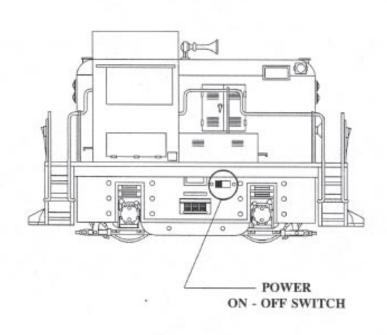
LIL' CRITTER DIESEL LOCOMOTIVE





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ARISTO-CRAFT TRAINS

Dear Model Railroader.

This locomotive, the Lil' Critter, is a highly detailed #1 Gauge 1/29th scale unit and is suitable for both indoor and outdoor operation. It has been designed and manufactured to our usual high specifications.

Should you have any questions regarding operation, proper usage or maintenance required on this or any other Aristo-Craft product, please do not hesitate to contact us at the following address:

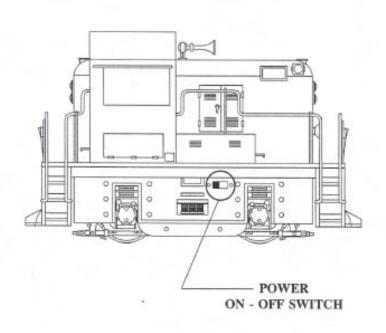
ARISTO-CRAFT TRAINS / Polk's Modelcraft Hobbies, Inc.

698 South 21st Street, Irvington, NJ 07111 USA Tel: (973) 351-9800 Fax: (973) 351-9700

e-mail: aristo@mindspring.com

Our customer service department phones are open from 10:00 AM to 5:00 PM Eastern time, Monday through Friday.

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HISTORY

The Lil' Critter represents a popular type of diesel electric locomotive which was an economical answer to construction, industrial, and railroad switching in branch line service. It was the successor to the small steam switching locomotives which were commonly employed for these purposes.

The diesel electric switching locomotive is the ideal motive power unit for industrial purposes because of its low operating cost, high availability, smooth performance, reduced track and wheel wear and its ability to negotiate very short radii curves.

FEATURES

This unit has the following features which make it look and operate in a superior manner:

Modular electrical connections

Modular carbody and power unit assembly

Ball bearing axles and gear case

Lighted front and rear headlights

Lighted number boards

Interior cab lighting -

Interior cab detail - including the engineer

Front and rear operating AAR knuckle couplers

Solid metal handrails

Clear plastic window glazing installed

Crisp painting and lettering

OPERATION

Because of the extremely short wheel base, this locomotive will operate on very sharp curves. It is important, however, to be sure that the freight cars being pulled will negotiate the same radii without derailing. Be sure that the molded air hoses on the front and rear pilots do not interfere with the knuckle couplers.

WHEELS

The metal wheels have been designed for good electrical power pick up. Specially plated to insure good electrical conductivity, corrosion resistance and extended wear, the wheels will give normal service during the life of the Lil' Critter locomotive.

Over a period of time, however, these wheels may require cleaning. Dirty metal wheels will cause sporadic electrical pick up and possibly electrical flashover which may cause discoloring of the affected surfaces of the wheels and/or track.

A good indication that the wheels require cleaning is the flickering of the lights. To clean the wheels properly, remove the locomotive from the tracks and turn it upside down to expose the metal wheels. Use ARISTO-CRAFT Smoke Fluid/Track Cleaner (ART-29601) applied with a clean, soft rag to clean the accumulated dirt and grease from the metal wheels. DO NOT use abrasives as the resulting grit may enter the motor and gearing and cause operational problems.

DRIVE TRAIN

The Lil' Critter, as well as all other ARISTO-CRAFT diesel locomotives, is equipped with a unique drive mechanism that allows greater pulling power and smoother operation than other, similar locomotives. Each axle (pair of wheels) is articulated and independent from the other axle in the power unit. Each axle can move vertically and horizontally without affecting operation of the other paired axle. This allows for better adhesion and electrical contact on switches and especially on rough or uneven track.

The power unit gearbox has been lubricated at the

factory with a new, high-tech lubricant, which, under normal operating conditions should last indefinitely, eliminating the need for periodic gearbox maintenance. However, if the unit is subject to heavy and continued usage, you may lubricate using ARISTO-CRAFT No. ART-29602, a high temperature, oil based paste. Use only a very small amount of lubricant. It will be necessary to disassemble the power unit to access the gears and shafts for lubrication. Note: Allow only a factory authorized ARISTO-CRAFT TRAINS repair technician to perform any repair, otherwise, the warranty may be voided.

To gain access to the power unit and gearboxes for inspection, maintenance or repair, follow the below steps:

- Turn the locomotive upside down and remove the outer side skirts and side frames.
- 2- Remove the six (6) screws which hold the power unit together. There are four screws in the bottom half and two (2) in the top. The cover may now be removed, exposing one fixed axle with its gear and worm, and one floating axle with its enclosed gear box. The exposed worm and gear may be lubricated without any further disassembly. The floating axle, however, has an enclosed gear box which must be opened for inspection or lubrication. Gently pull the wheel and gear box assembly up and away from the motor. Once detached, the four

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- (4) screws in the gear box are to be removed and the cover opened for maintenance or repair.
- 3- To remove the motor, first unsolder the wire leads, but be sure to note which color is attached to either terminal of the motor. Lift the motor up to remove. When re-installing the motor, the wires must be soldered to the same terminal from which they were detached.
- 4- After maintenance or repairs have been completed, reverse the above sequence to reassemble the gear box and power unit.

LIGHTING

The Lil' Critter industrial diesel locomotive is equipped with operating front and rear directional headlights, lighted number boards and an interior cab light. The lighting includes two (2) bulbs and four (4) LED's. The number boards are lit with one (1) bulb, as is the cab interior. The headlights contain two (2) LED's each.

To gain access to the interior in order to service the lighting, first turn the locomotive upside down and remove the screws that hold the hood and cab in place.

- Remove the ends of the railings from the cab.
- 2- Gently pull the hood away from the frame being careful with the wiring. Disconnect the modular plug and

set the hood aside.

- 3- Pull the cab away from the frame, disconnecting its modular plug.
- 4- All of the lighting units are now accessible for maintenance or repair.

COUPLERS

This locomotive is equipped with prototypically accurate, operating knuckle couplers. These couplers are factory installed on both the front and back of the locomotive. They may be operated manually by pressing upward on the small tab below each coupler assembly. Automatic uncoupling may be accomplished by using an LGB designed uncoupling device (LGB is a trademark of the E.P. Lehman Company, Germany).

The Lil' Critter uses coupler No. ART-29200, which is common to all ARISTO-CRAFT TRAINS. Do not confuse this coupler with the very similar coupler used only on the ARISTO CLASSICS items, No. ART-89200. While both styles of couplers look very similar, they are in fact not the same, and use different component parts and may not operate together automatically.

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

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

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