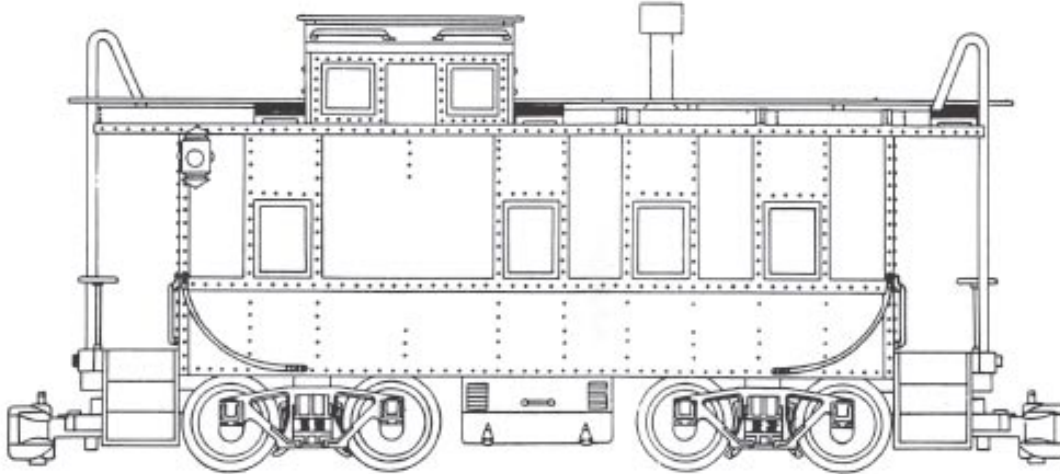


# LONG STEEL CABOOSE

INSTRUCTION MANUAL

ART 42100-01



## ARISTO-CRAFT TRAINS

010194 REV.

### INTRODUCTION

Dear Model Railroader:

This product is one of the most highly detailed #1 Gauge 1/29th Scale Model Railroad Freight Railcars available. Suitable for both INDOOR and OUTDOOR operation, it accurately portrays a North American prototype Offset Cupola Steel Caboose, based upon our research and on documented Official Blueprints referenced to standard Association of American Railroads (AAR) recommended practice.

Should you have any questions about operations, proper usage, or maintenance required on this freight railcar or any other ARISTO-CRAFT TRAINS' #1 GAUGE 1/29 Scale Model Railroad product, please contact us at the following address:

ARISTO-CRAFT TRAINS	PHONE: 973-351-9800
698 SOUTH 21ST STREET	FAX: 973-351-9700
IRVINGTON, NJ 07111	EMAIL: <a href="mailto:aristo@mindspring.com">aristo@mindspring.com</a>
	<a href="http://www.aristocraft.com">www.aristocraft.com</a>

Our phone lines are open from 10:00 AM to 5:00 PM (EASTERN STANDARD TIME) Monday through Friday

The following instructions are intended to help you understand and operate all the features built into this product.

Good Railroading!!!!

#### STEEL CABOOSE

The Steel Caboose is based upon a Offset Cupola Steel Caboose of the 1930's era. Actual prototype examples of this type caboose are still in use by North American Railroads.

#### WORKING FEATURES:

- Operating AAR-design knuckle couplers.
- Detailed freight car trucks/wheelsets with individual springs and Metal Wheels.
- Operating Doors.
- Potbelly stove with smoking chimney.
- Solid state electrical circuit.
- Removable roof.
- Operating interior lights and Rear-end Markers.

#### EXTERIOR DETAILS:

- Three-dimensional ladders on Ends and Sides.
- Brass Grab Railings and End Railings/Brakewheel.
- Simulated WOOD-GRAIN Flooring.
- Full Underframe, including Air Brake System components.
- Clear Windows with "Wood" Frame.

#### INTERIOR DETAILS:

- Wall partitions – Doors – Toilet
- Sink – Faucets – Water Tank – Table
- Wall Lamps – Benches w/cushions – Potbelly Stove

## FEATURES

### TRUCK BEARINGS:

The truck sideframes are molded of a thermal plastic which reproduces all details and, for durability, a special bearing has been permanently inserted in each journal box end. These bearings are designed to operate properly WITHOUT lubrication. However, you MAY lubricate, if desired, using a dry lubricant of powdered graphite, an oil-based liquid lubricant, or ARISTO-CRAFT TRAINS ART-29602 CONDUCTIVE LUBRICANT but ONLY in very small amounts. It is not necessary to dis-assemble freight railcar trucks to properly lubricate. Turn freight railcar upside down and apply lubricant to axle ends at truck sideframe.

### TRUCK SPRINGS:

The trucks/wheelsets on this model are designed exactly like the trucks used on prototype railroads, and use springs for equalization to act as a shock absorber and cushion the ride.

### ELECTRICAL PICKUP: See Notes on Page 3

Riding against the inside face of the metal wheels are spring-loaded carbon brushes. These brushes transmit electrical current from the wheels to the Solid State Circuit Board underneath the floor that allows all operating features to function.

After extended usage, it may become necessary to replace the carbon brushes (ART 29401). Unscrew the truck/wheelset from underbody. Then also unscrew the plastic brush holder from the truck/wheelset component – CAUTION: BRUSHES ARE SPRING-LOADED. Then remove old brushes and replace with new brushes. It is suggested to replace BOTH brushes at same time. DO NOT DAMAGE OR LOOSEN wires attached to underbody through the plastic brush holder. To reduce friction/drag on carbon brush contact surface, you may lubricate, but ONLY WITH ELECTRICALLY CONDUCTIVE lubricant, sold as ARISTO-CRAFT TRAINS ART-29602 CONDUCTIVE LUBRICANT.

### COUPLERS:

Loop style couplers (ART 29101-69) are enclosed as a spare accessory. The operating knuckle couplers (ART-29200) on all the ARISTO-CRAFT TRAINS freight railcars are designed based upon the AAR-style knuckle coupler used on all major North American Railroads.

**NOTE:** However, these knuckle couplers may not operate automatically when attempting to couple ARISTO-CRAFT TRAINS products to knuckle couplers used by other model railroad manufacturers. Couplers may have to be joined by manually coupling the knuckle on each car in a closed position by lifting one end coupler and inserting the closed knuckle onto the ARISTO-CRAFT TRAINS knuckle coupler.

This type coupler works equally well from either end of the freight railcar and can be uncoupled automatically by using an LGB\* designed uncoupling device. The couplers may also be operated manually by pressing upward on the small tab below each coupler assembly. The coupler can be pushed away to any side if you wish the railcar not to couple automatically when the railcars come together. However, DO NOT attempt to operate in train without the couplers properly aligned and fully coupled to opposite railcar/locomotive. Otherwise, railcar(s) may derail on curves or switch tracks. Should you prefer to use the Loop-style coupler, this conversion can be made easily and quickly by unscrewing the single screw that holds the AAR coupler to the truck arm and attaching the Loop-style coupler using the same screw. Both style couplers are attached to truck arm at a swivel base. When operating, railcar, this enables coupler(s) to articulate when encountering sharp radius curves or switches. Couplers will center automatically while railcar is in motion. Manual centering is accomplished by exerting light pressure on knuckle/Loop at articulated joint and returning knuckle/Loop to center.

\*LGB is a trademark of the E.P. Lehman Company, Germany.

### MARKER LIGHTS:

The Rear-end Marker Lights attached to the body end are illuminated by L.E.D.'s. Unlike ordinary bulbs, L.E.D.'s do not burn out quickly and should allow extended service. If you require replacement L.E.D.'s, we suggest contacting ARISTO-CRAFT TRAINS' Customer Service for assistance. Proper tools are required to replace L.E.D.'s and to connect to electrical circuit. Marker Light with L.E.D.'s is ART 29500/Pair.

### INTERIOR LIGHTING:

The detailed interior is illuminated by decorative lamp fixtures which utilize screw-base incandescent light bulbs, ART-29502, that will require replacement after normal extended usage. To replace, disconnect Long Caboose from electrical supply, remove Roof (see section ROOF REMOVAL), and unscrew bulb. CAUTION: Check first to ascertain that inoperative bulb has not vibrated loose.

### ELECTRICAL CIRCUIT BOARD:

The product is equipped with a Solid State Circuit Board that distributes the electrical current to various operating components. This Circuit Board is completely SOLID STATE and CANNOT WEAR OUT, and is a permanent part of subfloor which CANNOT be removed. If your LONG STEEL CABOOSE requires service due to malfunction of electrical Circuit Board, return to factory-authorized repair facility ONLY. See WARRANTY INFORMATION for repair instructions.

### LIGHTS/OPERATING SMOKESTACK:

This LONG STEEL CABOOSE is equipped with operating interior lights, operating Rear-end Markers, and Potbelly Stove with Operating Smokestack. Lights and smoking feature are controlled by slide switch off/on located underneath the caboose body floor on both sides of the rear truck/wheelset. (Rear truck/wheelset is caboose end with Rear-end Markers.)

The operating smokestack switch is same side (rightside) as smokestack. The light switch is on the leftside. To operate ON, slide switch lever forward. To operate OFF, slide switch to rear. Either switch may be both ON – both OFF or separately ON/OFF when Caboose is moving in train.

### SMOKE GENERATOR:

The Smoke Generator unit (ART-29300) is located in the removable smokestack/chimney that attaches to the roof in a slotted/tight-lock fit. To operate, fill smokestack with ART-29601 SMOKE FLUID AND TRACK CLEANER. Tilt smokestack cover back and allow 15 drops to enter chamber, then return cover to normal position. Make sure underbody switch is ON (forward position) and track power is connected. It is also important to turn smoke generator unit OFF immediately after smoke fluid is completely used, because an empty smoke generator unit in ON position will burn out unit. Be careful not to overfill the smokestack chamber or get smoke fluid onto caboose body/roof. If fluid spills, wipe dry immediately.

### CAUTION – CAUTION – CAUTION

The smokestack of this smoke generating unit and surrounding carbody roof MAY BECOME HOT during operation and for a reasonable time after unit turned off. DO NOT TOUCH this unit until it has sufficiently cooled. DO NOT TURN CABOOSE upside down or side-ways because remaining smoke fluid may flow out. Smoke Fluid MAY ALSO BE HOT.

### SERVICE NOTES:

All parts contained in this LONG STEEL CABOOSE are available for replacement or repair by contacting ARISTO-CRAFT TRAINS Customer Service Department. See Exploded Parts Diagram/Price List

Major components are available as a unit to allow the customer to have the option of replacement or repair by qualified factory technicians. If you have any questions, please refer to INTRODUCTION for method of contacting our office.

### PULSE WIDTH CONTROL: (Revised 01-94)

All ARISTO-CRAFT TRAINS locomotive, tenders, railcars, and accessories with operating features are designed to operate at proper capacity ONLY with ARISTO-CRAFT TRAINS Power Packs featuring "Pulse Width Control" (P.W.C.).

P.W.C. allows a continuous voltage to flow to the motor and accessories such as headlight, interior lighting, and smoke unit during operation REGARDLESS of the speed OR direction of locomotive, tender, and/or railcars. In addition, the motor is supplied with continuous voltage to allow smooth starting and stopping.

DO NOT CONFUSE PULSE WIDTH CONTROL with Pulse Power, a feature provided by some other (non-ARISTO-CRAFT TRAINS) power packs. It may seem that when operating with Pulse Power, the feature on ARISTO-CRAFT TRAINS products are operating properly but in fact they ARE NOT. Sufficient voltage may not be available to activate the unit(s) and, overload/underload damage to components may result. Also, the TRAIN POWER PACK 7000 - 3.5 AMP FOR G AND HO previously manufactured by Polk's Modelcraft Hobbies under the Aristocraft Tradename and the ART- 5460 POWER PACK (10 AMP) LINEAR (NEW FOR 1994) DO NOT HAVE P.W.C. To properly operate your #1 Gauge ARISTO- CRAFT TRAINS with P.W.C. use only ARISTO-CRAFT TRAINS ART-5400 (1.8AMP) or ART-5450 (4AMP) Power Supply Units.

If it is not possible to operate your #1 Gauge 1/29 Scale ARISTO-CRAFT TRAINS products with our P.W.C. equipped Power Supply, do not worry. Our Electrical Engineers have developed the ART-5401 CONTROL PACK ADAPTOR which can be easily attached to your present power supply, UP TO 5 AMPS ONLY, of another manufacturer and allow PULSE WIDTH CONTROL to be applied to your Indoor/ Outdoor model railroad.

#### ROOF

To remove roof, detach smokestack/chimney by pulling straight up on smokestack (See above CAUTION for HOT FLUID REMINDER). Be careful and do not damage hinged smokestack/chimney cover during removal.

Loosen and remove Phillips Head screws located above each end door. Press inward both sides of caboose body at center just below roofline, then lift roof section off body.

When replacing roof, metal screw brackets on body ends must be INSIDE body end Wall and upright end ladders MUST align with notches in roof.

Press down on roof until it 'snaps' in place, then re-insert screws at end.

**NOTE:** Roof is NOT 'position-changeable'-cupola MUST be at rear end of caboose body.

The roof must fit properly against the body.

Re-insert the smokestack/chimney, first alligning the protrusion on smokestack flange with notch on roof ring.

Holding the smokestack straight up, insert into roof hole and allign properly with potbelly stove recepticle.

If you are uncertain of allignment, visually check through window adjacent to potbelly stove below roof hole.

Push to snug fit. A smokestack crooked or not properly seated in potbelly stove WILL NOT OPERATE. The smokestack should fit snugly to roof when properly installed.

#### ASSEMBLY INSTRUCTIONS:

No assembly required, LONG STEEL CABOOSE is ready-to-run.

#### NOTES:

Some versions of Long Steel Caboose have electrical power pickup via power tabs in journals. "Electrical Pickup" section on PAGE 2 of this manual does not apply to Long Steel Caboose with electrical power pickup in journals.

#### LIMITED WARRANTY

Your new ARISTO-CRAFT TRAINS locomotives, tenders, railcars, trainsets, or accessories are warranted for 180 days from DATE OF PURCHASE against defects in workmanship and/or materials. Proof of purchase may be required by ARISTO-CRAFT TRAINS.

This warranty is VOID and does not apply to any product and/or parts and components that may have been improperly installed by purchaser/ owner, abused or damaged in any way through improper operation such as train derailment, modified, or repaired by unauthorized service centers and/or non-factory authorized technicians.

#### SERVICING

Should your ARISTO-CRAFT TRAINS model railroad product require warranty service, be sure to take the following steps to assure proper servicing:

1. Return product in ORIGINAL BOX then pack this ORIGINAL BOX in proper shipping carton. If not possible to use original box, only pack product carefully in cardboard box, FULLY INSURED and PREPAID. ARISTO-CRAFT TRAINS will not be responsible for any damage or loss incurred during shipping.
2. Include a brief but thorough explanation of the problem(s) and the servicing that may be required.
3. Be sure to include your name, street address (no Post Office Box, please), city, state (or province), country (if outside USA), and postal zipcode along with a daytime phone number, including Area Code, so that you may be contacted if it becomes necessary. All identification should be both INSIDE package and on OUTSIDE cardboard box.
4. Include proper payment for shipping/handling -

Locomotive or Complete Train Set - \$20.00 US

Accessory Center -

switch-trucks or individual

freight/cars - \$1.00 per car

freight/cars - \$1.00 per car

- with your (USA Bank Account only) check/Money Order payable in US Dollars(\$) to: Polk's Hobbies. **Please DO NOT SEND CASH.** If your item is out of warranty, you will be contacted with amount of repair costs before repairs are started.

**\*\*\*C.O.D. shipping NOT included, additional cost.\*\*\***

5. Ship your item(s) to:

ARISTO-CRAFT TRAINS  
698 SOUTH 21ST STREET  
IRVINGTON, NJ 07111

PHONE: 973-351-9800  
FAX: 973-351-9700  
EMAIL: aristo@mindspring.com  
www.aristocraft.com

6. Immediate written confirmation of receipt of returned item(s) will be sent along with estimated repair time/cost by ARISTO-CRAFT TRAINS Service/Repair Department.

**Refer to Exploded Parts Diagram/Parts List for part descriptions, part numbers, and prices. Do not use part descriptions, part numbers, and prices listed in the Instruction Manual**