1. First, write, call or FAX MTH Electric Trains, 7020 Columbia Gateway Drive, Columbia, MD 21046, 41O-381-2580 (FAX No. 410-381-6122), stating when it was purchased and what seems to be the problem. You will be given a return authorization number to assure that your merchandise will be properly handled upon its receipt.
- 2. CAUTION: Make sure the product is packed in its original factory packaging including its foam and plastic wrapping material so as to prevent damage to the merchandise. The shipment must be prepaid and we recommend that it be insured. A cover letter, including your name, address, daytime phone number, Return Authorization number 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 one of our service technicians when contacting MTH for your Return Authorization number.
- 3. Please make sure you have followed the instructions carefully before returning any merchandise for service.

#### LIMITED ONE YEAR WARRANTY

This item 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, if the item is returned to the address below within one year of the original date of purchase. This warranty does not cover items that have been abused or damaged by careless handling. Transportation costs incurred by the customer are not covered under this warranty. This warranty gives you specific legal rights and you may have other rights, which vary, from state to state.