



# J1e HUDSON

World's Largest Die-Cast Hudson

OWNERS MANUAL



1:29 Scale

USA TRAINS  
P.O. BOX 100  
MALDEN,  
MA 02148, USA  
[www.usatrains.com](http://www.usatrains.com)



Dear Customer,

Congratulations on your purchase of the world's largest die-cast J1e Hudson steam locomotive.

The Engineering and Design staff at USA Trains has spent many hours reviewing blueprints and developing a steam 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 J1e 4-6-4 HUDSON STEAM LOCOMOTIVE**

The New York Central 4-6-4 Hudson was the most famous class of locomotive in the world. In the mid-1920's, the NYC railroad required heavier, more modern locomotives to haul its prestigious passenger trains. Hence, the "Hudson" was developed and 275 were built for the New York Central Railroad. These locomotives typically headed sixteen to eighteen car Pullman trains at speeds up to 94 miles per hour.

All Hudsons in the first order received the classification J1 with a letter suffix to reflect production changes. The model you have purchased represents the J1e number 5344 which was often referred to as "The Most Famous of the Most Famous" because of her roller bearings and the different body styles she wore over her lifetime. In the summer of 1934, the 5344 was fitted with the first sheet metal shroud in America. The design was developed by the "Case School of Applied Science" in Cleveland, and the "Commodore Vanderbilt" was painted gunmetal grey with aluminum trim and letters. Later, in 1938, the shroud was again changed. This time the 5344 wore the Henry Dreyfuss styled shroud. Subsequently, it was later returned to its original shroud. Through her entire life she was always "something in between", always tinkered with, always streamlined, and always a Hudson.

The accurate reproduction of this locomotive in its original body style by USA Trains will allow the modeler to have an authentic NYC J1e Hudson 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 \$300.00 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.

## 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 three lubrication points. (See diagram below)

#### 1. Siderod/valve gear lubrication.

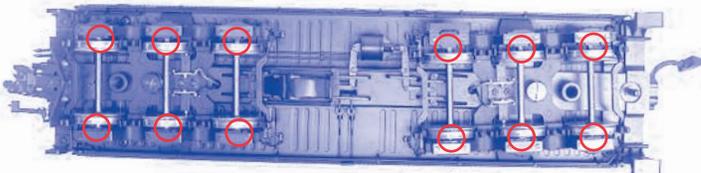
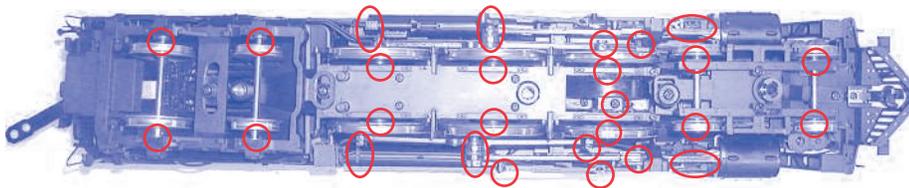
Periodically apply a few drops of light oil such as Hob-e-lube (#HL653) to each of the pivot points of the siderods. (See diagram below) Also, apply a light coat of oil to the valve gear so it slides back and forth freely.

#### 2. Axle lubrication.

Two drops of oil should be placed on all six contact points where drive wheel axles enter the gearbox. The same should be done for the locomotive pilot truck and trailing truck axles, as well as the tender truck axles.

#### 3. Gearbox lubrication.

Under normal operating conditions, the gearbox should be lubricated after each 100 hours of operation by first removing the screw in the bottom of the gearbox (see diagram below for location of screw) and then applying moly grease by Hob-e-lube into the hole. As you apply grease into the hole, rotate the wheels to spread the grease onto all the gears.



## FEATURES

### J1e Hudson Locomotive Features:

- Highly detailed die-cast metal construction
- Operating smoke stack and booster exhaust stack
- Operating headlight & cab light
- Illuminated marker lights
- Working drop coupler (front)
- Die-cast spoked drivers with stainless steel rims
- Roller bearing drive axles
- Metal drive rods
- Die-Cast metal sprung booster truck
- Drawbar coupling between locomotive and tender
- Highly detailed metal piping
- Separately cast metal detail parts
- Metal hand rails
- Brass bell
- Brass whistle
- Lighted firebox and ash pan glow
- Detailed builders plate
- Wooden collectors box

### J1e Hudson Tender Features:

- Highly detailed die-cast metal construction
- "Real" coal load
- Operating back-up light on tender
- Illuminated marker lights
- Separately cast metal parts including water scoop and brake cylinder
- Detailed coal bin with stoker
- Operating coupler lift bar
- Die-cast 6 wheel sprung trucks with safety chains

Overall length of Hudson Locomotive and Tender is 40 1/2 inches

## OPERATION

### POWER REQUIREMENTS

The locomotive is designed to operate on direct current (DC) with outputs of 0-24 volts. **DO NOT EXCEED 24 VOLTS DC.**

### CONTROL SWITCHES

The locomotive contains three switches to operate the on/off motors, on/off lights, and on/off smoke generator. The control switches are located on the right hand side of the body just ahead of the cab. (See below)



### MOTOR SWITCH

The motor switch is a 3 position switch to control the motors (center OFF, one side for ON (FULL) and the opposite side for DCC (DELAY) mode).

### DCC (DELAY) MODE FOR SLOW SPEED OPERATION ONLY-DO NOT EXCEED 24 VOLTS DC.

The locomotive is equipped with a "delay feature". In the DCC mode position the delay feature is activated. This allows the sound and smoke units to start up before the locomotive begins to move. The loco begins to move slowly at approximately 8 volts. At this point the sound and smoke units are fully activated. The locomotive begins to move progressively faster as the voltage is turned up higher. The locomotive is DCC ready. In order to install a decoder you must remove the delay feature circuit. There are four terminal screws that need to be released in order to remove the four wires connecting the delay feature (see wiring diagram in Phoenix sound instructions manual). You are now ready to install a decoder of your choice to the locomotive. The circuit will allow the decoder to operate the motors and lights only. The sound and smoke units are connected to track power directly.

### ON (FULL) MODE FOR NORMAL SPEED OPERATION ONLY-DO NOT EXCEED 24 VOLTS DC.

The motor ON (FULL) position allows direct track voltage to the motors. The locomotive will begin to move on the low voltage range of the power supply. The sound and smoke units will begin to function after the locomotive is moving. This mode also allows the motors to operate at the higher voltage range which in turn will allow the locomotive to run at higher speeds.

### SMOKE GENERATOR

The locomotive is equipped with a Sync-Ro-nized fan driven smoke generator that produces steam exhaust synchronized to the axle rotation of the driving wheels (four puffs per axle rotation). The smoke generator requires periodic addition of smoke fluid in order to operate properly. To add smoke fluid, add approximately 20 drops of USA Trains smoke fluid (part number R50001) into the smoke stack. Remember less is better -

## OPERATION

do not overfill the smoke unit and promptly wipe up any excess smoke fluid that may have spilled onto any painted surfaces. You can now begin operation. Smoke production will begin when the fluid becomes heated. It may take longer to generate the smoke if the unit is full. When the smoke chamber is empty, the smoke unit will shut down automatically until more fluid is added.

We suggest you switch the smoke switch to the "OFF" position if no fluid is going to be added. This will extend the life of the smoke generator. By following these directions, the smoke generator will provide many hours of enjoyment and enhance the realistic operation of your J1e Hudson locomotive.

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

## PHOENIX SOUND SYSTEM

### CONTROL SWITCHES

Your locomotive is equipped with a Phoenix Sound System from the factory, the locomotive contains a switch to turn on/off the sound system and a momentary toggle switch to increase/decrease the volume. There is also a computer interface which allows you to customize your train sounds. Please refer to the Phoenix Sound owners manual for more information.



### WHISTLE AND BELL OPERATION

The whistle and bell are activated by magnetic reed switches which are triggered by magnets placed along your track. These reed switches are located on the bottom of the locomotive near the rear driver. Magnets must be positioned inside the two rails of your track to line up with these reed switches to activate the bell or whistle. The whistle can also be activated by fluctuating the track voltage which will cause the whistle to blow.

### STEAM SOUNDS

The sound of steam is automatically turned on upon movement of the locomotive and is synchronized to the axle rotation of the drive wheels - 4 chuffs per axle rotation.

For complete operating instructions and additional features, please refer to the Phoenix Sound handbook provided with your locomotive.