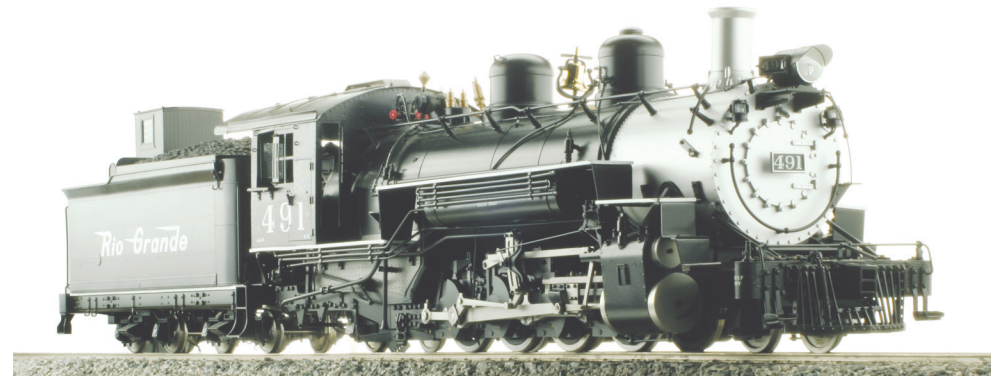


# D&RGW K37 2-8-2

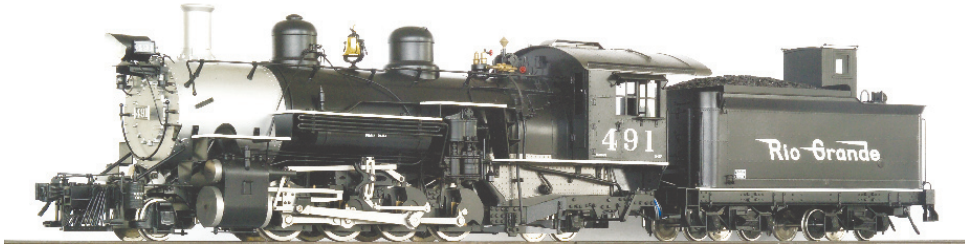


## INSTRUCTION MANUAL

 **ACCUCRAFT TRAINS**  
MUSEUM QUALITY BRASS MODELS

33268 Cental Avenue  
Union City, CA 94587  
Tel: (510) 324-3399  
Fax: (510) 327-3366  
[www.accucraft.com](http://www.accucraft.com)  
Copyright 2006

 **ACCUCRAFT TRAINS**  
MUSEUM QUALITY BRASS MODELS

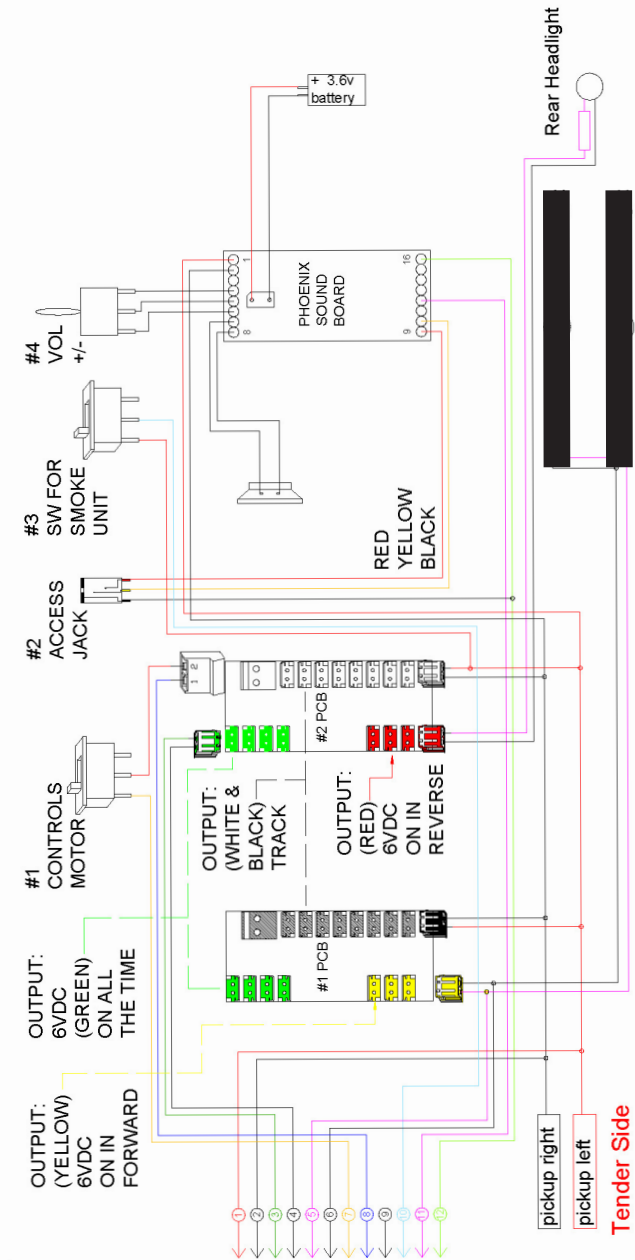


**Prototype Information:**

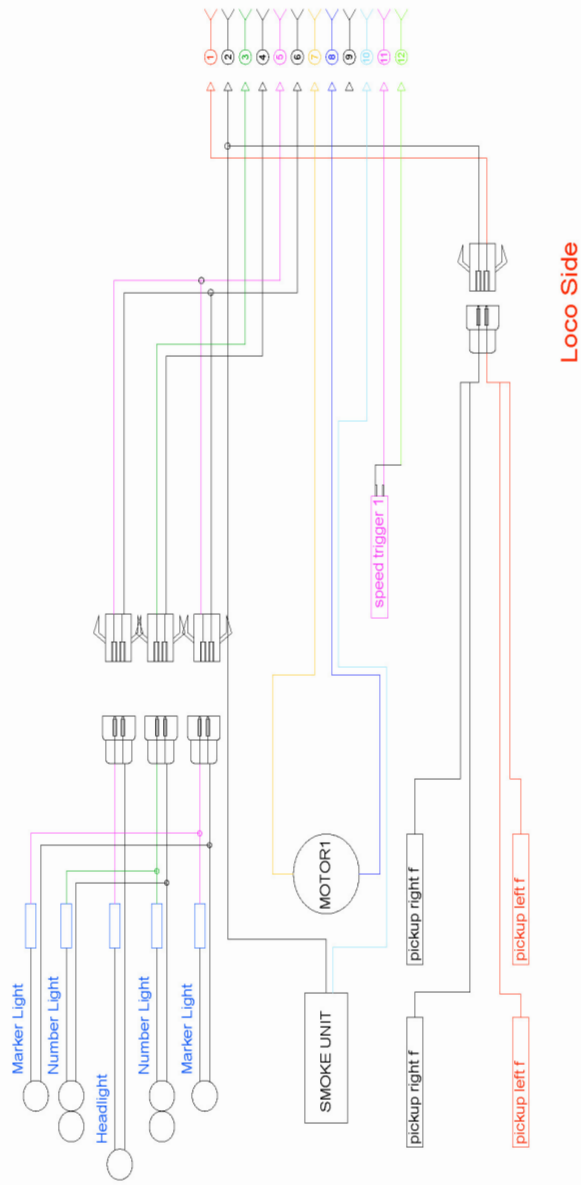
In 1928 and 1930 the D&RGW rebuilt ten standard gauge C-41 class 2-8-0 consolidations into 2-8-2 K-37 class Mikados. At the time, both the standard gauge and narrow gauge portions of the D&RGW railroad demanded more and larger motive power so it made perfect sense to rebuild small standard gauge locos that were limited in use into powerful narrow gauge locos, rather than buying new. The numbers #490 through #495 were built in 1928, while numbers #496 through #499 were built in 1930.

The railroad purchased new frames from Baldwin Locomotive Works and used as much of the old 1902 Baldwin-built consolidations as possible. Boilers were used after a rebuilding, smoke boxes were extended, cabs were rebuilt, tenders were lowered etc. Interestingly although new lower profile tender truck bolster were used the axles were left at their standard gauge length with the narrow gauge wheels spaced towards the center of a long axle. The resultant locomotive was quite large; in fact it became the largest of the D&RGW narrow gauge locomotives with a tractive effort of approximately 37,000 pounds.

Happily only two of the class numbers #490 and #496 were dismantled. The rest were either put on display or eventually found their way to the Durango and Silverton Railroad, or the Cumbres and Toltec Scenic Railway.



K37 Electrical Diagram



**General information About Accucraft K-37 Model:**

This accurately detailed model is constructed of brass and stainless steel. A large Pittman gearhead motor powers all eight drivers through a metal gear box and the side rods. The museum quality finish and lettering represents this locomotive as it would have looked in the early 1950's. Your locomotive and tender are electrically connected via a twelve-prong plug.

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 its name implies, a drawbar only. Both locomotive and tender units have carbon brush pickups on both rails to insure reliable operation when using track power.

Your K-37 comes with Accucraft's new scale couplers. These operate much the same as the prototype, and they are scaled from D&RGW photos and drawings. They can be activated as on the prototype, from both the top and bottom of the coupler. These couplers are made of a plastic material, and will allow you to double head your K-37 with another metal locomotive

without incurring any short-circuit problems.

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

Please take care in lifting this large and heavy model. It is recommended that the locomotive be picked up by carefully grasping it under the frame on both ends.

**Technical Specifications:**

Scale: 1/20.3, 45 mm Gauge  
 Minimum Radius: 1.2M (48 inch)  
 Power: 0-24V D, Pittman gear head motor  
 Weight: 28.5 lbs (12.94kg)

**Locomotive Information:**

Length: 26 inches (660.4 mm)  
 Width: 6.25 inches (158.75 mm)  
 Height: 8.0 inches (203.2 mm)

**Tender Information:**

Length: 16 inches (406.4 mm)  
 Width: 6.25 inches (158.75mm)  
 Height: 8 inches (203.2mm)  
 Recommended radius: 117.5 mm, 46 1/4 inches (LGB 1600)\*  
 Recommended clearance: 3 inches from rail\*

\*Be sure to leave at least 3" clearance (measured from the inner rail) on the 46-1/4 inch radius curve to allow for overhang.

***The following parts are packaged separately***

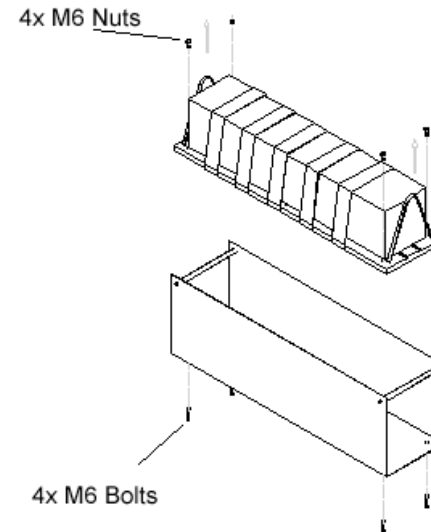
- M2 hex head screws
- M2 hex head screw driver

**Caution!**

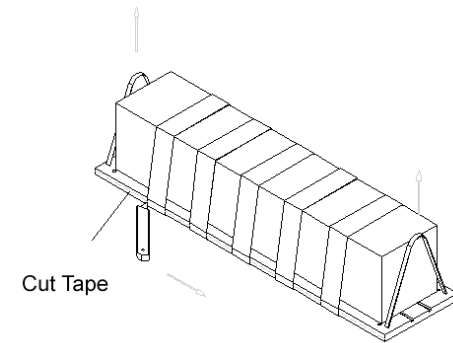
This model is an accurate replica of the original locomotive. It has sharp and moving parts. The locomotive drive rods are stainless steel with sharp edges.

**OPERATORS MUST NOT COME INTO CONTACT WITH THE MODEL WHILE IT IS BEING POWERED AT ANY TIME. UNDER NO CIRCUMSTANCES SHALL ACCUCRAFT TRAINS BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING IN REGARD TO ANY ACCUCRAFT PRODUCT.**

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.



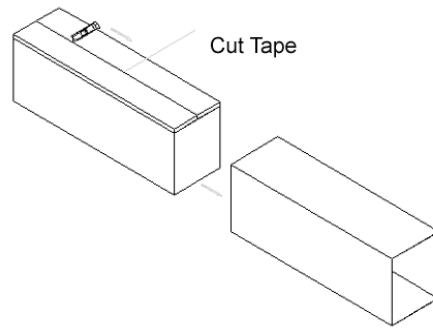
4. Place taped locomotive on a flat surface. Carefully cut the tape along the wood board side surface. Be sure to cut the tape on both sides of the wood board. Slowly lift the tape from the locomotive. Be very careful with small parts. Tape can not be re-used to re-pack the model. Use new packing tape if necessary.



**Unpacking Instructions**

Accucraft Train 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.

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.

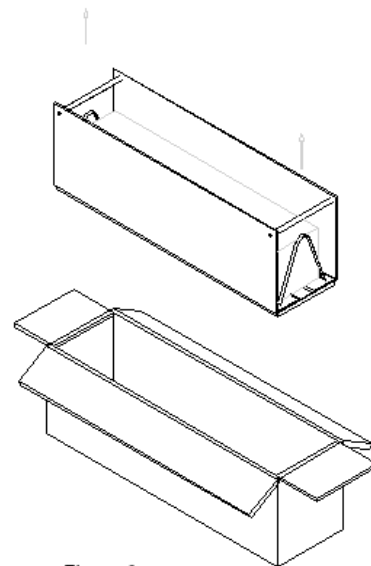
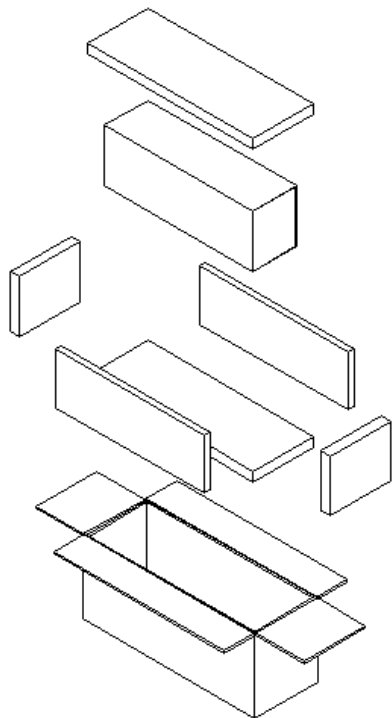


Figure 3



**Model Features**

This limited production model has been handcrafted for Accucraft Trains by AMMC, 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
- Scale couplers (compatible with Kadee #835)
- Steel helical gears in a die-cast transfer box

**Pittman DC Gearhead Motor Specifications (GM9234)**

- Peak voltage 24V
- Gear ratio 38.3:1
- Peak rated output torque 187 oz-in
- Output shaft stall torque 911 oz-in

**Tools you will need for maintenance**

- 1.5 mm allen wrench
- 1.6 mm and 2 mm hex wrenches
- Flat head screw driver
- Phillips head screw driver

**Lubrication**

**Please lubricate your Accucraft K-37 before attempting to operate.**

With a bit of care; your Accucraft K-37 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 a type of gear grease such as Permatex Super Lube or another hobby gear lubricant.

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

Do not over lubricate for excess oil only picks up unwanted dirt. Be careful to keep lubrication off the painted surfaces as this will cause shiny areas.

Use a type of oil that is a bit heavier to lubricate the axle bushings and pivot points of the lead and trailing trucks. The main gear box is lubricated in the factory, and will not need any attention when you first run your model. However, in time, you should make sure that the gears are well lubricated with 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 of how the cover came 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 D&RGW K-37 is now ready to provide many years of reliable operation. We recommend that you use a D.C. power supply with a capacity of 2.5 amps or larger. Always carefully pick your model up by

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

**Electrical Pickup**

The D&RGW K-37 model is powered by the DC voltage off the track through the engine and the tender. All drivers are insulated on the both side of the locomotive and the electricity is picked up with 12 pickup wheels. Be sure to clean electrical pickup units before each operation. Replacement electrical pickup units can be ordered from Accucraft Trains. Track power is connected to the Accucraft Train's power distribution board which is located in the tender.

**Sound Installation (if not factory installed)**

Several manufacturers have sound systems that are acceptable for your new D&RGW K-37 locomotive. Sound system power connectors are available on the power distribution board in the tender and a generous speaker hole will be found in the tender floor. **Please contact sound system manufacturers for installation directions.**

**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.

**Fax: (510) 324-3366**

**E-Mail: [info@accucraft.com](mailto:info@accucraft.com)**