To install, remove, or replace the single 9 volt battery in the sound unit control box, follow these steps:

- 1. Cover your working surface with a piece of foam rubber.
- 2. Place the sound unit control box face down on the foam.
- 3. Remove the four rubber feet from the bottom of the control box.
- Using a small phillips head screw driver, remove the four phillips head screws located under the rubber feet.
- 5. Remove the back of the sound unit control box.
- 6. Install, replace, or remove the 9 volt battery.
- 7. Reverse above procedure to put the box back together.

DISPLAY CASE CARE AND MAINTENANCE

The roller base and clear acrylic cover are manufactured with quality furniture grade materials and should be cared for accordingly. The wood roller base should be regularly dusted with a soft cotton cloth. Any stains or marks which may not come off during dusting may be cleaned utilizing a no residue furniture cleaner.

The clear acrylic cover should likewise be regularly dusted with a soft cotton cloth. Extreme care should be taken not to exert undue force on the cover as this can result in scratch marks. Should the cover be scratched or have a difficult to remove stain, plastic polish as is sold for record player 'dust' covers may be used. With care, no cleaning beyond regular dusting should be necessary.

SERVICE

The Lionel Smithsonian Collection 'Dreyfuss' Hudson comes with a limited lifetime warranty to the original registered owner. Additional information and instructions outlining this warranty is outlined on the warranty card included with this manual. Should service be required, please follow these instructions.

The Lionel Smithsonian Collection would also like to help keep your locomotive in top shape both in operation and appearance. Should any physical damage occur which might prevent proper operation or scar the appearance of your locomotive, we would be glad to repair this damage at a reasonable fee. Other repair and maintenance services are available for Lionel Smithsonian Collection models. Please write for further information, outlining your specific questions.

the Lionel Smithsonian Collection • P.O. Box 225 • Birmingham, MI 48012



The Lionel Smithsonian Collection

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NEW YORK CENTRAL J3A 'DREYFUSS' HUDSON OPERATING AND MAINTENANCE INSTRUCTIONS

INTRODUCTION

The Lionel Smithsonian Collection New York Central J3A 'Dreyfuss' Hudson locomotive model is constructed of formed and fabricated brass sheet and therefore must be handled differently than a traditional diecast Lionel steam locomotive. Although the locomotive is very sturdily built, the body, and particularly the details, are more susceptible to damage by careless handling than other Lionel models. Care <u>must</u> be exercised when removing the locomotive from the packaging, during general handling, and when placing the locomotive on the track to avoid damaging the model.

The Lionel Smithsonian Collection 'Dreyfuss' Hudson locomotive model is a Direct Current (DC) powered model. Any application of alternating current (AC) as is supplied by most traditional Lionel power supplies **WILL DESTROY THE DRIVE MOTOR AND SOUND SYSTEM ELECTRONICS!** The Lionel Smithsonian Collection will not be responsible for damage caused by the application of AC power to the model. Please see your warranty registration card for further details.

The Lionel Smithsonian Collection 'Dreyfuss' Hudson locomotive model is designed to run only on two rail track with a minimum curvature radius of 50 inches. Although the track gauge is the same as traditional Lionel three rail track, the locomotive will not operate on any of the various three rail track systems available. Attempting to operate the 'Dreyfuss' Hudson on three rail track may cause damage to your DC power supply or the locomotive itself.

Note: Now is an excellent time to fill out and mail your warranty registration card!

CHECK LIST OF INCLUDED ITEMS

Your Lionel-Smithsonian NYC J3A Dreyfuss Hudson Locomotive Model is supplied with several accessories. Please check your package to identify the following:

- 1. Wood display box containing locomotive, tender, and spare parts.
- 2. Wood 'Roller-Base' display base
- 3. Clear acrylic display case cover
- 4. Dreyfuss Hudson poster (inside tube)
- Sound system control box
- 6. Certificate of authenticity, owners manual, and warranty registration card

If any of these items are missing or damaged please contact us immediately at (800) 628-6202. In the event that damage occurred during shipping, **all** packing materials must be saved for inspection by United Parcel Service (or the respective delivery service).

UNPACKING

To remove your locomotive, roller base, clear acrylic display case, sound control unit, and poster tube from the shipping box, place the box on the floor with its top up and the long taped edge towards you. Open the top of the box by carefully cutting the taped seam along its three edges and fold back the box flaps. Rotate the box onto either of its ends so that the opening is facing you and vertical. Carefully grasp the wood locomotive box and poster tube and pull the entire contents forward out of the box. Remove the top foam end cap and pull each item from the bottom foam end cap.

The Lionel Smithsonian Collection recommends that all packing materials be saved for reuse when storing or moving your 'Dreyfuss' Hudson.

REMOVING LOCOMOTIVE FROM WOOD STORAGE BOX

Note: It is highly recommended that the locomotive, tender, and surrounding foam insert be removed from the wood storage box together. This allows easy removal of the foam from the locomotive and tender preventing any damage to details.

To remove the Lionel Smithsonian Collection 'Dreyfuss' Hudson from the wood storage box, slightly loosen all four screws attaching the opening hooks to the front of the box. Open the box and remove the small pack

USING THE SMOKE UNIT

Note: Do not place Lionel (or similar) smoke 'pills' or pellets in the smoke unit. The smoke unit will not function if smoke pellets are used.

The Lionel Smithsonian Collection 'Dreyfuss' Hudson is equipped with a Seuthe brand smoke generator which requires the use of smoke fluid. For best results, the smoke unit barrel (smoke stack) should be approx. half filled with smoke fluid. Care should be taken when filling the smoke unit to avoid getting the smoke fluid on the locomotive's painted surfaces.

The smoke unit may be deactivated by using the switch located inside the smoke box. This is recommended when running the locomotive without fluid in the smoke generator. To access the switch, gently lift the bottom ends of both front handrails where they enter the pilot platform and remove them from their holes. Carefully grasp both sides of the pilot/nose assembly and gently pull directly away from the locomotive boiler. Flip switch to down position to turn unit off. Carefully replace the pilot/nose assembly and reinsert the handrails into their mounting holes.

Note: If you are operating the 'Dreyfuss' Hudson on the included roller base, do not place the clear acrylic cover on the base while the smoke unit is generating smoke. The smoke will leave a difficult to clean oily residue over the model and the inside of the case.

LOCOMOTIVE CARE AND MAINTENANCE

The only maintenance that should be required is periodic lubrication as outlined under 'Preparing Locomotive for Operation' and the replacement of sound system batteries (outlined below). It is advisable to periodically check the firmness of the small fasteners used to assemble the side rods and valve gear. A tightening tool has been included for this purpose.

To install, remove, or replace the twin 9 volt batteries in the tender, follow these steps:

- 1. Cover your working surface with a piece of foam rubber.
- 2. Place tender top down on the foam.
- 3. Cover truck side frames with low tack masking tape to prevent paint damage.
- 4. Remove 5 screws holding floor to tender body.
- 5. Carefully remove tender floor by lifting truck side frames.
- 6. Install, replace, or remove twin 9 volt batteries.
- 7. Reverse above procedure to put the tender back together.

included roller base, while the other set of leads terminates with two bare wire ends.

To hook up the controller unit to the roller base, first attach the bare wire leads to your power supply's DC terminals. Second insert the male plug into your roller base receptacle. Your power supply and sound system are now ready to operate.

Due to the infinite variety of model railroad wiring schemes this owner's manual will only cover the direct wiring of the sound controller to a simple layout. First attach the bare wire leads to your power supply's DC terminals. Second, remove the plug which is attached to the remaining set of leads and strip the wire ends approximately 1/4". Attach these leads to your track terminal strip. Your power supply and sound system are now ready to operate.

USING THE SOUND SYSTEM

To activate the sound system in the Lionel Smithsonian Collection 'Dreyfuss' Hudson you must first slide the switch located on the tender bottom (between brake system reservoirs) to the on (red) position. Approximately 10 seconds after turning the system on you will hear the blowers activate. With the locomotive stationary you will hear, in addition to the blowers, the air compressors and pressure relief valves on an intermittent basis. When 'track' power is applied to the locomotive, the blowers will turn off and the brake release will sound. As soon as the drivers begin to turn, the chuffing of the cylinder exhausts will start in synchronization with the drivers. When the loco is brought to a stop, the blowers will again start up while the intermittent sounds continue.

The whistle and bell may be sounded at any time with the sound system turned on, using the sound system controller. The steam whistle is actuated using the push bottom labeled 'whistle' on the sound system controller. This push button control produces a whistle sound as long as it is depressed. It automatically returns to the off position when pressure is removed. The bell is similarly controlled utilizing the toggle switch labeled 'bell' on the sound system controller. This switch will remain in the on (up) position until manually switched off (down) by the operator. Both the whistle and bell may be activated concurrently.

Note: Make certain that the bell switch and tender sound system switch are in the off positions when not in use to avoid premature draining of battery power. of accessory items and set aside. With the lid of the box held open, stand the box on its front edge so that the locomotive and tender are standing upright. Grasp the corners of the foam insert and slide forward from the box onto a piece of foam rubber. Carefully remove the foam from around the locomotive and tender and replace in wood storage box. Carefully unwrap the poly and tissue from the locomotive and tender and place in wood storage box.

To replace locomotive in its wood storage box, first wrap the locomotive and tender in tissue and poly, then carefully place the locomotive and tender back into the foam lined wood box.

PREPARING LOCOMOTIVE FOR OPERATION

Although the Lionel Smithsonian Collection 'Dreyfuss' Hudson is ready to operate, a few preventive maintenance steps may be taken to ensure the smooth operation and longevity of the model. The 'Dreyfuss' Hudson has been lubricated during assembly and testing. While this will suffice for initial operation and break-in, you may wish to further lubricate the side rod and valve gear assemblies by applying 1 or 2 small drops of good quality fine oil to areas where moving parts are in contact with each other. Your local hobby dealer should be able to guide you in the selection of a suitable lubricant. Care must be taken to avoid soiling the surface of the sound cam located on the rear driver axle. Should this occur you will notice an alteration of the chuffing pattern heard during operation. This may be corrected by carefully removing the lubricant with a cotton swab.

The locomotive motor and gear box are adequately lubricated during assembly and will need no further immediate lubrication. In addition, all locomotive and tender axles rotate in sealed ball bearings and will not require any lubrication during normal use.

It is recommended that you operate the locomotive on the roller base during a break in period. Operate the locomotive at a variety of speeds, and in both directions for a period of 30 minutes. This will help the drive system to 'run-in' resulting in smoother running characteristics.

Note: Use lubricant sparingly and with care.

INSTALLING COUPLERS

The Lionel Smithsonian Collection 'Dreyfuss' Hudson comes equipped with a coupler pocket allowing the use of either the supplied 'tight lock'

non-operating coupler or the popular 'O' scale "Kadee" brand operating coupler (not included). To install either type of coupler, follow these steps:

- 1. Cover your working surface with a piece of foam rubber.
- 2. Place tender top down on the foam
- Remove the coupler pivot screw.(located in the center of the coupler pocket cover)
- 4. Remove coupler pocket cover.
- 5. Place appropriate couple in the coupler pocket.
- 6. Replace coupler pocket cover
- 7. Replace coupler pocket cover screw

LOCOMOTIVE AND TENDER CONNECTIONS

The Lionel Smithsonian Collection 'Dreyfuss' Hudson requires that three electrical connections be made between the locomotive and tender to permit operation of the locomotive drive system as well as the sound and lighting systems. Since the three pairs of connectors are unique, they cannot be miss-connected. The connections are made by matching the number of contacts on the female end (locomotive) and male end (tender) and firmly but carefully pushing the housings together. With the connections made, the excess wire may be carefully pushed into the locomotive and tender to allow for the drawbar connection to be made. When disconnecting the locomotive from the tender, pull only on the housings - **Do not pull on the wires!** These connections are most easily made when the locomotive is in place on the track or roller base.

POWER SUPPLY REQUIREMENTS

Note: Absolutely do not under any circumstances connect an AC power supply to your model! This will void your limited lifetime warranty.

The Lionel Smithsonian Collection 'Dreyfuss' Hudson is a Direct Current (DC) electric model train. Alternating Current (AC), as is produced by most Lionel power supplies will damage or destroy the 'Dreyfuss' Hudson's electric motor, constant lighting circuit board, and sound system circuit board. If you are not sure whether a power supply is usable with your locomotive, check the following:

- 1. Are the power supply's output terminals clearly marked as DC or Direct Current?
- 2. Is the power supply's output voltage rated from 0 to 18 vDC?

3. Is the power supply's output amperage rated a minimum of 2 amps?

If you can answer 'yes' to the previous three conditions, then your power supply is safe to use with your 'Dreyfuss' Hudson. Please note that most older and/or lower quality power supplies utilize an unfiltered and insufficiently regulated power output which may cause undesirable operational characteristics.

OPERATING THE LOCOMOTIVE

The Lionel Smithsonian Collection 'Dreyfuss' Hudson is designed to operate with the application of 0-18 vDC. Locomotive movement will occur when approximately 6 volts DC is applied to the Roller Base or layout track. This is a normal design characteristic which allows the sound and lighting systems to operate before locomotive movement commences. After the initial break-in period you will begin to notice smoother and quieter operating characteristics as the moving parts begin to run-in.

PREPARING SOUND SYSTEM FOR OPERATION

The Lionel Smithsonian Collection 'Dreyfuss' Hudson contains a state-of-the-art sound system which digitally recreates actual locomotive sounds including steam whistle, bell, blowers, air pump, emergency relief valve, and cylinder chuff. While this sound unit requires track voltage to actuate certain sounds, the actual power used to operate the sound system is supplied by two standard alkaline 9 volt batteries located in the tender and one standard alkaline 9 volt battery in the sound control unit.

Note: Your tender and sound control unit come equipped with batteries. If you do not plan to use your locomotive for an extended period of time it is highly recommended that you remove these batteries. Please also note that this system is not compatible with traditional Lionel sound unit controllers including Rail-Sounds. Any attempt to utilize such controllers may cause damage to the sound system.

The supplied sound system controller may be connected to either an operating layout or to the included 'Roller Base'. The sound system controller has two sets of wire leads. One set of leads terminates with a male plug matching the female plug mounted on the bottom of the