

INSTRUCTION MANUAL



UNION PACIFIC 4-8-8-4 BIG BOY, ELECTRIC



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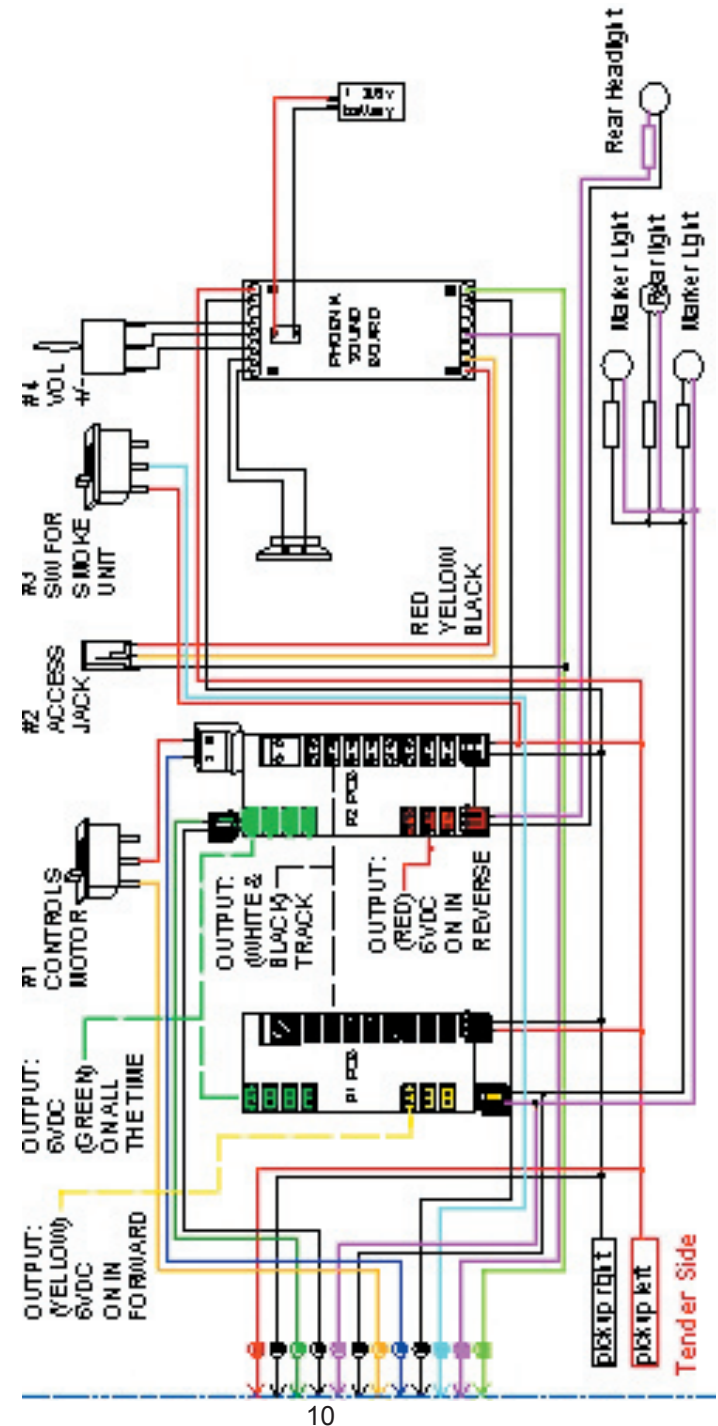


A detailed model of a Union Pacific steam locomotive, number X4002, is shown on a track. The locomotive is black with a white smokestack and a white front plate. The Union Pacific shield logo is visible on the front. The model is highly detailed, showing various mechanical components and the texture of the steam locomotive's body. The locomotive is positioned on a track with gravel ballast, and the background is a plain white surface.

In many peoples minds no other steam locomotive in history exemplifies the zenith of the builder's art of steam power more than a Big Boy. We are fortunate today that there is a high survival rate of Big Boys. With most famous steam locomotives that survive today we are lucky to have one example left on display or restored. In some cases many of the famous classes of locomotive have been scrapped and are now gone. The NYC Hudson and the Southern Pacific Mountain Class are two examples. Of the 25 Big Boy locomotives built 9 are still on display around the US. The locomotive numbers on the Accucraft models represent some of the surviving locomotives.

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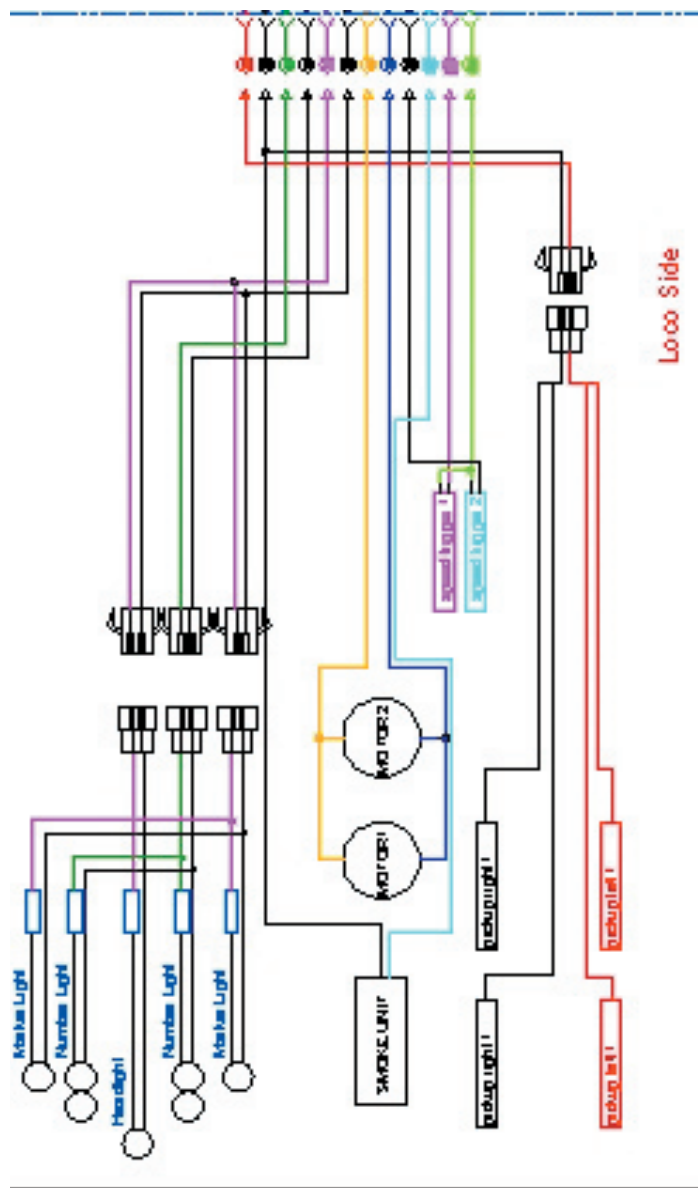
Big Boy Tender Side Wiring Diagram:



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Big Boy Loco Side Wiring Diagram:



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General information about the Union Pacific 4-8-8-4 Big Boy

This accurately detailed model is constructed of die-cast, brass and stainless steel. Pittman Gearhead motors power all 16 drivers. The museum quality finish and lettering represents this locomotive as it would have looked in the late 1940's and early 1950's.

Your Accucraft Big Boy has a new style power distribution board in the tender.

Remove the coal load in the front of the tender. This will reveal the power distribution board.

Track power is routed through this board to the motors. The sound system also gets its power from this board. Please refer to the Wiring Diagram at the rear of this manual.

The lights on this locomotive are LEDs rated at 6 volts.

Your locomotive and tender are electrically connected via a 12-prong plug at the rear of the locomotive, under the rear deck.

This plug takes the place of the usual "wireless drawbar" that has traditionally been found on metal locomotive models. The drawbar on this model is just what the name implies: a drawbar only. Power is routed from front to back and vice versa via the 12-prong plug.

Both locomotive and tender units have carbon brush pickups on both rails, to ensure reliable operation when using track power.

Disassembly on this large and complex model is not recommended. However, if absolutely necessary, the 1.6mm hex bolts and nuts can be turned with a nut driver sized for U.S. 00-90.

Your Big Boy is designed to run on a 10ft. minimum radius curve track.

Please take care in lifting this large and heavy model.



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Model Features:

This production model has been handcrafted for Accucraft Trains by AMMC, which is one of the most respected makers of large scale brass models. This museum quality model features:

- Full cab interior details, with operating cab windows
- Detailed boiler with fittings, domes, pipes and handrails
- Operating steel drive rods, valve gear and cross heads
- Prototypical livery and lettering
- Steel helical gears in a die-cast transfer box
- 2 independent Pittman Motors

Technical Specifications:

Scale/Gauge: 1/32, 45mm Gauge
Total Weight: 30.4 lbs.

Locomotive Information:

Length: 33.5 inches (851 mm)
Width: 4.25 inches (108 mm)
Height: 6.3 inches (160 mm)

Tender Information:

Length: 17 inches (432 mm)
Width: 4.05 inches (103 mm)
Height: 6.37 inches (162 mm)

Recommended Radius: 3M, 10ft.*

Power: Two Pittman GM94
13-2, 0-24V DC
11:5.1 Gear Ratio

Peak rated output torque: 187 oz-in

Output Shaft stall torque: 911 oz-in

*Be sure to leave at least a 3" clearance (measured from the inner rail) to allow for overhang.

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3. The locomotive is firmly taped to a 1/2" wood board which is then fastened to the metal case with 4 - M6 bolts. Bolts must be removed before lifting the locomotive with wood board from the metal case.

4. Place taped locomotive on a flat surface. Carefully cut the tape along the wood board

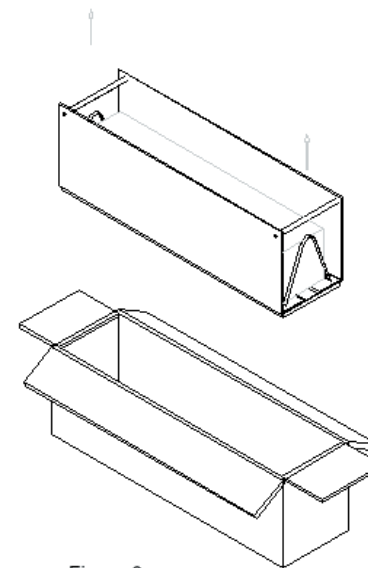
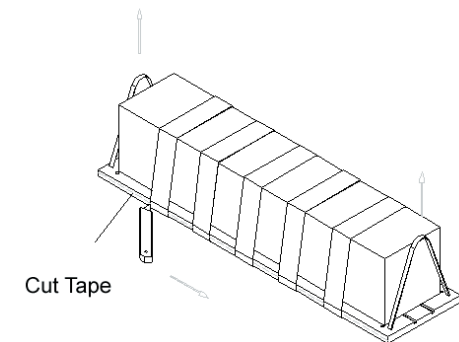
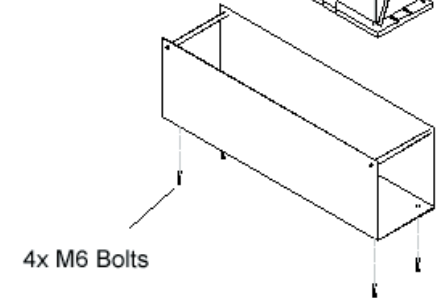
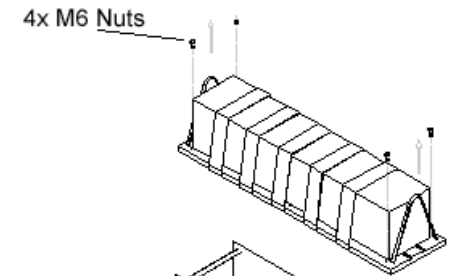


Figure 3



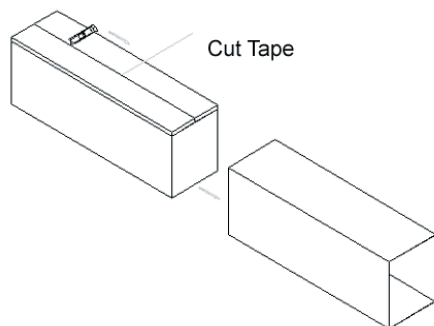
side surface. Be sure to cut both sides of the wood board. Slowly lift the tape from the locomotive. Be very careful with small parts.

Tape cannot be re-used to re-pack the model. Use new packing tape if necessary

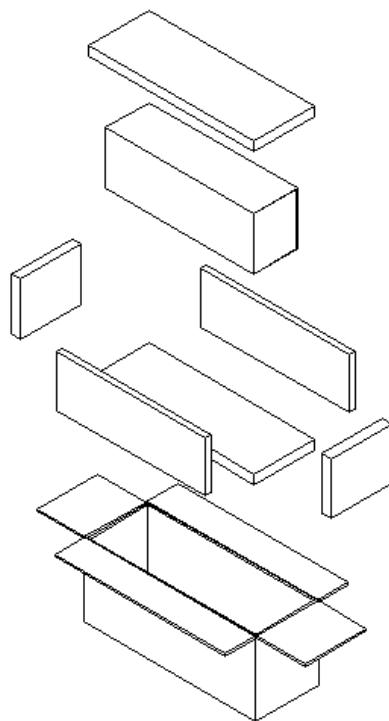
Unpacking your Big Boy:

Please read the following directions before unpacking your locomotive.

Accucraft Trains locomotives are fine scale brass models with small parts. To provide maximum protection from shipping damage; we carefully pack the models in metal cases. We ship via UPS with insurance coverage to its full value. Please contact UPS if package is damaged. Each locomotive is packed under UPS guideline for shipping. We do not warrant any damage resulted from re-packaging by any party other than Accucraft Trains. Please read the following directions before unpacking your locomotive.



1. Remove foam around the locomotive. Slide the inner box cover to the side, and open the inside cardboard box by carefully cutting the tape with a cutting knife.
2. Lift the metal case from the cardboard box.



Caution!

This model is an accurate replica of the original locomotive. It has sharp and moving parts. The locomotive drive rods are stainless steel with sharp edges.

OPERATORS MUST NOT COME IN CONTACT WITH A MODEL THAT IS BEING POWERED AT ANY TIME. UNDER NO CIRCUMSTANCES SHALL ACCUCRAFT TRAINS BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING IN REGARDS TO ANY ACUCRAFT PRODUCT.

Lubrication:

Please lubricate your Accucraft Model before attempting to operate.

With a bit of care, your Accucraft Model should give you many years of pleasure and reliable service. Lubrication is of prime importance on a model of this type with so many moving parts. Always use quality lubricants. This should not be a problem, for there are many modern lubricants available in hobby and sport shops. Light oil such as Labelle #108 or Hoppe's Gun Oil will do a good job on lubricating most of the moving parts. For pistons and slides, a heavier lubricant such as Labelle #102 would suffice. For gears, use gear grease such as Permatex Super Lube or another hobby gear lubricant.

To access the many moving parts of this model: using a soft towel or foam sheet, the model should be carefully placed on its side. A drop of light oil on every moving part is necessary: there are many moving parts on this locomotive. Be sure to lubricate all the crank pins, crosshead slides, piston rods, etc., that are visible to you. Make sure you lubricate the locomotive and tender axle's journals as well.

Do not over lubricate, since excess oil only picks up unwanted dirt. Be careful to keep lubrication off the painted surfaces to avoid having shiny areas.



Lubrication (Continued):

Use a type of oil that is a bit heavier to lubricate the axle bushing and pivot points of the lead and trailing trucks.

The main gear box is lubricated in the factory, and will not require any attention when you first run your model. However, in time; you should make sure that the gears are well lubricated with some technical gear grease. The gear box cover is held on with screws, and removing it will allow you to access all the gears and bushings that need lubrication. Take note how the cover comes off and replace it exactly the way it was when you started. Lubrication of the locomotive should be done every 25 hours of operation.

After following the recommended lubrication procedures, your Accucraft Big Boy is ready to provide many years of reliable operations.

We recommend that you use a D.C. power supply with a capacity of 2.5 amps or larger and 24 volt output.

Always pick you model up by grasping it under the frame on both ends. It is a very heavy model so make sure you grasp it firmly.

Electrical Pickup:

The model is powered by the DC voltage off the track through the engine and tender. All drivers are insulated on both sides of the locomotive, and the electricity is pickup with 16 pickup wheels.

Be sure to clean the electrical pickup units when needed. Replacement electrical pickup units can be ordered from Accucraft Trains.

Lighting:

This model features directional lighting.

Sound installation (if not factory installed):

Several manufactures have sound systems that are acceptable for your new Big Boy locomotive. Sound system power connectors are available for the power distribution board in the tender, and a generous speaker hole will be found in the tender floor. Please contact the sound system manufacture for installation directions.

General Maintenance:

Clean the exterior surfaces of your locomotive with a clean, soft and lint free cloth. To remove stubborn soil or greasy spots from the painted surfaces use alcohol on a soft, lint free cloth.

Accucraft Train locomotives are fine scale models with small parts. To provide maximum protection from shipping damage, we carefully pack the models in metal cases. We ship via UPS with insurance coverage to its full value. Please contact UPS if package is damaged.

Each locomotive is packed under UPS guidelines for shipping. We do not warrant any damage resulted from re-packing by any party other than Accucraft Trains.

IMPORTANT

Please read the "Unpacking Accucraft Trains Locomotives" section of the enclosed instruction manual before attempting to remove your model from the steel shipping case. Also, some parts may have loosened during shipment. Inspect your model prior to any operation. Please contact Accucraft Trains technical support at (510) 324-3399 with any problems.

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