

AUTHORITATIVE GUIDE TO  
**LIONEL'S POSTWAR  
OPERATING CARS**

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PROJECT ROAR<sup>™</sup>  
PUBLISHING

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# Sources of Authoritative Information

Project Roar Publishing is dedicated to preserving the history of hobby collectables. Our publications stem from “fact based research” of actual production documents combined with expert observations. True to this mission, the foundation of this publication is internal Lionel documentation as well as years of expert observations from leading postwar historians. Thousands of actual postwar Lionel documents were reviewed and numerous interviews with former Lionel employees were conducted.

This research provides the authoritative word straight from postwar Lionel. The authors have weaved this information seamlessly into the text and also provide “green” pop-up boxes containing specific interesting facts. These pop-ups make reference to numerous documents, each of which is summarized here.

## Lionel Blueprints

Each part manufactured by Lionel included a blueprint drawing. Changes to the blueprints were recorded along with a dated description. For this volume, blueprints provide complete

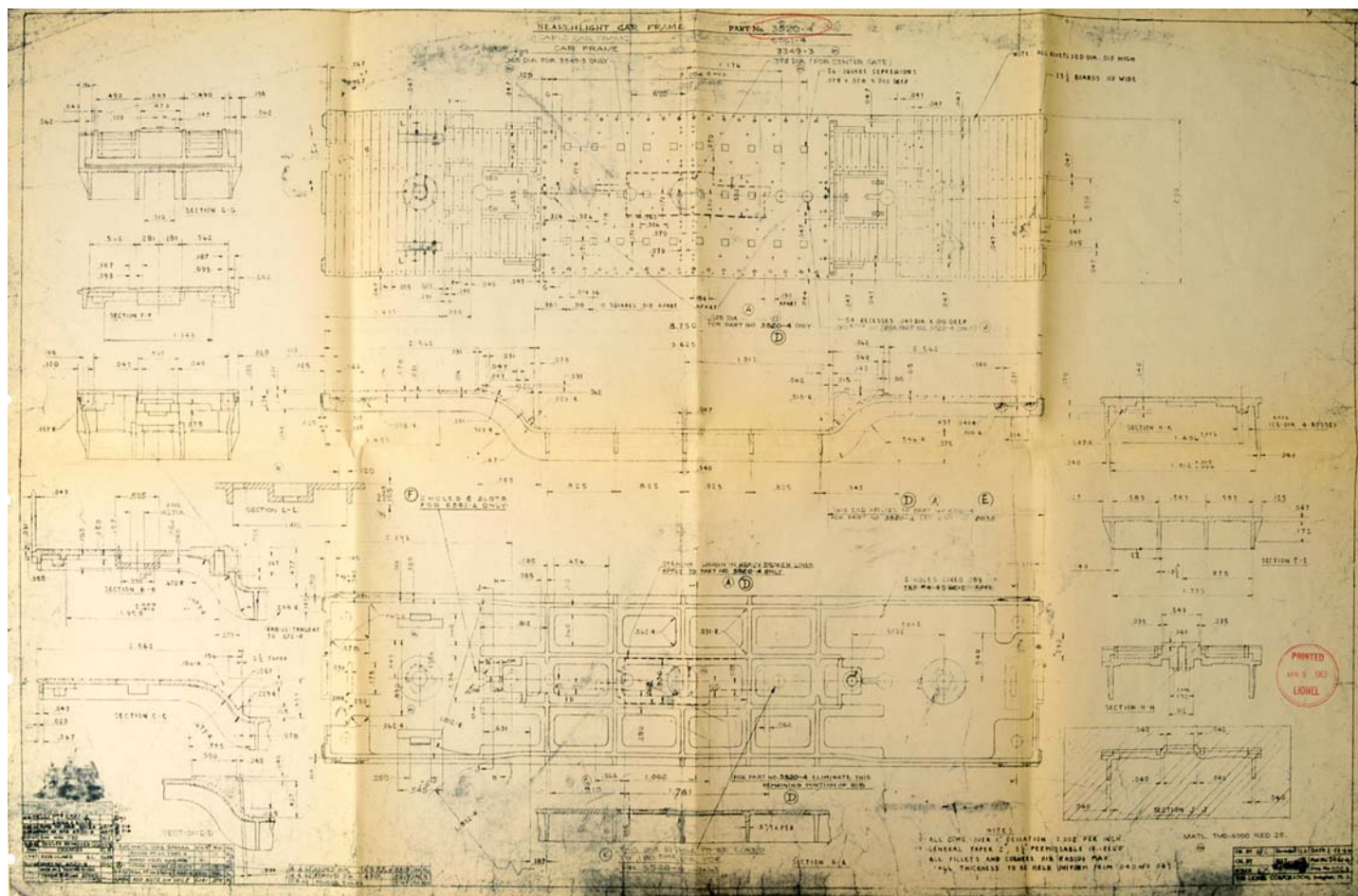
manufacturing information of every part, the changes made, as well as when the change occurred.

## Components Parts Index

Component Parts Indexes are paired with blueprints to provide the complete list of parts and subassemblies used to manufacture a complete item or finished good. They also provide the master index of each fully assembled item’s individual blueprints. For this volume, Component Parts Indexes provide a complete list of every part and subassembly, the materials used and dates of any changes.

## Production Control Files

Every Lionel finished good included a “packet” of documents, which when taken as a whole was the bill of materials for the fully assembled (boxed or unboxed) finished good. These files list every part, subassembly and processes required to make the finished



The 3520-4 blueprint details when changes were made to the frame as well as all the dimensions and materials used. Of interest, the other parts that shared this blueprint were the 6561-4 and 3349-3.

This volume is based on authentic postwar Lionel documents listing **EVERYTHING** that came with an operating car and the changes made during its production life.



CONFIDENTIAL

RE: SALES-ENGINEERING MEETING  
1962 LINE - TOTS & TRAINS DIVISION

June 22, 1961  
K. Parry

Date: June 13 & 14, 1961

Subject: Report by Sub-committee on Perpetual Inventory  
Control of Finished Goods

Following our conversation of Saturday, April 9, I am submitting below a report on recommendations of Sub-committee that supersedes report prepared and submitted by Mr. D. A. Perella at Inventory Control Meeting of April 8 which does not reflect the actual views and recommendations of the Sub-committee.

...items of the Sub-committee are as follows:-

### THE LIONEL CORPORATION

APRIL 15, 1960



Some of the 1,000's of authentic Lionel documents that were used to compile this volume.

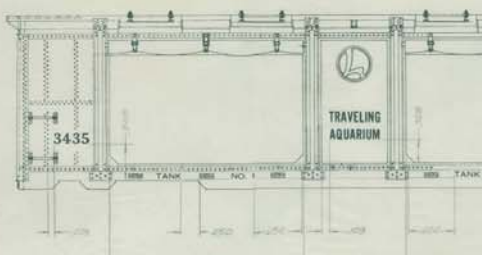
### 1957 PROGRAM SEPARATE SALE PRODUCTION

Catalog No.	Description	Quantity
<b>"027" Ga. TRAIN SETS</b>		
1569 725	Diesel Freight	75,000
1571 726	Diesel Freight	17,500
1573 727	Steam Type Freight	40,000
1575 728	Diesel Freight	32,500
1577S 729	Freight with Smoke	25,000
1578S 730	Passenger with Smoke	4,500
1579S 731	Freight with Smoke	14,500
1581 732	Diesel Switcher Freight	9,500
1583WS 733	Freight with Smoke & Whistle	24,000

### 1958 PROGRAM SEPARATE SALE PRODUCTION

Catalog No.	Description	Quantity
<b>"027" Ga. TRAIN SETS</b>		
1590	Steam Type Freight	38,665
1591	Diesel Freight	20,000
1595	Steam Type Switcher	10,000
1597S	Steam Type Freight with Smoke	5,000
1599	Diesel Freight	11,000
1600W	Diesel Passenger	14,000
1603WS	Diesel Freight with Horn	3,500
1603WS	Steam Type Freight with Smoke & Whistle	10,500
1603WS	Steam Type Freight with Smoke - Postal	15,000
1603WS	Diesel Freight with Horn	6,000
1606W	Steam Type Freight with Smoke & Whistle	5,000
1606W	Diesel Passenger with Horn	3,300
<b>SUPER "O" Ga. TRAIN SETS</b>		
2501W	Diesel Freight with Horn	6,000
2502W	Diesel Passenger with Horn	600
2503WS	Steam Type Freight with Smoke & Whistle	4,500

PR	CAT	#	UNIT	ORDERS	TO DATE	PROD	PROGRAM	PROD
101	11490	24.75	2624	69831.00	4601	113874.75	25	
11520	9.00	51540	62700	564300.00	44			
11520	11.25	10997	192912.91	27000	303750.00	15		
11540	13.50	21497	291082.50	38650	524475.00	20		
11550	18.00	9336	169356.00	12000	216000.00	18		
11560	15.87	9122	154098.34	12404	209255.48	16		
November 6, 1961								
7705.40			476	6854.40				
1313.70			3000	22650.00				
33796.04			5550	52123.50				
36594.25			3665	46116.00				
4597.22			350	6545.00				
34533.00			24576	207746.00	12411	105493.00		
11395.00			1310	17357.50	1301	17238.25		
14686.00			632	10112.00	945	18392.00		
7552.50			1062	33650.00	652	10170.50		
13130.25			1450	22112.50	1100	16775.00		
16497.00			1500	1000.00	1500			
40460.70			5000	64780.00	3988			
20589.00			10000	190200.00	4675			
17121.00			1500	19900.00	2502			
10200.00			2300	26700.00	2300			
15265.00			1150	15525.00	1150			
10060.48			596	10054.58	596			
10000.00			200	400.00	200			
13819.80			1280	15180.00	1280			
6459.80			1647	30798.90	900			
4972.50			3844	32674.00	1048			



### Lionel Telephone Directory

Adams, John	214-88	Adams, John	214-88	Adams, John	214-88
Adams, John	214-88	Adams, John	214-88	Adams, John	214-88
Adams, John	214-88	Adams, John	214-88	Adams, John	214-88
Adams, John	214-88	Adams, John	214-88	Adams, John	214-88
Adams, John	214-88	Adams, John	214-88	Adams, John	214-88



CONFIDENTIAL AND IMPORTANT NEWS FOR THE LIONEL SELLER  
SPECIAL ACCESSORY PROMOTION

Here's important news from Mr. M. Charles Sussman, V. P. Sales. All Lionel Franchised Distributors can now order train accessories and not pay for them until June 10, 1967. This special October Accessory Promotion, offering extended terms, covers the complete train accessory line and is 2% June 10, 1967. Back orders shipped beginning with October 31, 1966 will also be invoiced on 4/10/67. Orders must call for shipment before 12/31/66, when this special offer expires. Anticipation is allowed at the rate of 9% per annum.

This cooperation is extended by Lionel to its valued distributors in recognition of their special needs, and in keeping with the Lionel Distributor Policy. Mr. Sussman urges every distributor to take full advantage of this opportunity for greater volume and greater profit.

To help call your attention to this accessory special, you will receive separately, in the mail, a handsome train tractor and trailer, as supplied with No. 6431 Piggy-Back car. It comes with the store of Engineer Bill.

Good initial orders have been received from practically all major chains, and this means you have a fine opportunity for re-orders.

Now is the time to make calls in your area, and get the re-orders in. Remember, the local managers do want to order more Lionel merchandise, but often don't take the trouble to go back through headquarters for it. They need and want your sales calls now!

- 1- 218P-1
  - 1- 218T-1
  - 1- 3428-1
  - 1- 2412-1
  - 1- 2416-1
  - 1- 1013
  - 1- 1018
  - 1- 6029-25
  - 1- 1053-50
  - 1- 90-1
  - 1- 81-32
  - 1- 310-2
  - 1- 1640-100
- Also Diesel Power Unit - "Santa Fe" - with Headlight, Magna-Traction, Non-Operating Couplers - without Headlight
- Also Diesel Motorless Unit - "Santa Fe" - with Headlight, Magna-Traction, Non-Operating Couplers - without Headlight
- Operating Mail Car - Blue
- Vista Dome - Silver with Blue Stamping and Stripping
- Curved Track
- Straight Track
- Uncoupling Track Section
- 60-Watt Transformer
- Uncoupling Track Controller (Packed in one envelope)
- Instruction Book
- Set of (5) Billboard Signs
- Accessory Catalog

LIONEL



THE LIONEL CO  
HOPKIN PLAZA HILLS

## DETERMINING A COMPONENT BOXED ITEM'S CONDITION

**A component boxed item is the combination of an item, its box, instruction sheet, packed envelope and inserts.**

GRADING SCALE	ITEMS*	ITEM BOXES	INSTRUCTION SHEETS	PACKED ENVELOPE	INSERTS AND LINERS	
C10	Mint – Brand new, all original, unused, and unblemished.	Brand new, square with all flaps present and never opened or only opened once or twice, flaps stiff to open, perforation (Orange Perforated) present and unpunched. No creases. Color appears as if it just came out of master shipping carton, bright, no fading or darkening. No box rubs, tears, holes, dents or punctures. No marks, price tags, or writing. No water damage. All liners, inserts, and outer sleeve included.	Brand new with square edges, bold and sharp printing. If a folded sheet, has never been opened. No marks, creases, folds or tears.	Envelope sealed, never opened. Condition of envelope mirrors instruction sheets. Contents all present and mirror condition of items.	See "Item Boxes" condition ratings.	
C9	Like New – Complete, no rust, no missing original parts. May show effects of being on display and/or age. May have been test run.	Same as C10, except flaps show signs of opening but still stiff. One small mark. Possible price tag. Inserts required.	Same as C10, except shows some sign of handling, i.e. if folded, can tell item has been opened. Corners sharp and square.	Sealed and never opened. Envelope same as instruction sheet. Contents all present same as items.		
C8	Excellent – Minor scratches and paint nicks, no rust, no missing original parts. No distortion of component parts.	Same as C9 with nice color, but not as crisp as C9 due to minimal fading. Small box rub and minimal dents, but no holes, tears or punctures. Minimal marks. No water damage. Inserts or liners optional. Perforation shows wear but not split.	May have small crease or fold. One corner may not be perfectly square. Printing may have some slight fading.	Could be opened, but all contents present. Condition same as instruction sheet and items.		
C7	Very Good – Minor scratches and paint nicks, minor spots of surface rust, free of dents. May have minor parts replaced.	Cardboard is slightly rounded at one corner, not completely square. One small crease possible. All flaps there, but are beginning to get floppy (not stiff). May be reinforced with tape. Color shows signs of minimal fading or darkening. Minimal box rubs, dents, but no punctures, holes or tears. Minimal marks. No water damage. Perforation beginning to separate. No inserts or liners.	Shows signs of wear and use. Corner(s) slightly off square, minor folds, or dog ears, present. May have some small pencil marks present.	Has been opened. Major contents present. Condition same as instruction sheet and items.		
C6	Good – Some sign of play wear with scratches and minor paint loss. Small dents, minor surface rust, minor parts may be missing	Same as C7, but more than one side losing squareness. One or more small creases. Can be missing one or more interior flaps. Exterior end flaps present but may be reinforced with tape. Moderate rubs, dents, and a few puncture marks. Writing or other marks present.	Same as C7, but may have small tear(s) that were fixed with transparent tape.	Opened, missing most contents. Condition same as instruction sheet and items.		
C5	Condition is defined for a "Complete" component boxed operating car and everything that came with it....all in one comprehensive table.					
	parts, surface rust. Evidence of heavy use.	Fading very noticeable. Many box rubs and dents. Flaps may have small tears. Many markings. Perforation separated and missing.	repair. Marks present in pen or pencil. Has tears or rips that were fixed.	as instruction sheet.		
C4	Poor – Requires major body repair. Heavily scratched, major rust and missing parts. Restoration candidate.	Same as C5, but at least one flap remains.	Major tears, parts of pages missing, paper is disintegrating in sections.	Envelope only. Condition same as instruction sheet.		
C3	Restoration required.	All flaps missing, not square, major rubs, marks, dents, creases, punctures, water damage or holes.	Pages missing if multiple-page sheet. Rips, tears, and partial pages remain.	Envelope only. Condition same as instruction sheet.		
C2	Parts value only.	Just a piece of the box remains.	Just part of the instruction sheet remains.	Envelope only. Condition same as instruction sheet.		
C1	Junk	Junk	Junk	Envelope only. Condition same as instruction sheet.		

\*Item grading descriptions as defined by the Train Collectors Association (TCA).



Demand

Demand is the other side of rarity. It does not matter how rare or in what condition the operating car is in, if there is no demand, price will be reflected accordingly. The opposite is also true. An item in demand, such as a 6805 Atomic Energy Disposal Car in C9 condition, continues to sell well even though the quantities produced were fairly high.

Other Factors

Besides condition, rarity and demand, a few intangible factors can lead to temporary price fluctuations of operating cars, such as:

Short-Term Supply

Short-term supply fluctuations can influence pricing. Even if an item is rare with high demand, if two of them appear at the same train show or multiple auctions at the same time, prices may be temporarily affected. Also, if a higher than listed price is paid for an item, this may coax collectors who owned such an item for years to sell them in hopes of making profits.

Regional Supply

Due to the Internet, this is not as much of a factor as it used to be, but certain items still sell better in different regions.

Pricing is provided for the operating car alone as well as with its box, instruction sheet, packed envelope, inserts / liners and any additional peripherals.

This is the first time this detail has been presented all in one easy to read table.

Internal documents unlock the suffix mystery. The most notable being the use of different suffixes for *boxed* and *unboxed* items. In this example, "-1" indicates *boxed*, whereas "-25" indicates *unboxed*.

Complete suffix information is provided throughout this volume.

completeness or the quantity produced. Volumes such as this will help create and enhance the market for operating cars because this information is now available.

Access to Distribution

Easy worldwide distribution of train items is a few clicks away. Operating cars that would never have found their way into the collector community are now available through online auctions and other Internet sale channels.

Prices in this Volume

The prices for items listed in this volume are determined by applying the pricing formula to each operating car:

Price = Condition (Grading) : Rarity (Current Supply) : Demand : Other Factors

The resulting prices are the selling prices known by the authors and publisher. These prices come from train shows across America, gleaned from major auction houses, and items sold on eBay and other Internet sources. Asking prices for items listed for sale on individual websites and in toy train club publications are also used for the pricing criteria.

How Prices are Displayed

Pricing and rarity are summarized in a table at the end of each operating car's listing. The table for a 3357 is shown below:

3357		C7	C8	C9	Rarity
Regular Production	-25	10	15	30	R5
Type IIb	-1	40	90	180	R7
Teal Blue	-25	35	75	100	R8
Type IIb	-1	65	150	275	
Regular Production	-25	25	40	60	
Type III	-1	55	115	225	
Teal Blue	-25	50	75	100	R8
Type III	-1	80	150	250	

For *unboxed* operating cars, C7, C8 and C9 pricing is provided. This includes only the car without any of the associated peripherals. In the pricing table, these numbers have a white background.

For *boxed* items, C7, C8 and C9 pricing is also provided:

- C7 pricing includes the item and its box, both in C7 condition. This is color-coded orange.
- C8 pricing includes the item, item box, instruction sheet and packed envelope, all in C8 condition. This is color-coded yellow.
- C9 pricing includes the item, item box, instruction sheet, packed envelope, inserts and liners and any other peripherals, all in C9 condition. This is color-coded green.

# Lionel Operating Cars: An Overview and an Appreciation

## By Roger Carp

### I. INTRODUCTION

How fitting that a venture as exciting and path-breaking as Project Roar Publishing should begin with the first comprehensive look at the operating cars that Lionel cataloged in the post-World War II decades. For these O gauge freight cars continue to stand out, just as the books published by Project Roar will. No other postwar toy train maker – or any manufacturer in the history of the model railroading hobby – brought out as many different, original, and entertaining operating cars as did Lionel. No other toy trains blended elements of realism and make believe more consistently than did these cars. The operating cars described and analyzed here are as enjoyable and noteworthy as they were when Lionel introduced them.

And as diverse. For the range of Lionel's operating cars is nothing short of astounding. Engineers relied on an assortment of mechanisms – solenoids, gears, electromagnets, cogwheels, and more – to animate virtually every kind of freight car in the line. Searchlights rotated on flat cars, figures sprang forward on refrigerator cars, crates were ejected from box cars, cattle shuffled through stock cars, and barrels were dumped from gondolas.

That was just the beginning! Fish swam, satellites roared into orbit, brakemen ducked, mailbags flew, and police officers chased tramps on Lionel's operating cars. Nothing seemed beyond the imagination and ability of the designers, electrical wizards, and model makers who worked under the direction of Joseph Bonanno, the company's hard-driving chief engineer.



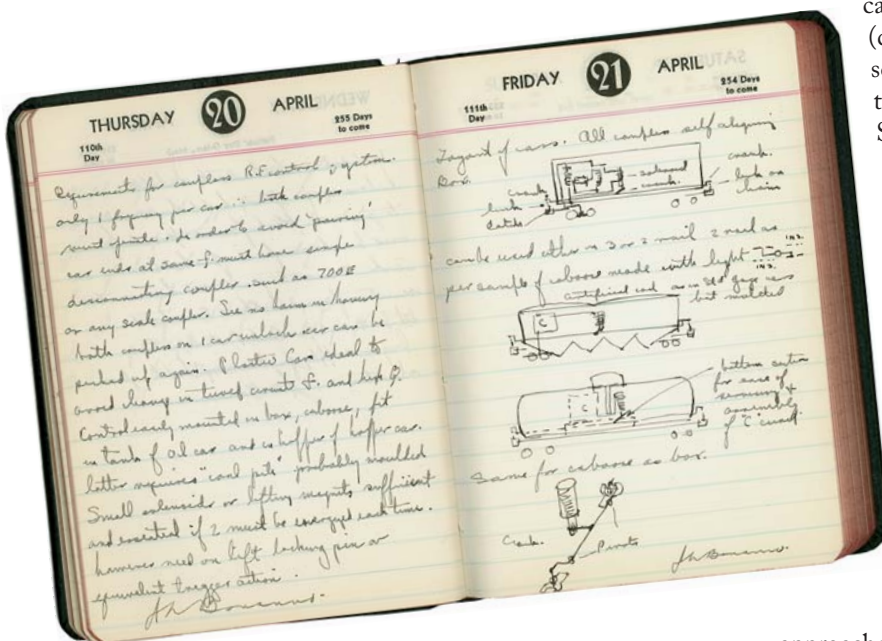
Lionel's chief engineer, Joseph Bonanno (middle) with two of his top associates after the war: John Salles (left), who managed the Electrical Test Department, and John DiGirolamo (right), who managed the Electrical Research and Development Department.

Frank Pettit, Anthony Rocco, and Dorland Crosman – to name just three of Bonanno's top men – developed operating cars that simulated activities associated with railroads (delivering freight) as well as models whose animation was so fanciful that it had more in common with television than transportation (a sheriff firing away at an outlaw). Some of Lionel's cars worked in conjunction with an accessory (coal and log dump cars). A few models needed something extra, say a loading platform or a tell-tale, to operate fully. Many other postwar operating cars, of course, did not require ancillary items of any sort and proved to be just as popular then and now.

So fully do the operating cars exemplify all that was outstanding about Lionel in the postwar period that it comes as no surprise that the firm hardly faced any real competition in this area. Other toy train makers brought out excellent replicas of powerful steam engines and sleek diesels. Similarly, a number of businesses developed freight loaders, signals, bridges, light towers, and stations that strived to rival what Lionel offered.

But no other manufacturer of toy trains approached Lionel in showing the public as many diverse and original operating cars. In fact, due to patent issues and expenses, no one else tried in the O gauge market until Kusan briefly plunged ahead in the late 1950s. Otherwise, nothing!

Lionel's operating cars, even more than its other great trains,



Joseph Bonanno's personal diary entry from April 20, 1939, outlining "requirements for couplers RF control system." This was well ahead of the 4109WS Electronic Control Set issued in 1946.

# Box Cars



## 3357-1 COP AND HOBO CAR (BOXED VERSION): 1962 - 1965

## 3357-25 COP AND HOBO CAR (UNBOXED VERSION): 1962 - 1965

Often referred to as a “Hydraulic Platform Maintenance Car”, the 3357-1 represented the component *boxed* version of the Cop and Hobo Car, although the “-1” was not printed on the box or the car.

The 3357 Cop and Hobo Car used a modified Scout-type box car, but the action was brand new and exciting. A platform was added to the roof upon which the cop or hobo could be positioned. A two-piece metal trestle was also included, upon which the other figure could be placed. The never-ending action began as the box car, holding let’s say the cop, passed under the trestle holding the hobo. As the box car passed under the trestle, the cop would hop onto the trestle, but to his amazement, the hobo would in turn jump off onto the top of the passing box car. Naturally, the action could be repeated.

The 3357 was almost perfectly depicted in the full-color 1962 and two-color 1963 consumer catalogs, except that part of the vertical row of rivets to the left of the double doors was incorrectly missing. In 1964, it didn’t fare any better as it was incorrectly depicted as a stock car.

The 3357 used the same shell as the Scout-type box cars (mold no. 1004-3), except its roof was modified to accommodate the gray plastic platform and the other parts necessary for the action of the cop and hobo.

Lionel’s operating box cars came in a variety of designs and road names.





6670 left to right: Number left of "Lionel", number right of "Lionel", and factory error with no stamping.

An example of a complete listing. This one details the 6812-1 boxed and 6812-25 unboxed.

**6812-1 TRACK MAINTENANCE CAR (BOXED VERSION): 1959 - 1962**  
**6812-25 TRACK MAINTENANCE CAR (UNBOXED VERSION): 1960 - 1961**

The 6812 Track Maintenance Car came *boxed* (6812-1) and *unboxed* (6812-25). It was designed to simulate the raising of a platform to allow maintenance access to bridges, signals and other elevated railroad structures. The operation for a 6812 depended on careful turning of the fragile crank projecting from the platform floor. This raised the platform to a height designated for maintenance work. Two inspectors (figures) were included, one to simulate the operation of the platform and the other to do the work.

In 1959, the 6812-1 was expected to be a hot item, since Lionel included it in six cataloged sets and offered it for separate sale at \$5.95. The 6812 used a red polystyrene flat car (mold 6424-11 or 6511-2) with white heat-stamped lettering in the Cheltenham Bold font. Production for 1959 primarily used the 6424-11 mold, as it likely paralleled the production of the 3419 Operating Helicopter Car (which used the 6511-2). AAR trucks with a three-piece knuckle coupler were the norm and followed the normal progression.

The 6812 came equipped with a polystyrene base and top platform. To meet the demand of 1959 production, both parts were color-coded in various shades of yellow plastic: light yellow (cream), medium yellow (lemon) and dark yellow (mustard). The crank was also color-coded to match the various shades, but sometimes that color is slightly off. The full-color consumer catalog illustrated the 6812 with a yellow base and yellow platform. Two exceptions are found: page 16 (gray base and yellow platform) and page 23 (orange base and orange platform). Regardless of the shade of yellow, the base was heat-stamped with black lettering.

Also included with the 6812 were two blue vinylite figures with painted face and hands. One figure was positioned on the

**Author's Comments:** Although the 1959 box explained that a Boom Crane Car was packaged inside, the 6670 shown in both the advance and consumer catalogs was referred to *only* as a Derrick Car.

The 6670 was probably a harder sell than a 6660, but the yellow mast and boom, together with a modified base, were used again with the 462 Derrick Platform Set introduced in 1961. These sat on dealer shelves into the early 1970s.

The 6670 in an Orange Perforated box came with one 6670-9 insert whereas when packaged in an over-stamped 6660 box, it included two 6660-56 inserts. The 6670-9 insert is more difficult to find and is reflected in the C9 price below.

6670		C7	C8	C9	Rarity
Reg. Prod.	Regular Production	50	75	100	R6
	Orange Perforated Box	100	150	200	R7
	"6660" Over-Stamp	100	150	175	R8
"6670" Right	Regular Production	150	200	250	R9
	Orange Perforated Box	200	275	375	
	"6660" Over-Stamp	200	275	350	



The five color variations of 6812-1, (left to right on boxes): lemon, mustard, cream, gray over black and black over gray. Front: When in sets, the 6812-25 came unboxed with a 6812-40 packed envelope.

base, while the one to be placed on the top platform was packaged loosely in the box. The base of each figure should have been T-shaped to fit T-shaped areas on both the bottom and top platforms. However, in 1959, closer inspection reveals that these 3562-62 figures weren't originally T-shaped. Apparently, the 3562-62, whose original design had only a single slot on its base, was never modified, and Lionel may have used a hot iron or some other instrument to open up the hole in its base. Lionel corrected this problem in 1960, as the figures were molded with a T-shaped base and were a darker shade of blue (see 6822).

and retained the same features as 6812-1. With each set a 6812-40 packed envelope was enclosed that included one T-shaped figure and two 81-32 connecting wires. In fact, Lionel Factory Orders for cataloged set 1631WS revealed that 30,000 units were projected for both the boxed set and the envelope.

**Lionel Production Control Files dated 1-4-60 stated:**  
**"additional parts (6812-40 envelope packed) required to be packed by Outfit Packing Department."**

Most importantly, in 1960, the colors of the base and platforms changed. Gray plastic bases with black plastic platforms, or black bases with gray platforms, replaced the all-yellow examples. Regardless of color, the crank that raised or lowered the top platform was color-coded to match that platform. Although the full-color consumer catalog illustrated only the black-over-gray variation, the gray-over-black one was made in 1960. The gray base had black heat-stamped lettering, whereas the black had white lettering.

**Per Lionel Changes Affecting Future Production dated 5-10-60:**

**"Note 1: One half of production to be assembled with black base & nut assembly, gray platform and gray crank handle & screw assembly and the other half with gray base & nut assembly, black platform and black crank handle & screw assembly."**

**Note 2: For the first 3,000 units only, use a yellow base & nut assembly, yellow platform and yellow crank handle & screw assembly until all inventories are used."**



**Left: The base of the 1959 figure for the 6812 was opened up by a hot instrument (Type IIP Altered). Right: Figure with "T" shaped opening and a brighter blue (Type IIPT) vinylite.**

Of further interest, most of the illustrations in the consumer catalog included arrows pointing up and down. This allowed the reader to understand that the top platform moved up and down.

In 1960, the 6812's busy schedule continued as the 6812-1 was part of two cataloged and several promotional sets and was also offered at the same \$5.95 separate-sale price. It also came *unboxed* as a 6812-25 in set 1631WS and promotional set 9745

**Green "pop-ups" detail information straight from internal postwar Lionel documents. This one shows Lionel's plans for 1960 production of the 6812.**





The 6812-1 got a breather in 1961, when it appeared in only one cataloged set and eight promotional sets and the separate-sale price remained the same. The 6812-25 was included only in two promotional sets. Gray platforms over black bases as well as black platforms over gray bases continued to be offered in 1961.

The 6812-1 was component boxed with a car, a 3562-62 figure for the top platform loose in the box, and a 6812-22 instruction sheet dated 8/59.

The 6812-40 packed envelope (envelope no. 6812-41) included a 3562-62 painted figure and two 81-32 24" RC wires, all in a 4½"x 2½" tan envelope.

6812		C7	C8	C9	Rarity
Cream Colored Version	-25	200	250	325	R8
	-1	225	300	400	
Lemon Colored Version	-25	125	150	175	R7
	-1	150	200	250	
Mustard Colored Version	-25	100	125	150	R7
	-1	125	175	225	
Black Over Gray Version	-25	100	125	150	R6
	-1	125	175	225	R7
Gray Over Black Version	-25	100	125	150	R6
	-1	125	175	225	R7
6812-40 Envelope		75	100	150	R8

**Complete box and peripheral information is included with each listing.**



## APPENDIX B

### DATING POSTWAR INDIVIDUAL ITEM BOXES

**1945**

**1946**

#### ART DECO 1945 - 1946

From 1945 - 1946 Art Deco orange and blue boxes were used to package Lionel trains. The term Art Deco was used because the Lionel font resembled the one used on Radio City Music Hall and surrounding building's Art Deco motif.

The most distinguishable feature was that the bold blue lettered Lionel on both sides and end flaps touched the blue border above and below. The company was listed as The Lionel Corporation in New York, Chicago and San Francisco. Item numbers were listed on both sides, the top and bottom. The overall cardboard had a heavier textured feel.



The Lionel Corporation touches the blue borders.  
Item number on both sides, top and bottom.  
New York, Chicago and San Francisco.



Item number on top and bottom (above) and sides (below).



**1947**

#### ART DECO TOY LOGO VARIATION OF ART DECO 1947 - 1948

In 1947 and 1948 Lionel used an Art Deco Toy Logo box. This was an exact copy of the Art Deco box except it included the Toy Manufacturers Association Logo on top of the box.



The Lionel Corporation touches the blue borders.  
Item number on both sides, top and bottom.  
New York, Chicago and San Francisco.



Toy Manufacturers Association Logo on top.



Item number on bottom (above) and sides (below).



Toy Manufacturers Association Logo on top.

**1948**

**1949**

#### EARLY CLASSIC Early 1948 - 1949

In early 1948 and 1949 Lionel used the Early Classic orange and blue box. This style of box and subsequent variations were in use for over ten years, making it one of the most recognizable boxes of the Postwar era. The most distinguishable feature from previous boxes is that the blue lettered Lionel on both sides and end flaps no longer touched the blue border above and below. All other features remained the same. The company was still listed as The Lionel Corporation in New York, Chicago and San Francisco. Item numbers were listed on both sides, the top and bottom of the boxes.



**The Lionel Corporation does not touch the blue borders.**  
Item number on both sides, top and bottom.  
New York, Chicago and San Francisco.



Toy Manufacturers Association Logo on top.



Item number on bottom (above) and sides (below).

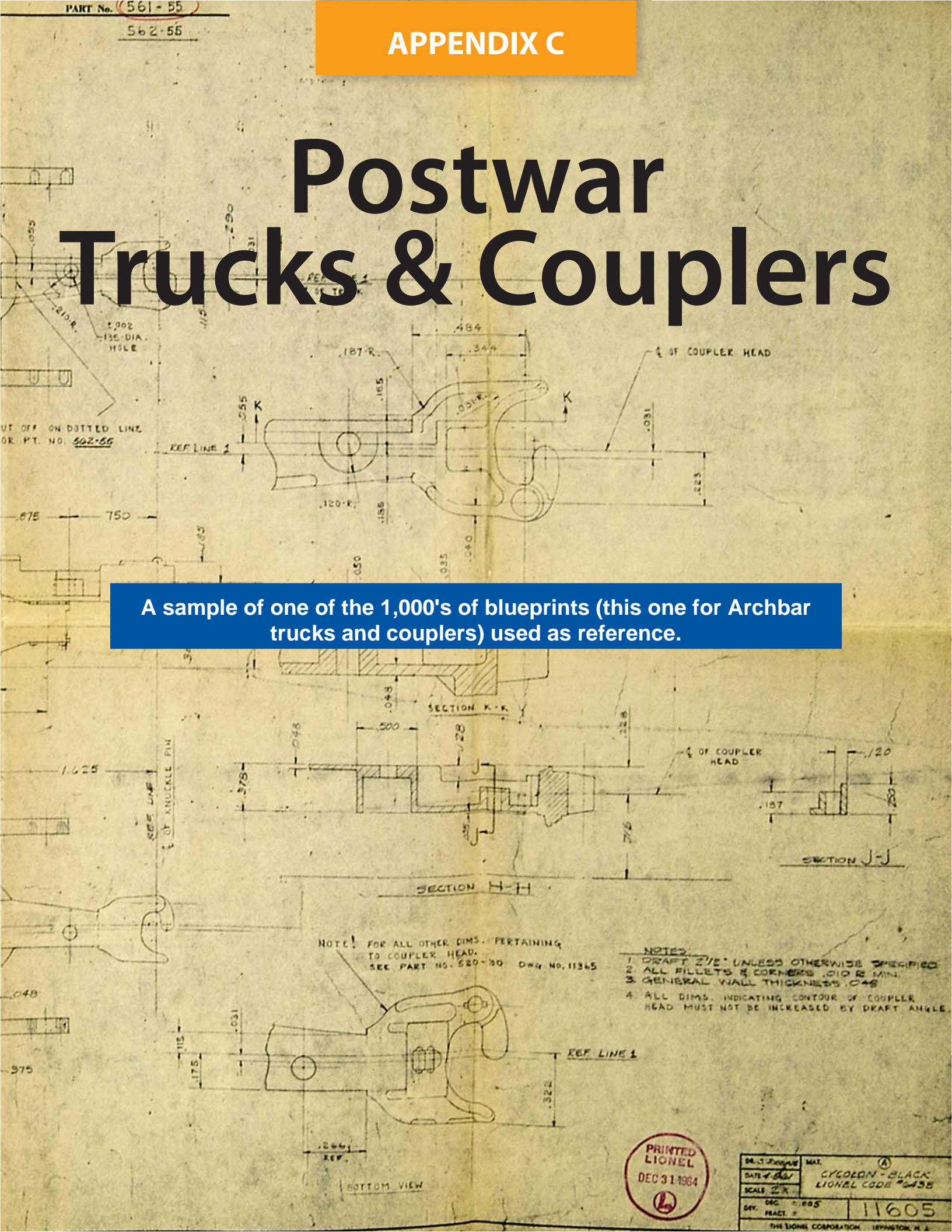


**Changes from previous style shown in red.**



# Postwar Trucks & Couplers

A sample of one of the 1,000's of blueprints (this one for Archbar trucks and couplers) used as reference.





## APPENDIX C

### DATING POSTWAR TRUCKS AND COUPLERS

#### STAPLE END AND SCOUT TRUCKS

1945      1946      1947      1948      1949      1950      1951      1952 - 1955

STAPLE END TRUCKS

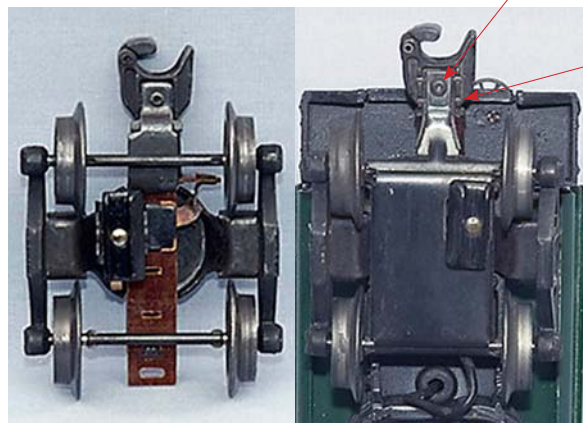


#### STAPLE END TRUCKS METAL FRAME TRUCKS WITH DIE CAST "STAPLE" ATTACHED SIDES

From 1945 - 1951 metal frame trucks with die cast sides were used for rolling stock. The die cast sides were attached to the truck's metal frame so that when viewed from the side, it appeared that they were stapled together. Staple end trucks first appeared with coil couplers and later with magnetic couplers.

Two versions of staple end coil couplers exist. They are categorized by the way the coupler was attached to the truck.

Swedging - An operation to attach the base plate to the coupler. Used on all metal trucks

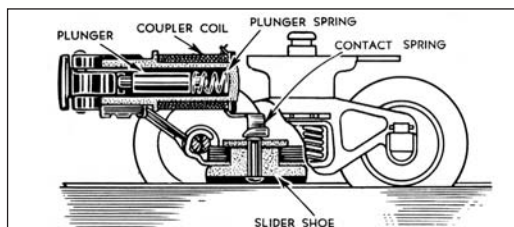


From 1945 - mid 1946 the coil coupler was attached to the metal coupler bracket.

From mid 1946 - 1948 the coil coupler was attached to a bottom frame assembly which was then attached to the trucks.

Staking - First appeared in late 1946

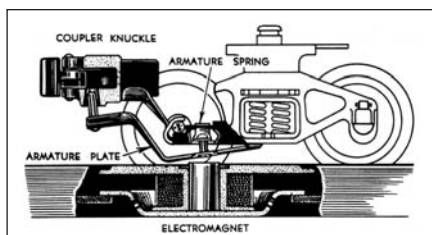
#### STAPLE END COIL COUPLERS



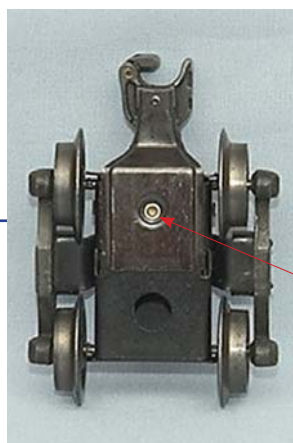
From 1945 - 1948 couplers were opened by an electromagnet whose coil was integrated on the coupler, hence the name "Coil" coupler. Electricity passes from the track to the slider shoe. When activated, the plunger spring contracts pulling the plunger back, thus releasing the knuckle.

STAPLE END TRUCKS WITH COIL COUPLERS

#### STAPLE END MAGNETIC COUPLERS



From 1948 - 1951 couplers were opened by an electromagnet in the uncoupling track section. When the track section was activated, the trucks metal armature plate was pulled down, thus releasing the knuckle.



Flared end of rivet is visible. This feature appeared from 1948 into 1950.

From 1948 - 1951 staple end trucks used magnetic couplers.

STAPLE END TRUCKS WITH MAGNETIC COUPLERS

#### SCOUT TRUCKS METAL FRAME TRUCKS WITH PLASTIC SIDES

From 1948 - 1952 metal frame trucks with plastic sides were used for low end starter outfits known as "Scout" outfits. The coupler on these trucks were not compatible with regular postwar knuckle couplers. Scout couplers can be converted to magnetic knuckle couplers by adding a no. 480-25 magnetic coupler conversion kit.



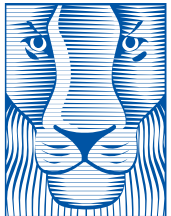
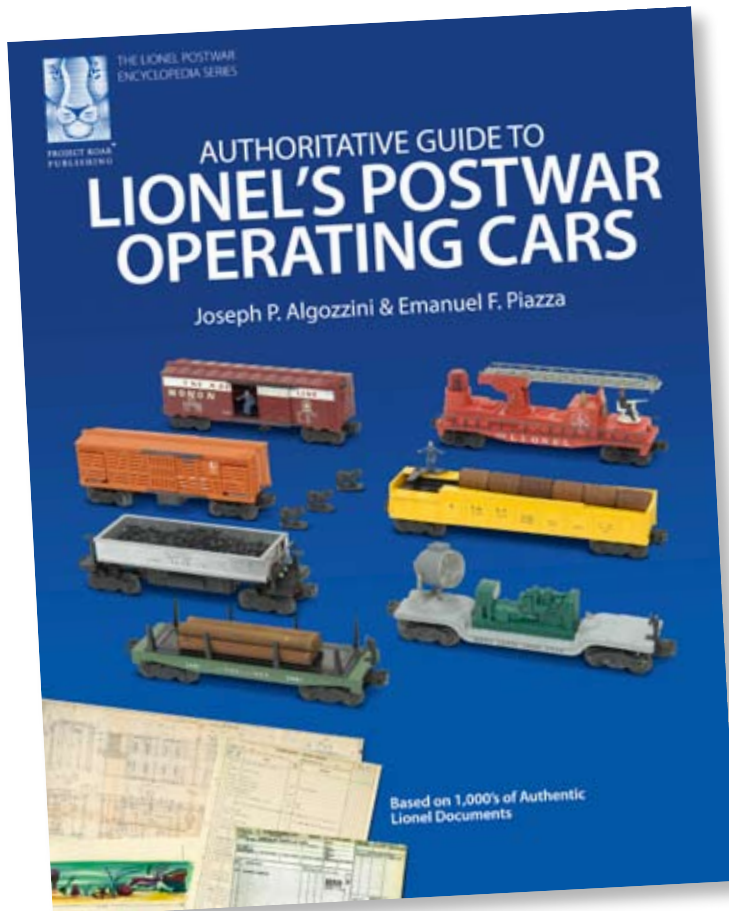
#### SEMI SCOUT TRUCKS METAL FRAME TRUCKS WITH PLASTIC SIDES NOT SHOWN

From 1952 - 1955 metal frame trucks with plastic sides and a "coupler frame complete" attached to the trucks were used in a few low end starter outfits. This allowed Scout style truck frames to be compatible with regular postwar knuckle couplers.

SCOUT TRUCKS



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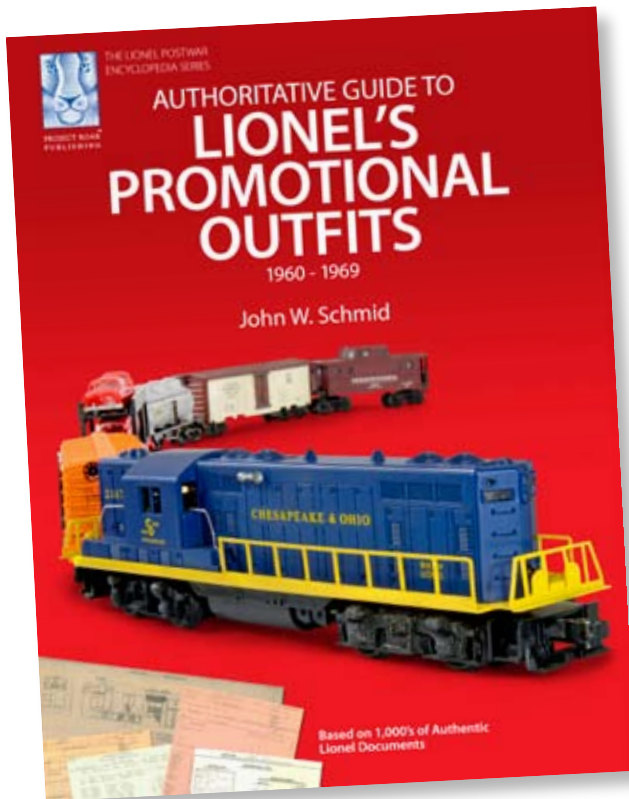


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- Diagrams for packing the outfit in the outfit box

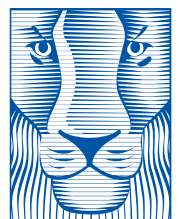
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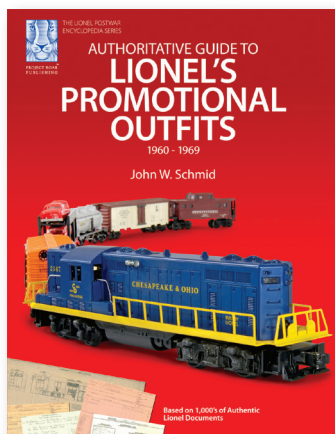
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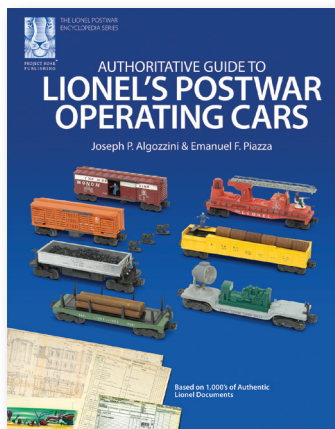
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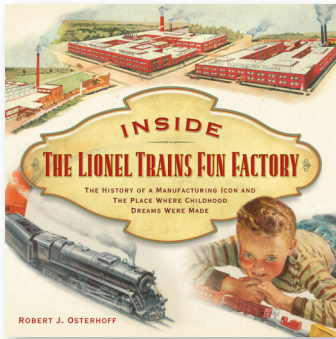
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