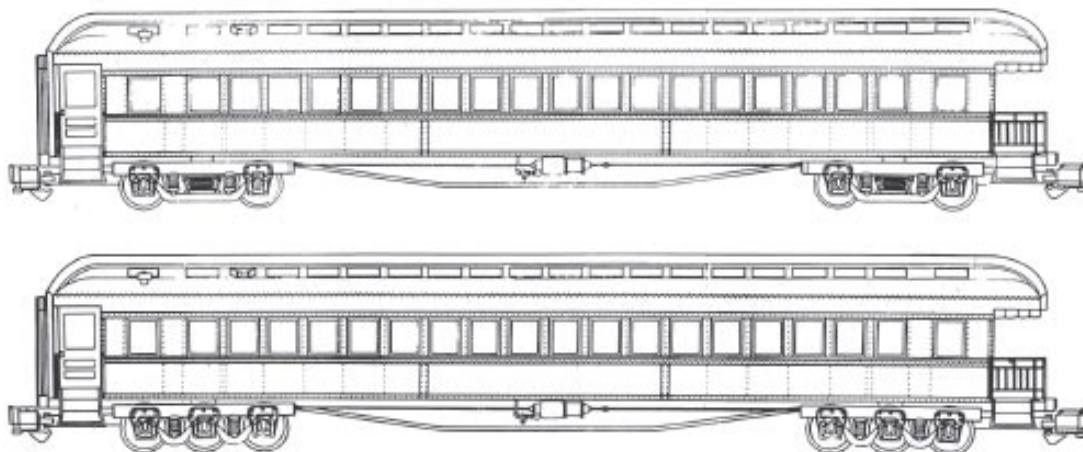


STANDARD HEAVYWEIGHT PASSENGER OBSERVATION CAR

INSTRUCTION MANUAL ART 31400-01



INTRODUCTION

Dear Model Railroader:

This product is the most highly detailed #1 GAUGE 1/29 Scale Model Railroad STANDARD HEAVYWEIGHT PASSENGER OBSERVATION CAR available. Suitable for both INDOOR and OUTDOOR operation, it accurately portrays a North American prototype Passenger Observation Car, 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 passenger railcar or any other ARISTOCRAFT TRAINS #1 GAUGE 1/29 Scale Model Railroad products, 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: aristo@mindspring.com
 www.aristocraft.com

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

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

NOTE: Heavyweights are available with 4 or 6 wheel trucks depending on production run, prototype, and road name of particular Heavyweight

STANDARD HEAVYWEIGHT PASSENGER OBSERVATION CAR

This passenger car is based upon a design built by the Bethlehem Shipbuilding Company for the Central Railroad of New Jersey (CNJ) in the early 1920's. Actual prototype examples of similar passenger observation cars are still in use today (1990) on North American Railroads, mainly tourist or museum operations such as the VALLEY RR (CT-USA) or the CONWAY SCENIC RR (NH-USA). However, the original 3 Observation Cars built for the CNJ still exist today (1990), one as a restaurant in Clinton, NJ USA, another awaiting preservation in a state transportation-theme museum, and the third remains in service for NJ TRANSIT, a state-operated passenger railroad.

FEATURES:

Operating AAR-design knuckle couplers.
Detailed passenger car trucks/wheelsets with Metal Wheels.
Moveable Vestibule doors.
Solid-state electrical circuit.
Removable Roof.
Operating interior lights.
BRASS grab-railings. - Many versions blackened or painted
Fully detailed interior with seats, bag racks, and lavatory.
Realistic painting and authentic detailing.
Full Underframe, including Air Brake System components.
Clear Plastic Windows with Brightwork Trim.
Observation Platform with Train Drumhead Sign.
- Brightwork replaced with simulated wood trim

OPERATION:

This passenger railcar will operate on the small radius ART-11100/ART-30100 curve track (1100mm). However, caution should be

taken regarding switch-tracks and side clearance during operation on small radius curve track. For better model railroad operation, it is suggested that, at least, the ART-11500/ART-30110 medium radius curve track (1500mm) be utilized. Another option would be to use the ART-30120 extra-large radius curve track (1800mm) that allows realistic and improved operation for maximum enjoyment of ARISTO-CRAFT TRAINS Standard Heavyweight Passenger Cars.

TRUCK BEARINGS:

The truck sideframes - both 4 and 6 wheel type - 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 either a dry lubricant of powdered graphite or an oil-based paste lubricant/ART-29602 but ONLY in very small amounts. It is not necessary to disassemble passenger railcar trucks to properly lubricate. Turn passenger 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:

Each axle makes contact with a brass bushing inserted into truck/wheelset sideframe. Continuous electrical pickup is possible over switch-tracks and irregular trackage. A brass collar attaches to the bushing and transmits electrical current from the wheels to the Solid State Circuit Board underneath the floor that allows electrical features to function.

If dis-assembly of 4/6 wheel truck is attempted, first unscrew the truck/wheelset from underbody. DO NOT DAMAGE OR LOOSEN wires attached to underbody through the brass collar.

NOTE: OBSERVATION is equipped with either 4 wheel or 6 wheel trucks, depending upon railroad name. These trucks ARE AVAILABLE as replacements - see Parts Listing Section - and DO NOT require modification to underframe bolster when changing from a 4-wheel truck to a 6-wheel or reverse, just re-position bolster using pre-drilled holes.

COUPLERS:

Loop-style couplers are enclosed as a spare accessory. The operating knuckle couplers on all ARISTO-CRAFT TRAINS passenger railcars are designed based upon the AAR-style knuckle 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 manually closed on each car and then lifting one end coupler and inserting the closed non-ARISTO-CRAFT TRAINS knuckle coupler onto the closed ARISTO-CRAFT TRAINS knuckle coupler.

This type coupler works equally well from either end of the passenger 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 small radius curves or switches (see section OPERATIONS for suggested curve radius). 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.Lehmann Company, Germany.

INTERIOR LIGHTING:

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

Interior lighting is controlled by On-Off slide switch located underneath railcar near center.

MARKER LIGHTS

This railcar is equipped with rear end marker lights. These lights consists of two LEDs wired 'in series' with red/green plastic lenses connected to Interior lighting system.

NOTE: See section PULSE WIDTH CONTROL for power supply requirements for Interior/Marker Lights.

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 part of subfloor which SHOULD NOT be removed. If your STD.HWT.PASS. railcar requires service due to malfunction of electrical Circuit Board, return to factory-authorized repair facility ONLY. See WARRANTY INFORMATION for service/repair instructions.

ROOF:

1. To remove roof, loosen and remove Phillips Head screws located above each end step assembly and vestibule sidedoor and at rear observation canopy. Two screws per railcar end.
2. Then lift roof section off body.
3. When replacing roof, align screw holes properly on body ends.
4. Press down on roof until it 'snaps' in place, then re-insert screws at ends.
5. NOTE: Roof is NOT 'position-changeable' - certain interior body partions must align with roof for proper fit. The FRONT is body section with lavatory and matches roof section with ventilator stack.
6. The roof must fit properly against the body.

SERVICE NOTES:

All parts contained in the STANDARD HEAVYWEIGHT PASSENGER OBSERVATION are available for replacement or repair by contacting ARISTO-CRAFT TRAINS. If you have any questions, please refer to INTRODUCTION for method of contacting our office.

PULSE WIDTH CONTROL:

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

P. W. C. allows a continuous voltage to flow to the operating accessories such as interior lighting during operation REGARDLESS of the speed OR direction of passenger railcar.

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 features 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 underload/overload damage to components may result.

Also, the TRAIN POWER PACK 7000 - 3.5AMP FOR G AND HO previously manufactured by Polk's Modelcraft Hobbies under the Aristocraft Tradename DOES NOT HAVE P.W.C. To properly operate your #1 Gauge ARISTO-CRAFT TRAINS WITH P.W.C., use ARISTO-CRAFT TRAINS ART-5400 (1.8AMP) OR 5450 (4AMP) Power Supply Units.

If it is not possible to operate your #1 Gauge 1/29 Scale ARISTO-CRAFT TRAINS product 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, of another manufacturer and allow PULSE WIDTH CONTROL to be applied to your Indoor/Outdoor model railroad. The ART-5401 CONTROL PACK ADAPTOR will be available in 1990 Product Year.

ASSEMBLY INSTRUCTIONS:

No assembly required, STD. HWT. PASS. OBSERVATION is ready-to-run.

REFER TO EXPLODED VIEW DIAGRAMS AND LIST FOR PART descriptions, part numbers, and prices. Do not use part descriptions, part numbers, and prices listed in the Instruction Manual

LIMITED WARRANTY

All ARISTO-CRAFT TRAINS products are under warranty for five (5) years from the 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 which have been improperly installed by the purchaser/owner, abused or damaged in any way through improper operation such as but not limited to derailment, repairs or modifications performed by non-authorized service centers or technicians.

SERVICING

Should your ARISTO-CRAFT TRAINS product require warranty service, please return it in the original box, if possible, protected by a proper shipping carton. Send the product fully insured and prepaid. ARISTO-CRAFT TRAINS will not be responsible for any loss or damage incurred during shipping. Be sure to include a brief, but thorough explanation of the problem, together with your name, street address (no Post Office box please), city state or province and country, if outside of the United States. Also include a daytime telephone number so that we may contact you if necessary. Your return address should be clearly marked on the outside of the shipping carton.

Payment for shipping and handling, in U.S. funds, ~~is \$20.00 and~~ should be included. Your check or money order should be made payable to: Polk's Modelcraft Hobbies, Inc. Do not send cash. If your item is not covered by warranty service, you will be contacted and a repair estimate given before any work commences. Warranty covers manufacturer defects, not normal wear and tear.

The shipping address to be used for returns is as follows:

ARISTO-CRAFT TRAINS / Polk's Modelcraft Hobbies, Inc.
Customer Service Department
698 South 21st Street
Irvington, NJ 07111 USA
Tel: (973) 351-9800

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

**CALL FOR CURRENT
SHIPPING COSTS**

Written confirmation of receipt of returned items will be sent with estimated repair time by the ARISTO-CRAFT TRAINS Customer Service Department.