



# Colorado & Southern No 59 & 71

## Instruction Manual



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## Colorado & Southern No. 59 & 71 Electric

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### Colorado & Southern No. 59 & 71 Electric

Colorado and Southern locomotive No. 59 & 71 are similar to locomotive No.60. All these locomotives were built in the mid-1880's. By the 1890's these engines were rebuilt by the Colorado and Southern and designated class B-4-C all weighed in at 61900 pounds and had cylindered dimensions of 16" by 18". Performances of these locomotives were similar to that of C16 locomotives of the D&RGW.

In their long career, these engines saw heavy use on the dual-gauge track around Denver and the mining areas of Leadville, Colorado. They passed through the famous Alpine Tunnel and ran from Black Hawk through Central City. They traversed the famous High Bridge at the Georgetown loop.

This splendid Accucraft model of the Colorado & Southern No. 59 & 71 are built entirely of brass and stainless steel, and are powered by a Pittman gearhead motor to allow slow and reliable running.

The museum quality finish and lettering complete these outstanding and historical models.

Total production volume is limited to 100 of each number.

### *Technical Specifications:*

Scale/Gauge:	1:20.3, 45 mm Gauge
Total Weight:	7.75 Kg, 17.1 lbs.
Length:	826 mm, 32.5 ins.
Width:	135 mm, 5.3 ins.
Height:	228 mm, 9.0 ins.
Driver Wheels:	Dia. 45 mm, 1.8 ins.
Minimum Radius:	0.76 M, 30 ins.
Power:	0v-24v DC Pittman Gearhead Motor



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### **General information about your C&S No. 59/71**

This limited production model has been manufactured by Accucraft Company, one of the most respected makers of large scale brass models. Production of this Accucraft Train locomotive has been limited to 100 models worldwide. This museum quality model features:

- Complete cab interior details
- Detailed boiler with fittings, domes, pipes, and handrails
- Operating steel drive rods, valve gear and cross heads
- Real coal load
- Prototypical livery and lettering
- Scale couplers (compatible with Kadee #835)
- Pittman DC gearhead motor
- Steel helical gears in a die-cast transfer box
- Twelve pickup wheels

### **Pittman DC Gearhead Motor Specifications(GM8712-31)**

- Peak voltage 24 volts
- Gear ratio 60.5:1
- Peak rated output torque 100 oz-in
- Output shaft stall torque 202 oz-in

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

- M3 hex head screws
- 3mm hex head screw driver
- Whistle and rope
- Lower end of cinder discharge pipe

### **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.

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



### ***Tools you will need for maintenance***

- 1.5 mm allen wrench
- 3 mm hex wrench (Included)
- Flat head screw driver

### ***Lubrication***

Lubricants: always use quality lubricants!

Light oil such as Labelle #108 or Whal Clipper Oil. Heavy lubricant such as Labelle #102 heavy gear oil or Labelle grease.

Prepare the engine for lubrication by placing the model gently on the work surface. To protect the locomotive finish, place the engine on a piece of foam sheet or soft towel. The engine should be placed on its side. Be careful to keep the lubricant off of the painted surfaces, as this can leave a shiny appearance on the area it touches.

1. First lube the bearings on the driver journals with a small amount of light lube oil. The oil is easily applied with a wood tooth pick.
2. Next lube the U-Joints with heavy lube and tender journals with light machine oil.
3. Next lube the CRANK SHAFT JOURNALS, MAIN ROD BEARINGS AND CROSSHEAD with light machine oil.

4. THE MAIN GEAR BOX IS FULLY LUBRICATED AT THE FACTORY. NO LUBRICATION IS NECESSARY WHEN YOU RECEIVE YOUR MODEL. To lube the main gear box, remove the cover of the gear box carefully (make sure you familiarize yourself with the position of all parts). Place the screws in a small container to prevent losing them. Grease the gearing and shaft bearings generously. Replace the cover exactly the way it was when you started.

It is a good idea to wipe off all excess light oil when you complete the lubrication process.

You have now completed the lubrication of your Accucraft "Consolidation".

**THIS LUBRICATION SHOULD BE REPEATED AFTER EVERY 25 HOURS OF OPERATION!**

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After following the recommended lubrication procedures your C&S No. 59/71 is 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 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 C&S No. 59/71 model is powered by the DC voltage off the track through the engine and the tender. All C&S No. 60 drivers are insulated on the both side of the locomotive, the electricity is picked up with 12 pickup wheels. Track power is connected to the Accucraft Trains' control circuit board which is located in the tender.

### - **Control Circuit Board**

All input and output terminals on the control circuit board are labeled for easy access. Two "On/Off" switches are added to the circuit. "M" switch can disconnect the locomotive motor from its powered wheels, and "S&L" switch controls the sound unit and lights.

### - **Lighting**

This model features directional lighting. The constant voltage is set at 1.5V.

### - **Smoke unit**

Accucraft Trains does not recommend any smoke unit for this model due to the prototypical bear trap design. However, a smoke unit may be installed in the barrel of the smokestack with some modification to the model.

### - **Sound Installation (if not included)**

Both Phoenix and Sierra provide sound units for this model. Please contact them for installation directions. The tender has a speaker opening that will fit an 3" speaker. Power terminals for the sound units are also labeled on the control circuit board.

### - **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.