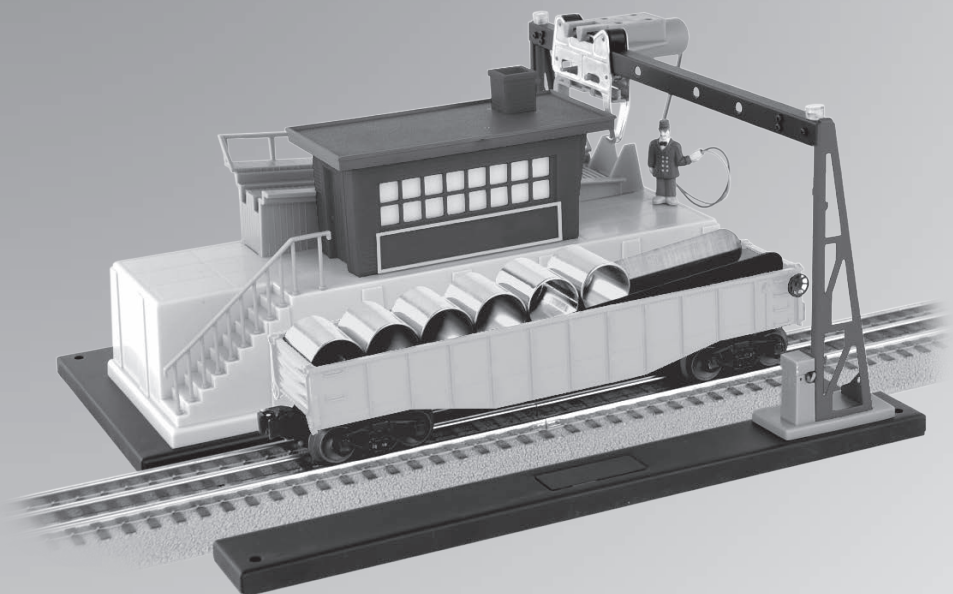




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Lionel



***Command Control
Culvert Loader
Owner's Manual***

Congratulations!

Congratulations on your purchase of the Lionel #342 Command Controlled Culvert Loader. This classic Lionel accessory has been upgraded to reliably operate under TrainMaster Command Control or LEGACY operation. Additionally, for a more intuitive user interface this accessory can be controlled with the LCS (Layout Control System) using a tablet. This loader is equipped with an infrared optical sensor to ensure the culvert gondola is in position before turning on to prevent shorting the track with falling culverts. The Loader can be placed on any Lionel FasTrack, O27 or O Gauge tubular three rail layout and is designed to operate at 18VAC under command control.

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Trainmaster Command Control

Products equipped with the classic TrainMaster Command Control system are controlled by commands from your CAB-1 or CAB-2 Remote Controller. ElectroCouplers™, basic sounds, and multiple unit lash-ups are all at your fingertips as you walk around your layout.

The following Lionel marks are used throughout this Owner's Manual and are protected under law. All rights reserved.

Lionel®, LionChief™, LionChief Plus™, TMCC®, LEGACY®, FasTrack®, TrainMaster®, Odyssey®, RailSounds®, CrewTalk™, TowerCom™, DymaChuff™, StationSounds™, Pullmor®, ElectroCoupler™, Magne-Traction®, CAB-1® Remote Controller, American Flyer®, Lionel ZW®, ZW®, MagniVision®, TMCC®, Lionelville®, Wireless Tether™, Powerhouse™, LionMaster®, Conventional Classics™, Postwar Celebration Series™, TruRail™, PH-1 Powerhouse®, Powermaster®, Powerstation-Powerhouse®, Accessory Motor Controller™, AMC™, Accessory Switch Controller™, ASC™, Action Recorder Controller™, ARC™, Track Power Controller 300™, TPC 300™, Track Power Controller 400™, TPC 400™, Block Power Controller™, BPC™, Operating Track Controller™, OTC™, FatBoy™, Lionel Lines®, Joshua Lionel Cowen Series™, Lockon®, TrainSounds™, MultiHorn™, MultiWhistle™, Choo-Choo™, SensorTrack™, Plug-Expand-Play™, Imagineering™, SensorCar™, LionScale™

Installation of Your Culvert Loader

For optimum operation, its location on your layout should be flat and level. After securing your Culvert Loader to your layout using the four mounting holes, snap one section of traditional track into position on base (Figure 1). FasTrack track sections will simply run through the depression in the base.

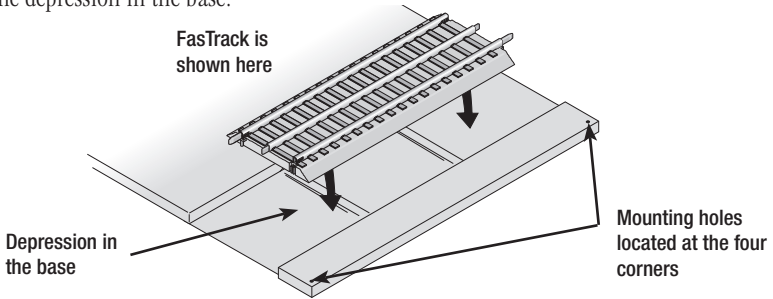


Figure 1. Installing the track

Powering your culvert loader

Your Culvert Loader is equipped with the Lionel Plug-Expand-Play system, which makes wiring this accessory extremely easy.

If your layout is equipped with any of the Plug-Expand-Play lock-on tracks (6-81313 single port lock-on straight or 6-81314 3-port lock-on straight) simply insert the power cable into the accessory lock on socket and power the track at 18VAC.

If your layout uses a more traditional wiring system locate the 6-82038 Plug-Expand-Play 8" Pigtail and plug it into the power cable. Connect the red wire to accessory power hot, connect the black wire to accessory power ground. Set the accessory power voltage to 18VAC.

This Culvert Loader is equipped with command control, so it requires a constant supply of 18 Volts AC power to operate properly. Under no circumstances should you apply DC power to this accessory, as permanent damage will occur!

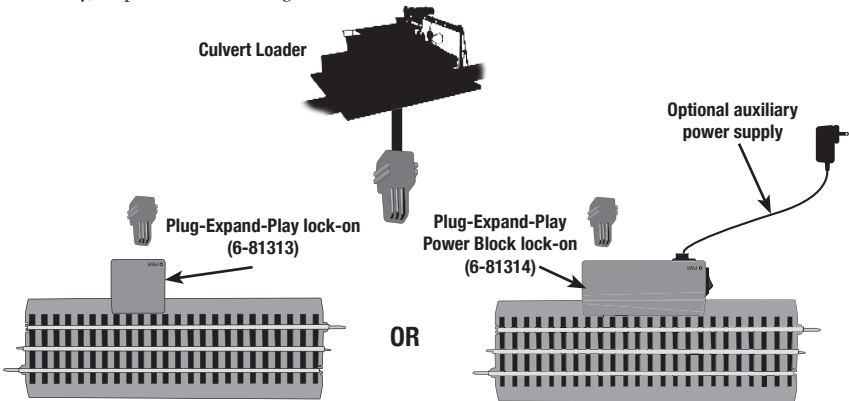


Figure 2. Connecting the loader to a Plug-Expand-Play lock-on

Powering your culvert loader continued

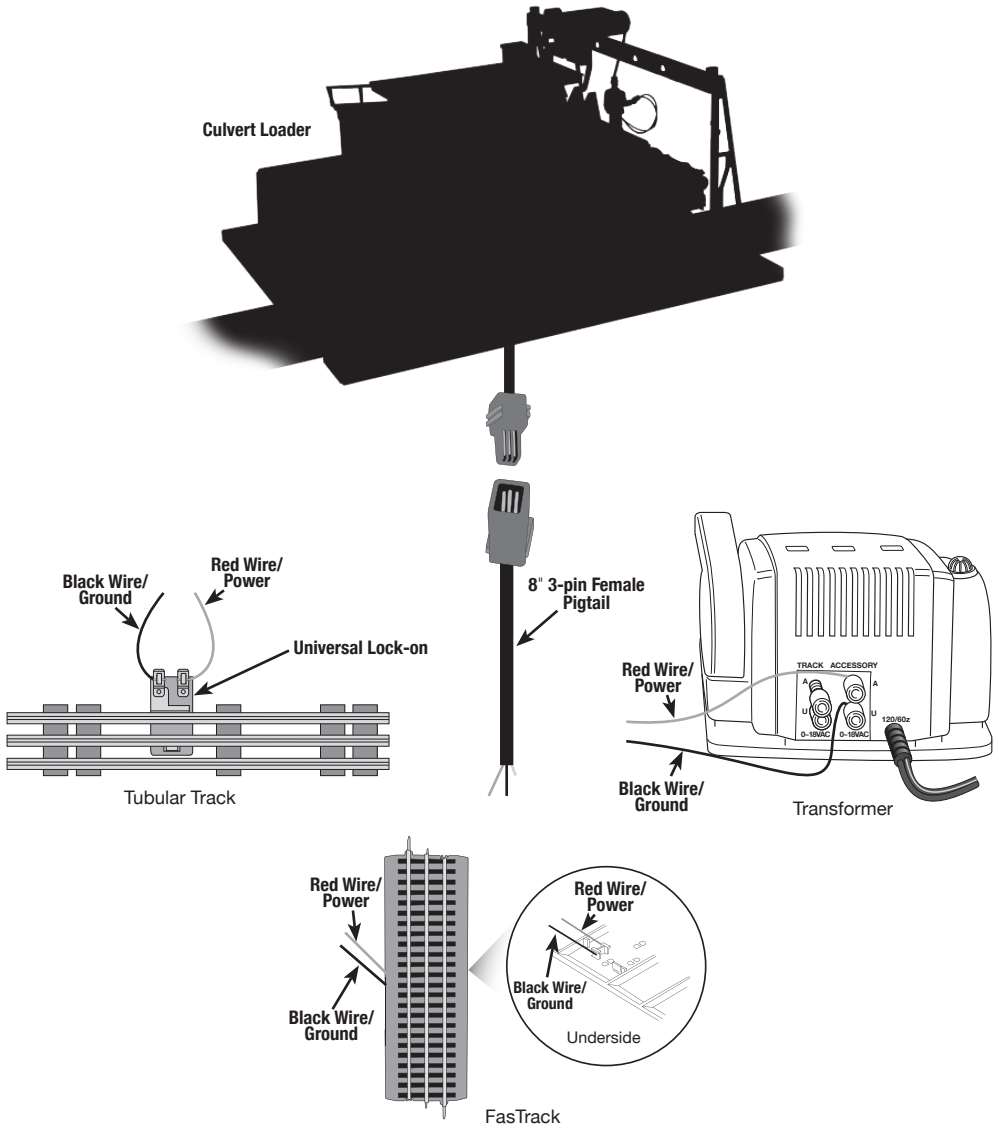


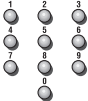





Figure 3. Making traditional connections

Programming your culvert loader

Locate the Program/Run switch on the side of the accessory base plate. Apply 18VAC power to the accessory and ensure your command base, Base-1L or LEGACY command base is plugged in and the “U” Post on the base is connected to the outside rail of the track on your layout. Place the program/run switch in the “Program position”. Using your Cab-1, Cab-1L or LEGACY remote press the following keys;

Command	Cab-1 or Cab-1L remote	LEGACY remote
ACC (Accessory address)	ACC 	ACC 
1 or 2-digit address (can be any number from 1 through 99)		
SET (Press the set button on the remote)	 SET	 SET

When you press the set button all the lights on the accessory will flicker (inside the accessory's structure and the crossbeam strobe lights) to confirm it has taken the program.

Slide the program/run switch back to the “run” position. The accessory will retain this ID number until you change it in the future.

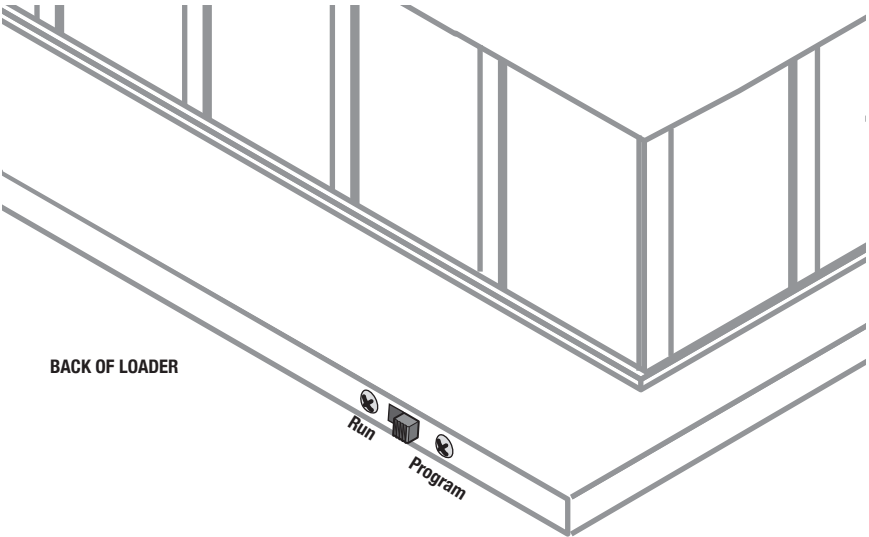








Figure 4. Program/Run switch

Operating your culvert loader

Your culvert loader is equipped with an infrared light beam that must be broken (it is broken by having the culvert gondola positioned in the correct place) you will know the car is in position when interior light in the structure illuminates. If the car rolls out of position the interior structure light will turn off and the mechanism will return to its “home” position.

Using the Cab-1, Cab-1L or Legacy remote activate your loader as follows;
ACC + ID# + AUX2

Command	Cab-1 or Cab-1L remote	LEGACY remote
ACC (Accessory address)	ACC 	ACC 
1 or 2-digit address (can be any number from 1 through 99)		
AUX2	AUX 2 	

Once Aux2 is pressed the culvert loader will begin operating. To turn the animation off simply press the AUX2 key again on your cab controller. The motor assembly will return to its “home” position, over top of the culvert ramp.

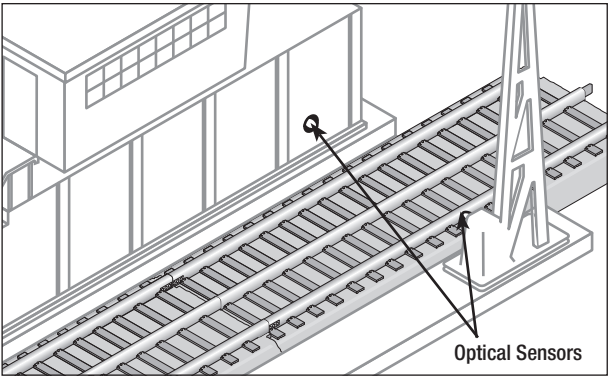


Figure 5. Optical sensors

Servicing the LEDs

Your culvert loader is illuminated by LEDs. The LED is expected to last for the life of the accessory and is not user serviceable. Contact Lionel Service if your LEDs need replacing.

Installing the culvert ramp

Your culvert loader is equipped with a culvert ramp which is used to connect the unloader ramp (6-82030; available separately) to the culvert loader ramp. See the diagram below for the proper position and orientation of this ramp.

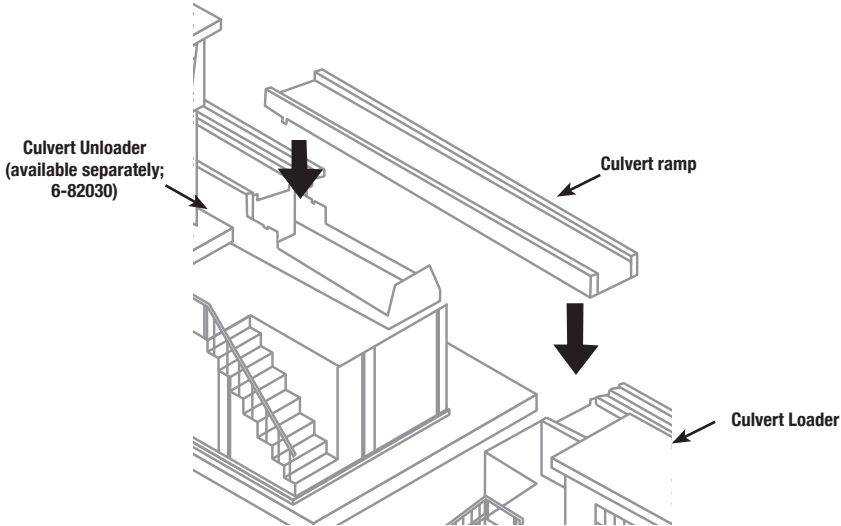


Figure 6. Connecting the loader and unloader

Lionel Limited Warranty Policy & Service

This Lionel product, including all mechanical and electrical components, moving parts, motors and structural components, with the exception of **LIGHT BULBS, LED's & TRACTION TIRES** are warranted to the original owner-purchaser for a period of **one year from the original date of purchase** against original defects in materials or workmanship when purchased through a **Lionel Authorized Retailer***.

- This warranty does **NOT** cover the following:
- Normal wear and tear
 - Light bulbs or LED's
 - Defects appearing in the course of commercial use
 - Damage resulting from abuse/misuse of the product

Transfer of this product by the original owner-purchaser to another person voids this warranty in its entirety. Modification of this product in any way; visually, mechanically or electronically, voids the warranty in its entirety.

Any warranted product which is defective in original materials or workmanship and is delivered by the **original owner-purchaser** (this warranty is non-transferrable) to Lionel LLC or any Lionel Authorized Service Station **MUST** be accompanied by the original receipt for purchase (or copy) from an **Authorized Lionel Retailer***, will at the discretion of Lionel LLC, be repaired or replaced, without charge for parts or labor. In the event the defective product cannot be repaired, and a suitable replacement is not available, Lionel will offer to replace the product with a comparable model (**determined by Lionel LLC**), if available. In the event a comparable model is not available the customer will be refunded the original purchase price (requires proof of purchase from the **Authorized Lionel Retailer*** it was originally purchased). Any products on which warranty service is sought must be sent freight or postage prepaid (Lionel will refuse any package when postage is due). **Transportation and shipping charges are not covered as part of this warranty.**

NOTE: Products that require service that do not have a receipt from an LIONEL AUTHORIZED RETAILER* will be required to pay for all parts required to repair the product (labor will not incur a charge) providing the product is not older than 3 years from date of manufacture and is within 1 year from date of purchase. A copy of the original sales receipt is required.

In no event shall Lionel LLC be held liable for incidental or consequential damages.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Instructions for Obtaining Service

If service for this Lionel LLC product is required; bring the item, along with your DATED sales receipt and completed warranty information (at the bottom of this page) to the nearest Lionel Authorized Service Station. Your nearest Lionel Service Station can be found by calling 1-800-4-LIONEL or by accessing the website at www.lionel.com.

If you prefer to send your Lionel product directly to Lionel, for repair you must FIRST call 586-949-4100 extension 2 or write to Lionel Customer Service, 6000 Victory Lane, Concord, NC 28027. Please have the 6-digit Lionel product number, the date of original purchase, the dealer where the item was purchased and what seems to be the problem. You will receive a return authorization (RA) number to ensure your merchandise will be properly tracked and handled upon receipt at Lionel LLC.

Once you have your Return Authorization (RA) number, make sure the item is packed in its original Styrofoam inner container which is placed inside the original outer display box (this will help prevent damage during shipping and handling). This shipment **MUST** be prepaid and we recommend that it be insured with the carrier of your choice.

Please make sure you have followed all of the above instructions carefully before returning any merchandise for service. You may choose to have your product repaired by one of Lionel LLC's Authorized Service Stations after its warranty has expired. A reasonable service fee should be expected once the product warranty has expired.

Warranty Information

Please complete the information below and keep it, along with your **DATED ORIGINAL SALES RECEIPT**. You **MUST** present this form **AND** your **DATED SALES RECEIPT** when requesting warranty service.

*A complete listing of Lionel Authorized retailers can be found by calling 1-800-4-LIONEL or by visiting our website at www.lionel.com.

Products that are more than 3 years old, from date of manufacture, are not applicable for warranty coverage, even if they have never been sold prior to this date. (Under no circumstance shall any components or labor be provided free of charge.)

Name _____

Address _____

Place of Purchase _____

Date of Purchase _____

Product Number _____

