



# **PARTS LISTS AND EXPLODED DIAGRAMS**

## **SUPPLEMENT 10**

**Edited by Samuel J. Baum**  
**With the assistance of I.D. Smith**  
  
**Diagrams by Maureen Crum**

### **Notice to the User**

This supplement is designed to fit with two different publications, the Lionel Service Manual by Lionel Trains, Inc. and Lionel Parts Lists and Exploded Diagrams published by Greenberg Publishing Company, Inc. Each page has two page numbers. The number for the Lionel Service Manual by Lionel is indicated by parenthesis, i.e., (A-35). The number which applies to Lionel Parts Lists and Exploded Diagrams by Greenberg Publishing is above the parenthesis, i.e. S10:1-4.

We recommend that readers with the Lionel Service Manual insert the pages according to the numbers in the parenthesis. On the other hand, we recommend that readers with Lionel Parts Lists and Exploded Diagrams keep the pages as a set and insert them into a new binder. Binders to match the 1970-1986 binder are available from Greenberg Publishing Company, Inc. for \$7.50 plus \$2.50 shipping and handling. A comprehensive index to the Lionel Parts Lists and Exploded Diagrams will be issued once a year, and will take the place of the index at the front of the original 1970-1986 manual.

**Authorized by Lionel Trains, Inc.**

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4- Indicates American Flyer item. Example 4-2300.

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AMERICAN FLYER S GAUGE  
by LIONEL

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LIONEL SERVICE MANUAL  
BY LIONEL SERVICE

Description	Drawing
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Lionel Hudson: 783, 784, 785.	(A-39, A-39-2, A-39-3, A-39-4, A-39-5)
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Index by Catalog No.

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Note: 4- Indicates American Flyer Accessories. Example 4-2300.  
1- Indicates Lionel Accessories made after Jan. 1987.  
Example 1-2700.

Product No.	Description	Dwg.	List
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2171	Gooseneck Street Lamps		
2195	Floodlight Tower		9-13
2199	Microwave Tower		9-14

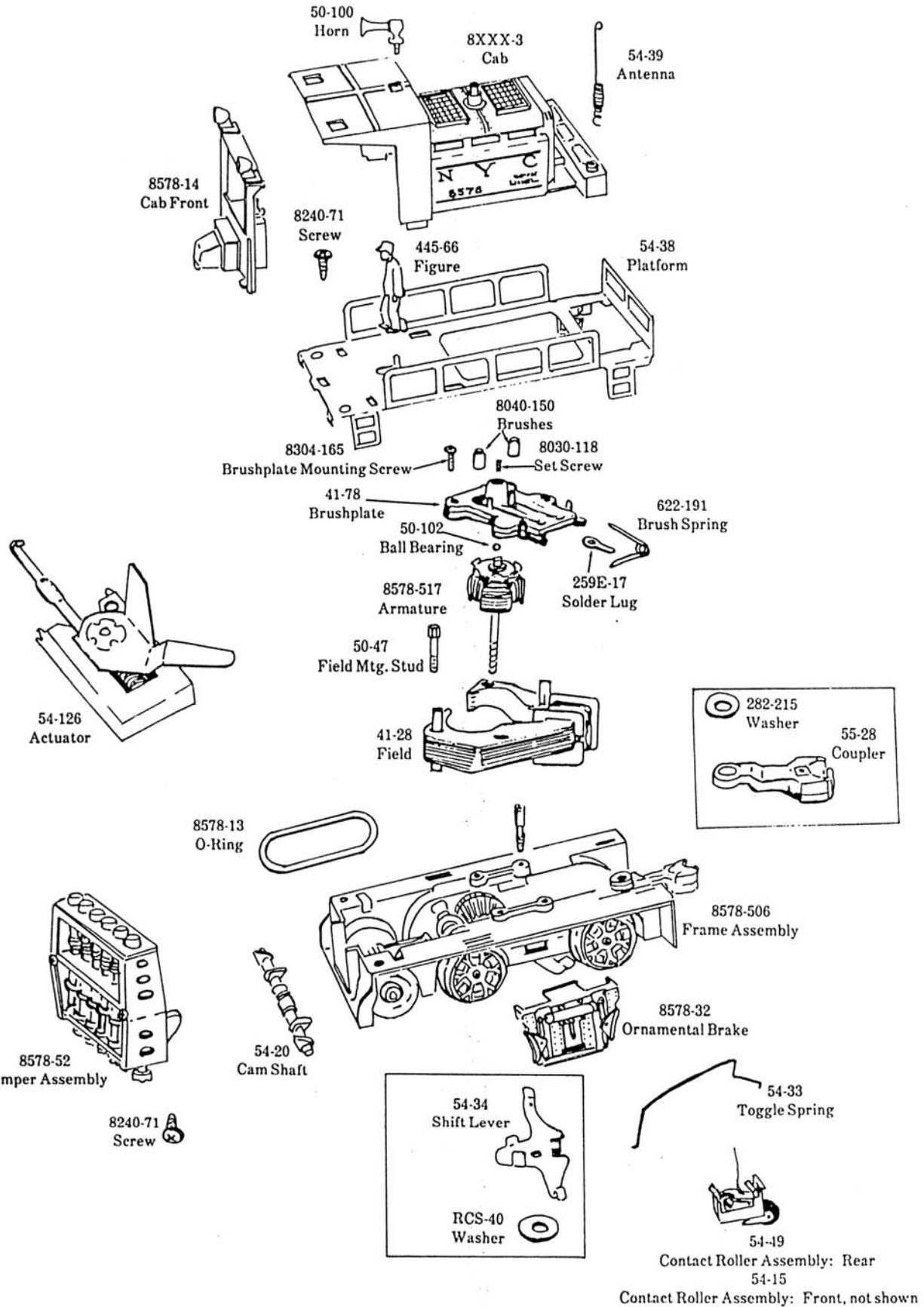
Product No.	Description	Dwg.	List
2256	Station Platform		
2260	Bumper Illuminated		9-15
2283	Illuminated Die Cast Bumpers		
2290	Lighted Bumper		9-20
2292	Station Platform		
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2494	Rotary Beacon		9-20
1-2700	Magnetic Gantry Crane		
1-2701	Diesel Fueling Station		

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1-2709	Automatic Banjo Signal		
1-2713	Automatic Gateman		
1-2714	Automatic Crossing Gate		
1-2715	Illuminated Bumper		
1-2716	Searchlight Tower		

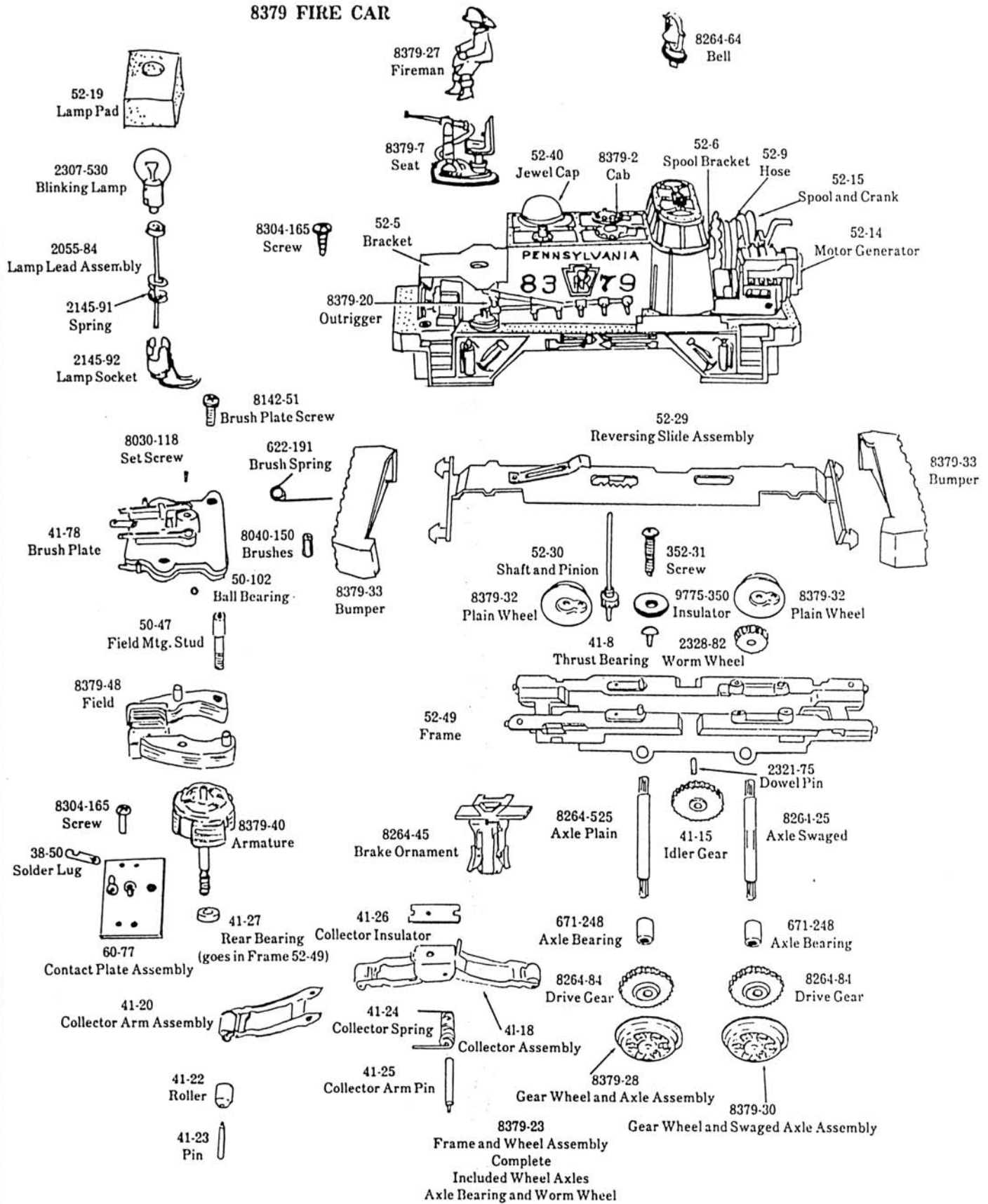
Note: S Gauge accesories go in old HO section orange dividers of regular Lionel Manual.



# 8578 BALLAST TAMPER

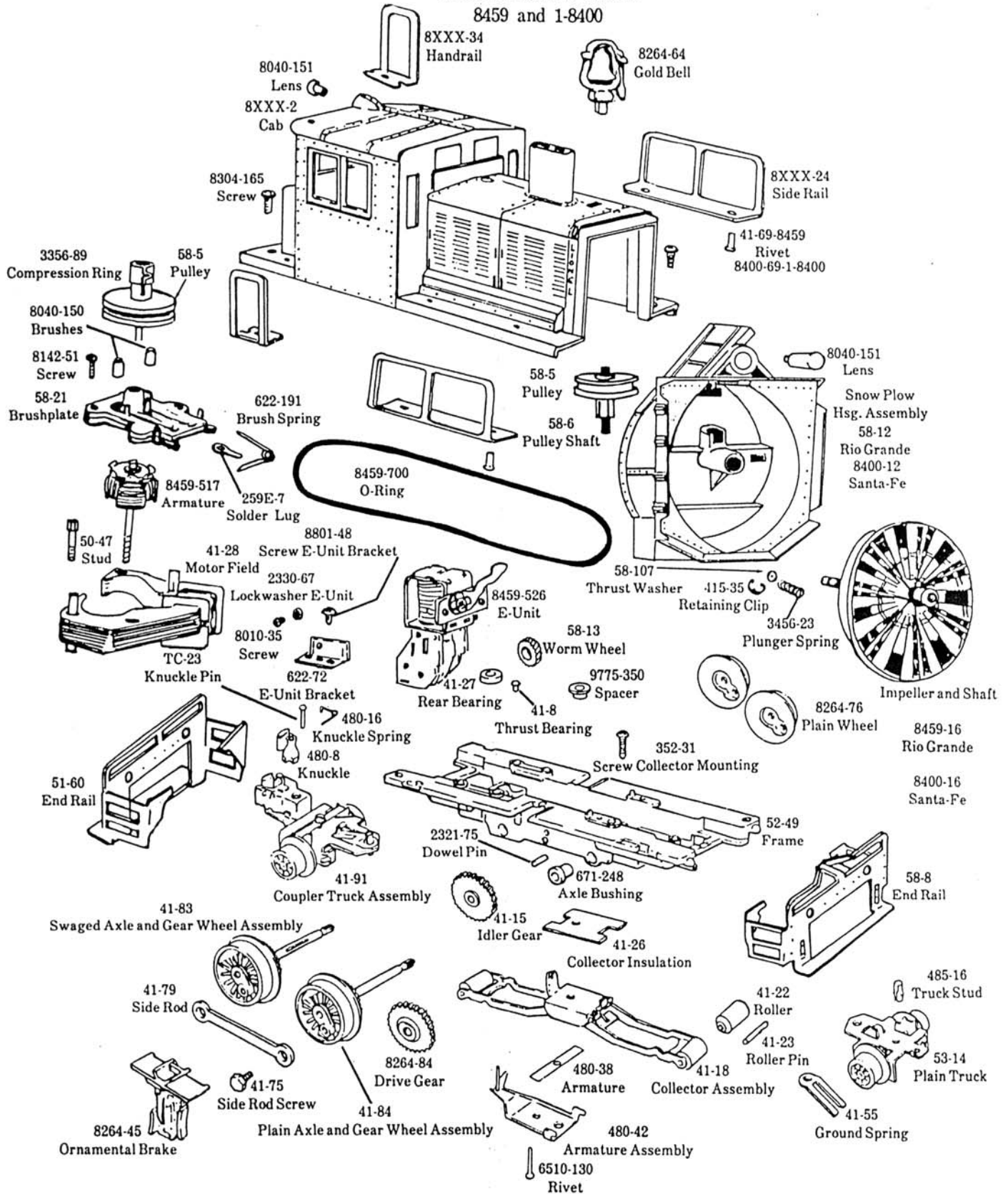


# 8379 FIRE CAR



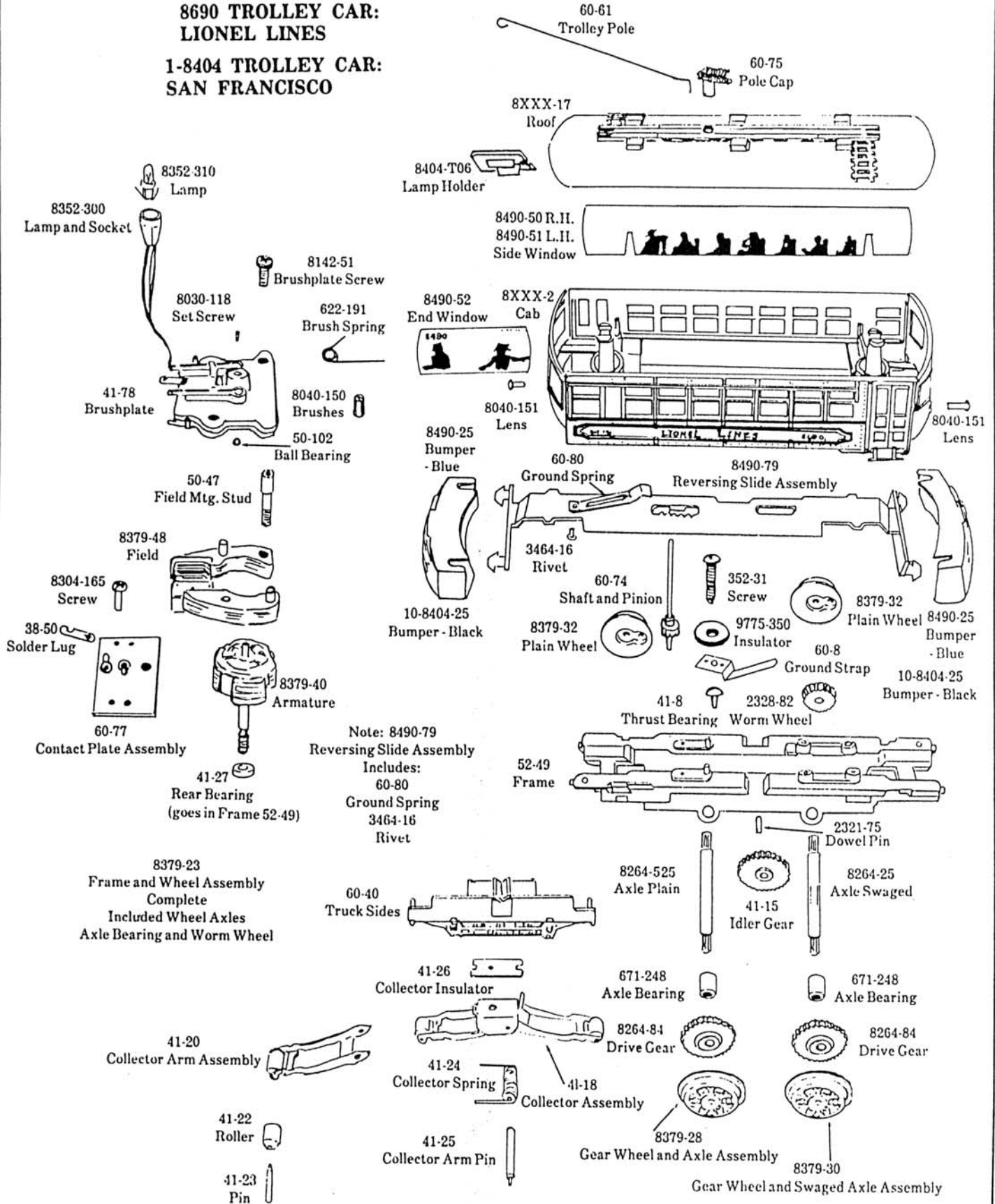
# ROTARY SNOW PLOW

8459 and 1-8400

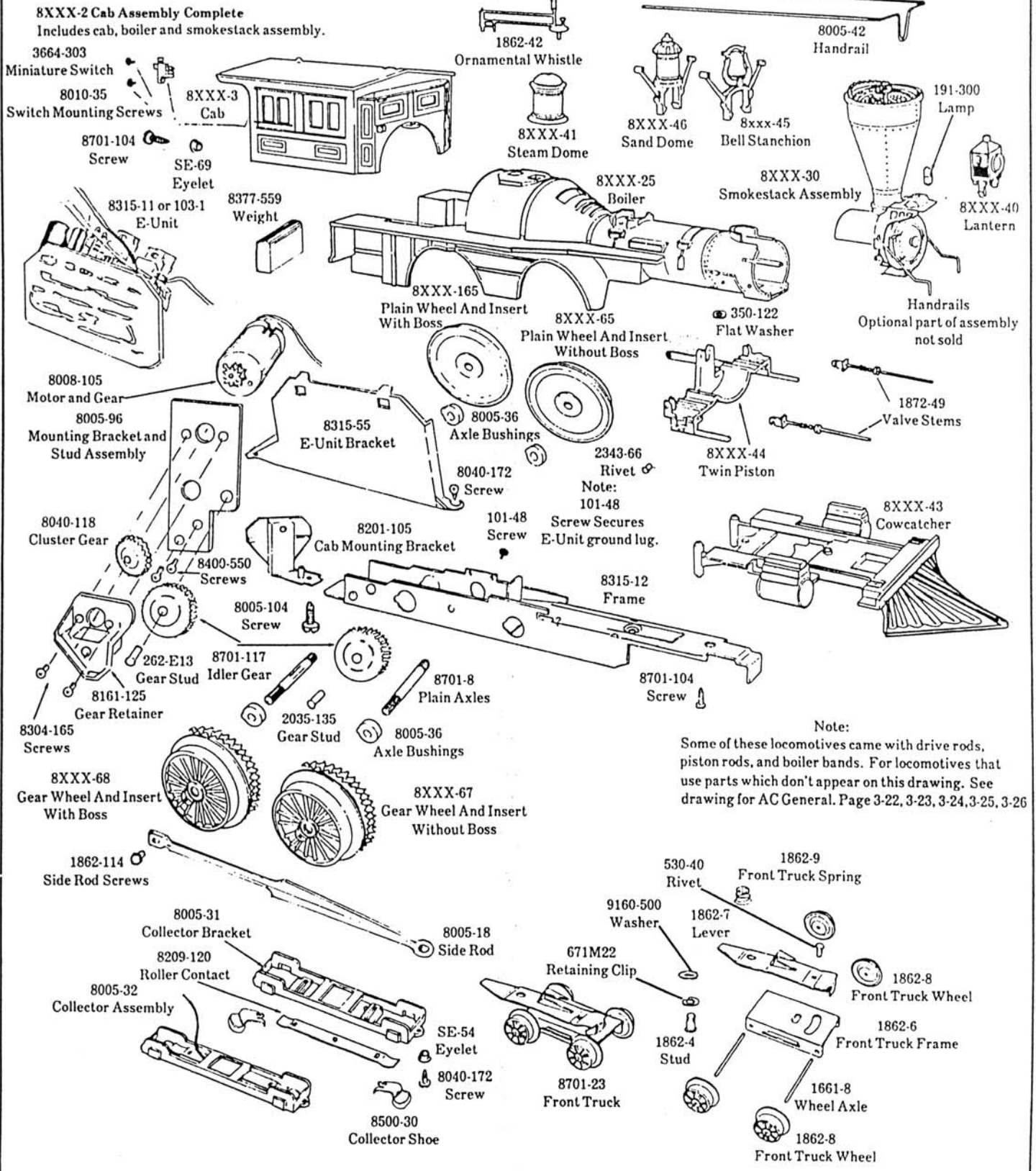


**8690 TROLLEY CAR:  
LIONEL LINES**

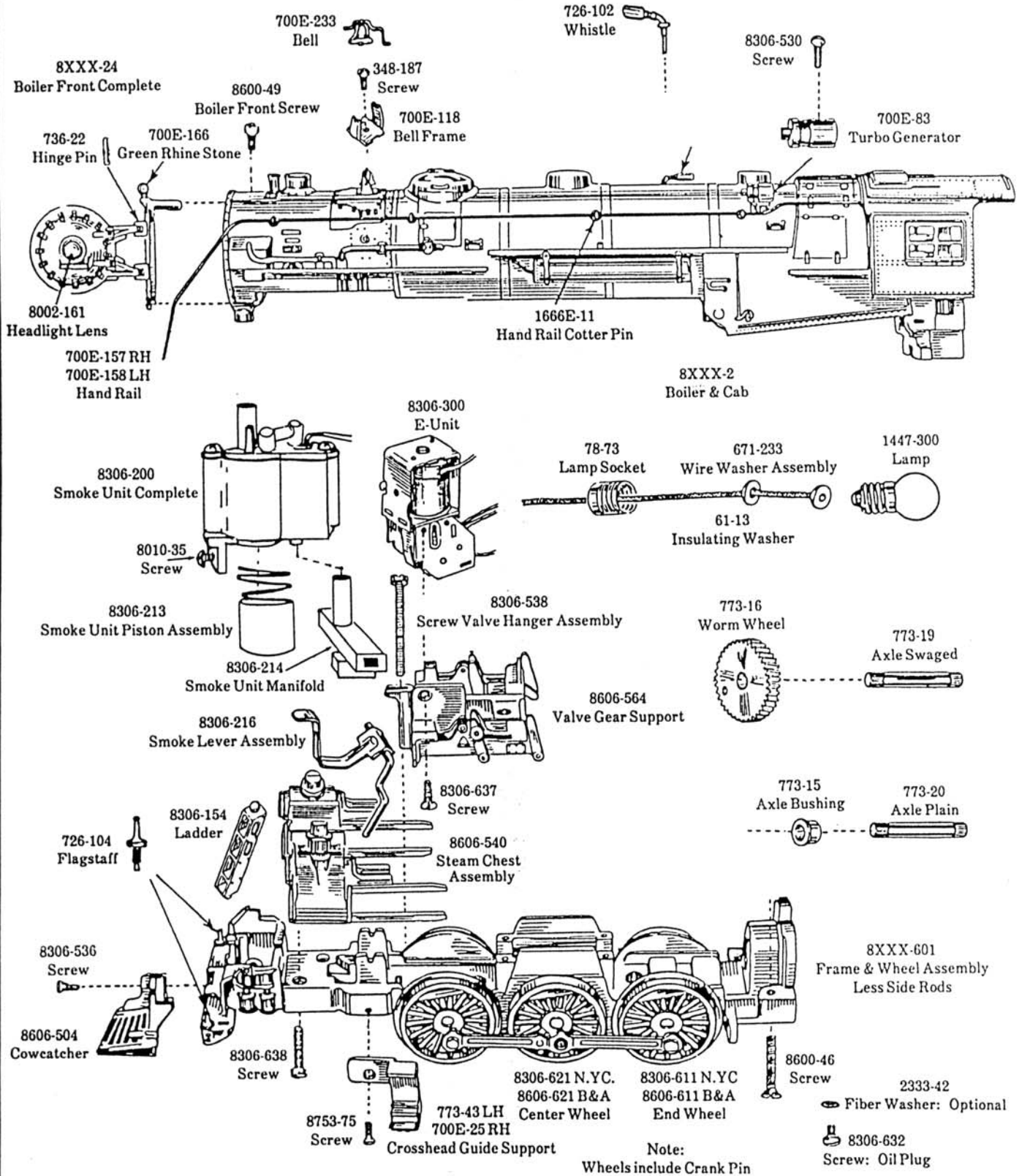
**1-8404 TROLLEY CAR:  
SAN FRANCISCO**



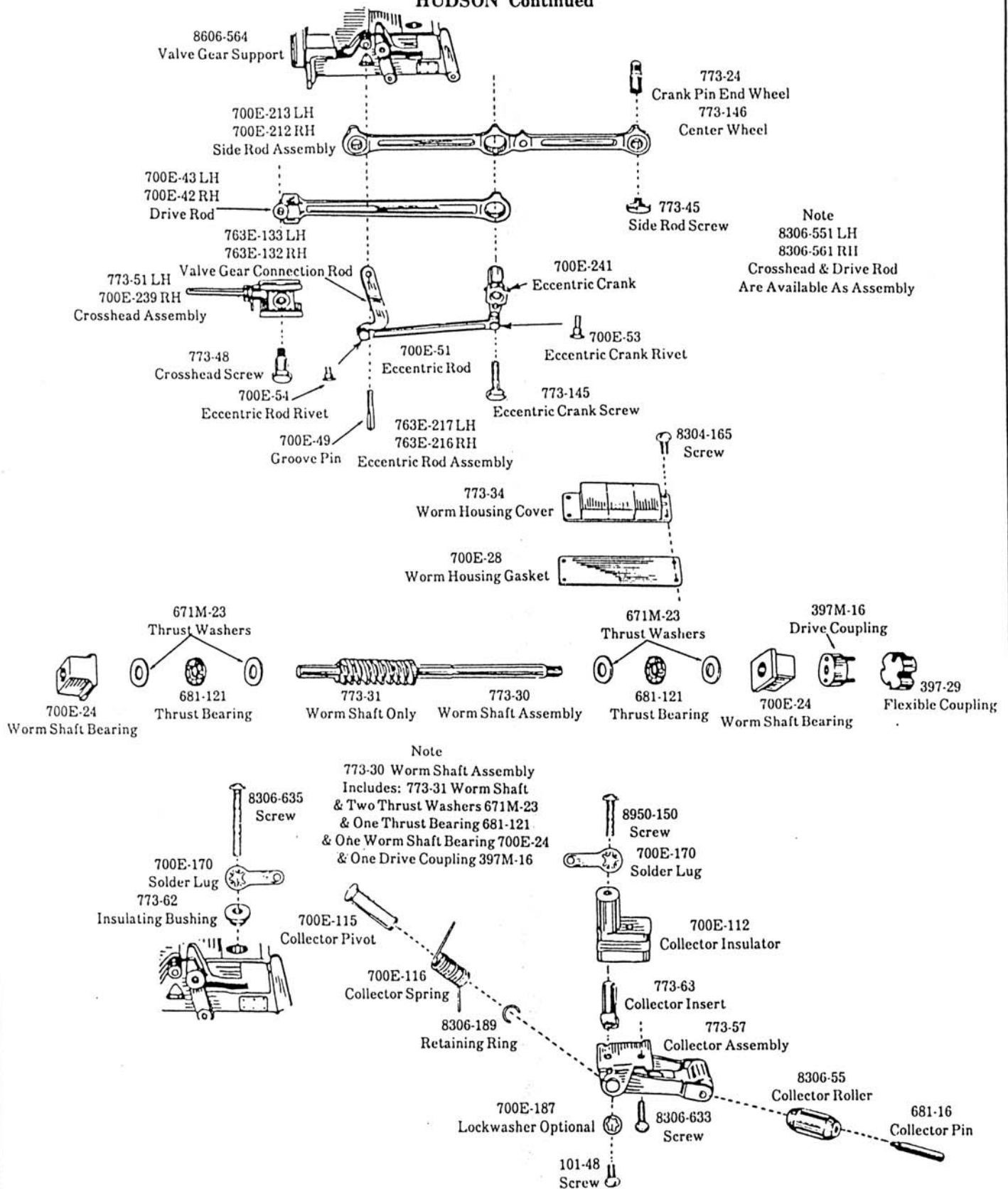
## GENERAL TRADITIONAL SERIES With Can Motor and Electronic E-Unit



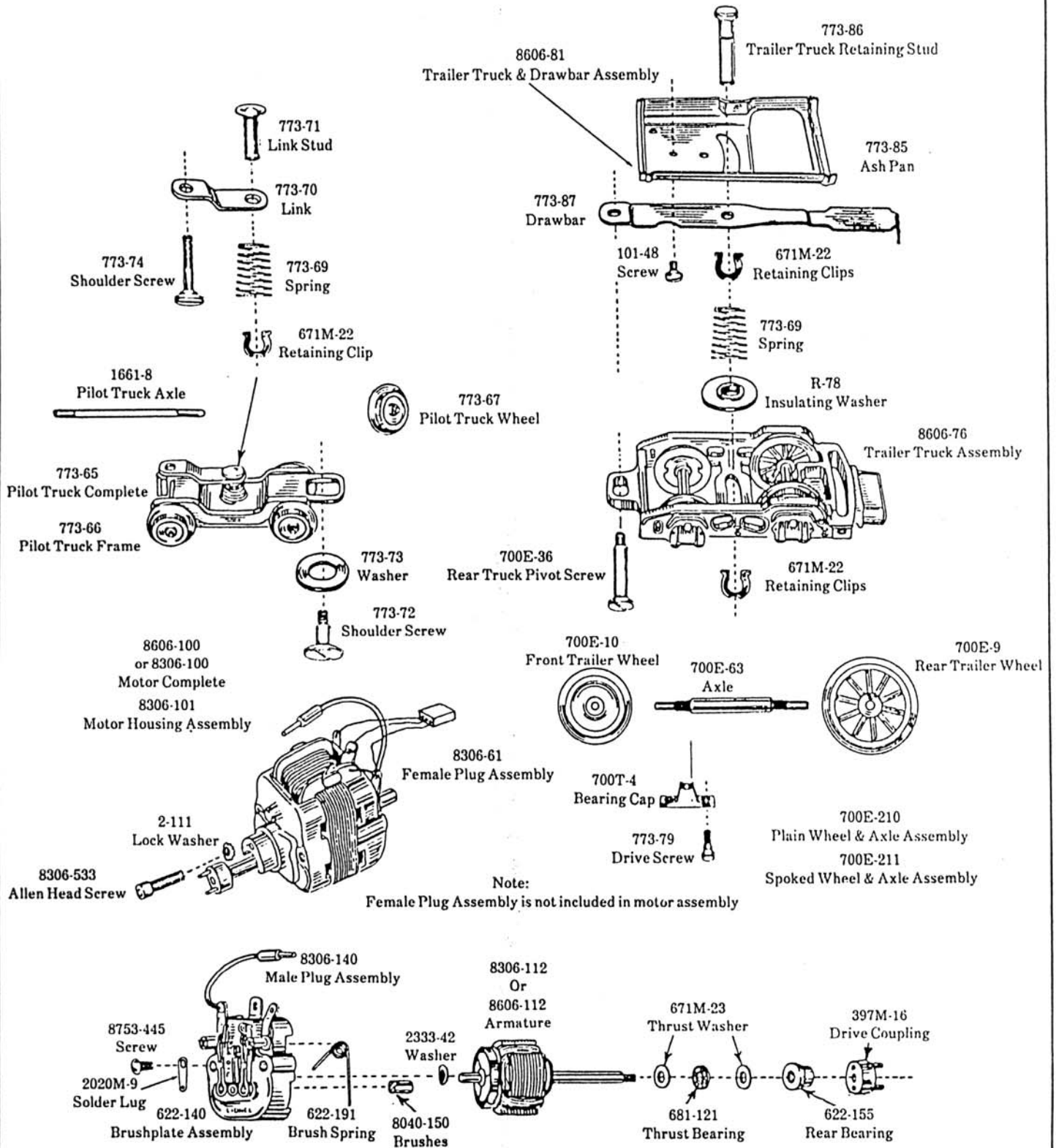
# LIONEL 783, 784, 785 HUDSON LOCOMOTIVE



# HUDSON Continued

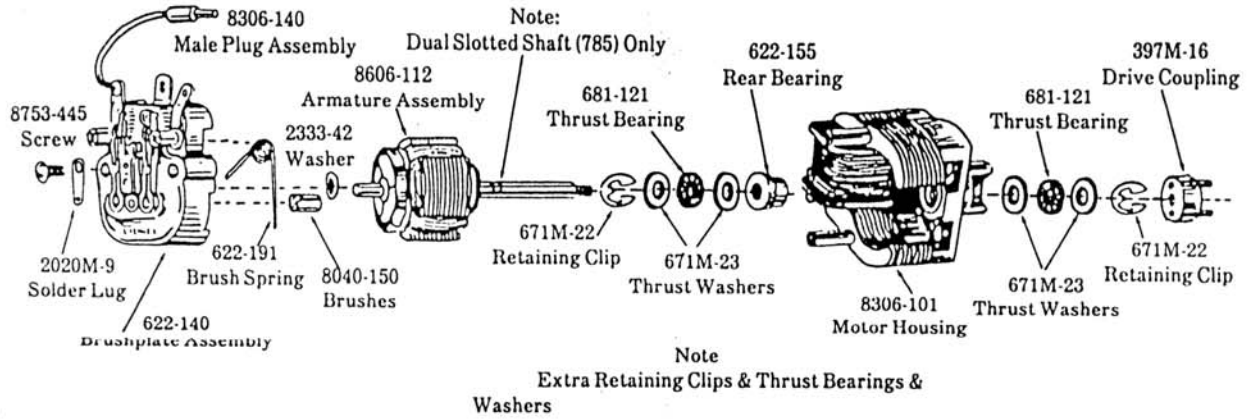


# HUDSON



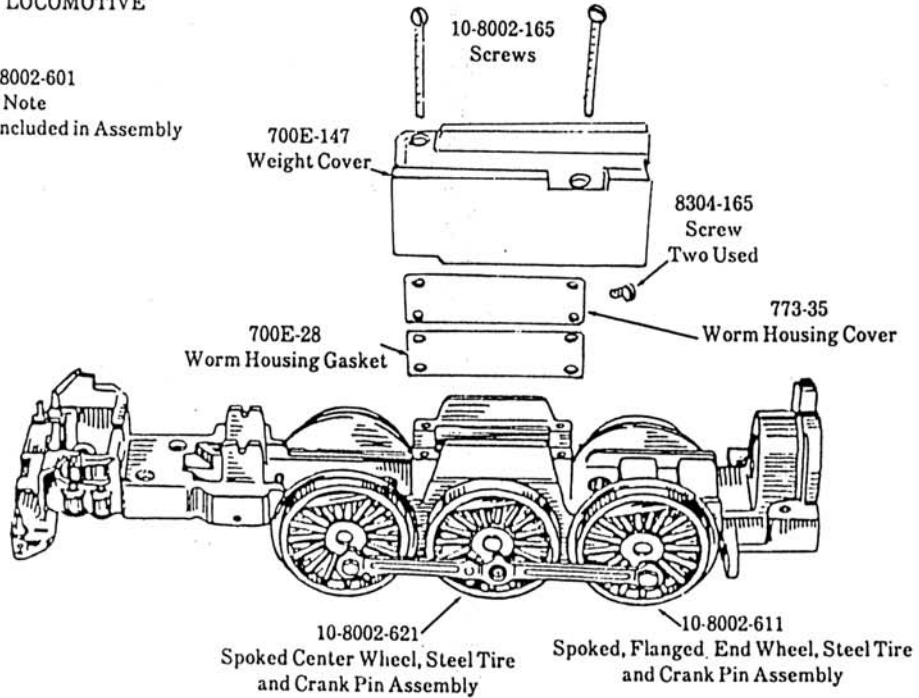


8606-100 MOTOR COMPLETE NEW DESIGN



FRAME & WHEEL ASSEMBLY,  
USED ON 785 LOCOMOTIVE

10-8002-601  
Note  
Side Rods not Included in Assembly



8606-100 MOTOR COMPLETE

SECTION MOTORS/TRUCKS

8306-100 MOTOR COMPLETE

DATE 10/87

783, 784, 785 HUDSON MOTOR - breakdown

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
	397-M16	1	Drive coupling
	622-140	1	Brushplate
	622-155	1	Rear bearing
	622-191	2	Brush spring
	671M-22	1	Retaining clip - two used on 785 motor (8606-100)
	671M-23	2	Thrust washer - four used on 785 motor (8606-100)
	681-121	1	Thrust bearing - two used on 785 motor (8606-100)
	2020-M09	1	Solder lug
	2333-42	1	Fiber washer (armature spacing on 784)
	8040-150	2	Brush
	8306-101	1	Motor housing assembly
	8306-112	1	Armature - early type used on 783
	8306-140	1	Male plug assembly
	8606-112	1	Armature new commutator single slotted shaft used on 784 B&A
	8606-112	1	Armature newer type with new commutator and dual slotted shaft for extra C-clips thrust washers and bearings for 785
	8753-445	2	Screw (brushplate)

8606-100 HUDSON MOTOR SERVICE NOTES

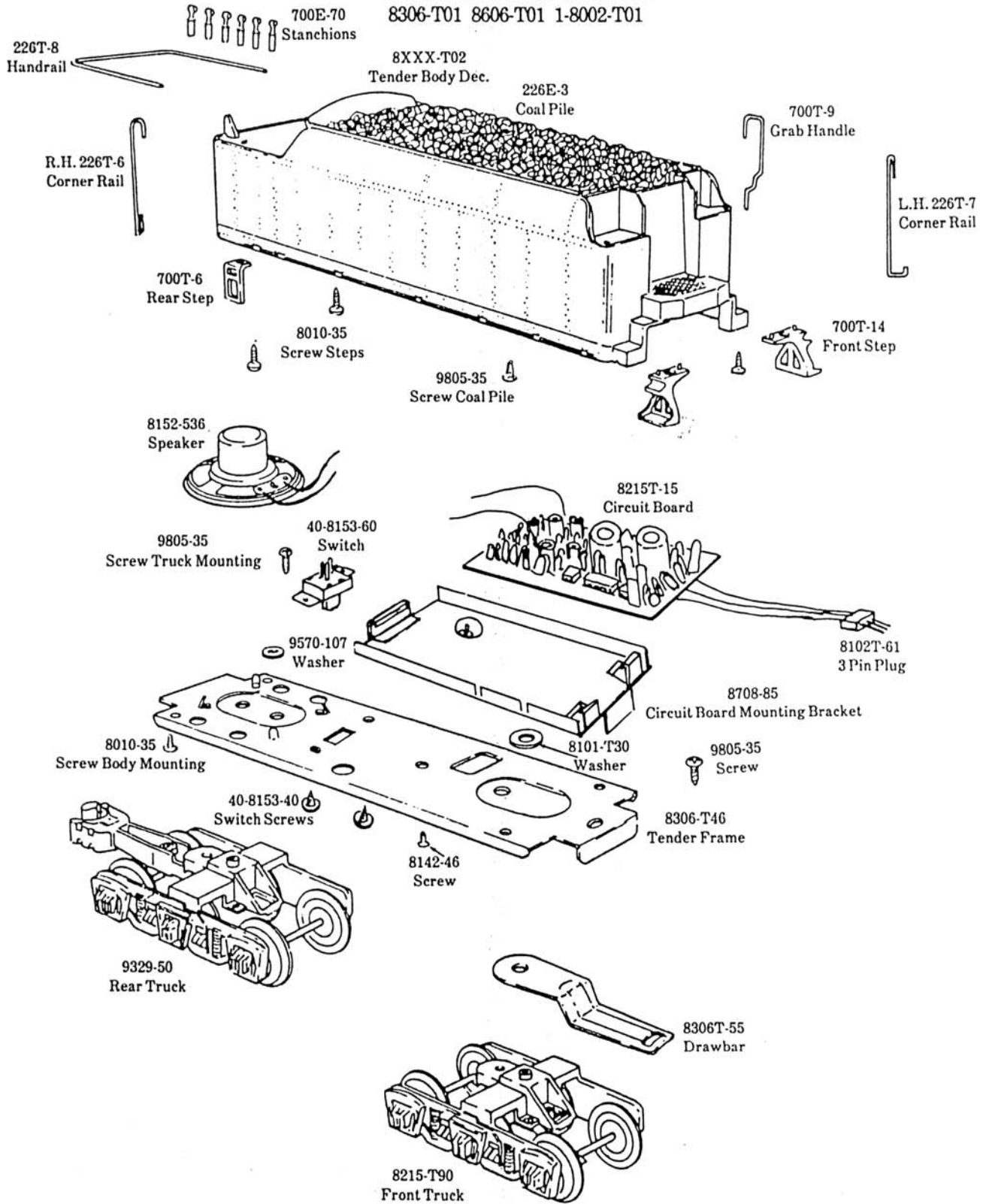
The latest design of the 8606-100 motor incorporates the use of four thrust washers 671M-23, two thrust bearings 681-121 and two retaining clips 671M-22.

The armature shaft is dual slotted for the additional retaining clip 671M-22. The reason for the change is to prevent the armature from thrusting too far back forcing commutator to bind up against brushplate in the reverse direction.

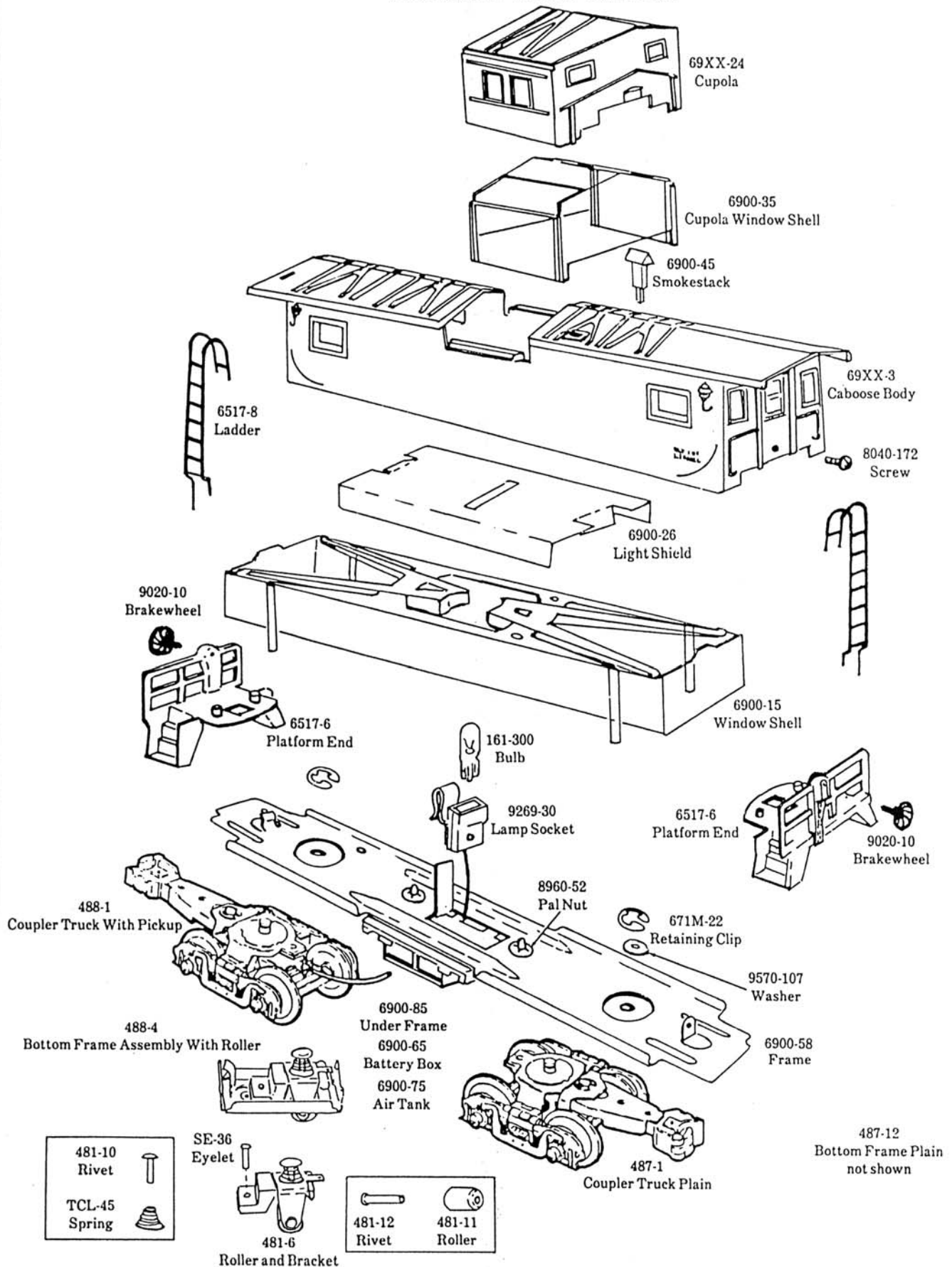
The armatures 8306-112, 8606-112 single slotted shaft and 8606-112 dual slotted shaft are all interchangeable. If the earlier types are used as replacements in the newest style 8606-100 motor, the armature must be spaced properly by inserting fiber washers 2333-42 on armature shaft between commutator and brushplate. It may also be necessary in this case to space brushplate up with suitable washers inserted on brushplate mounting studs between field and brushplate. This also prevents the back thrust problem.

# LARGE DIE-CAST TENDER

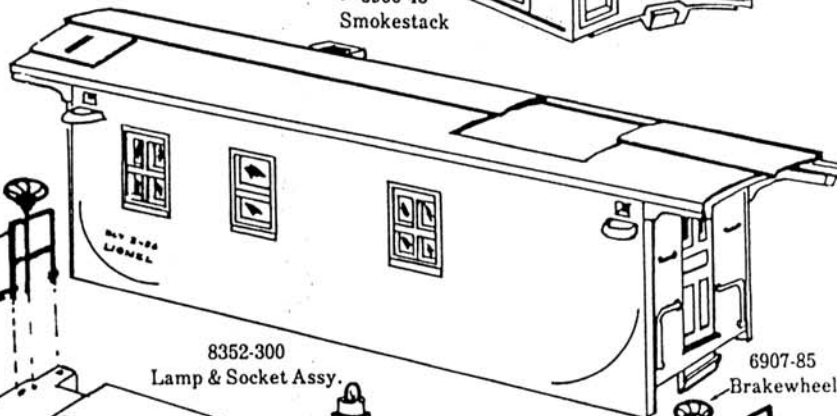
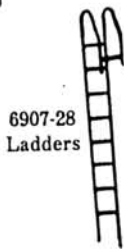
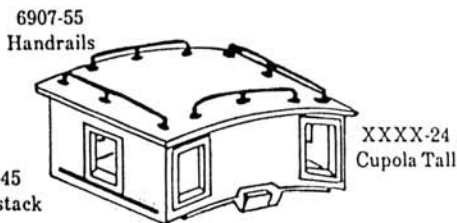
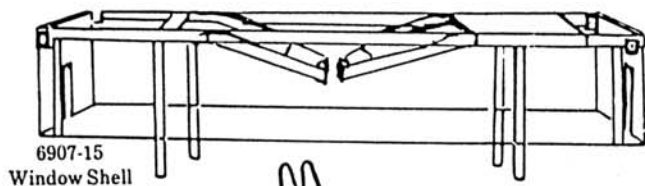
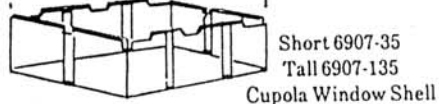
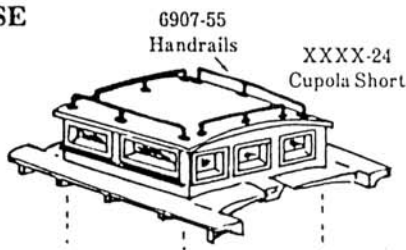
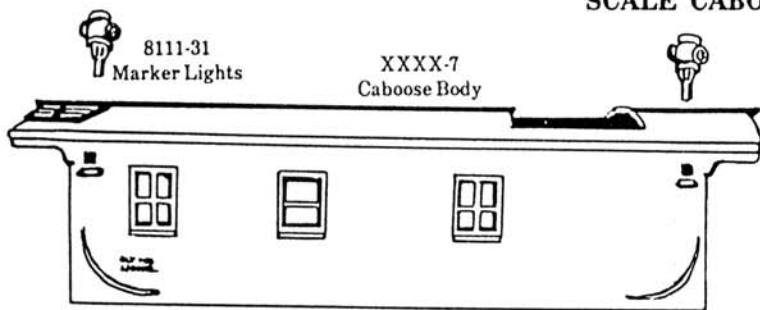
8306-T01 8606-T01 1-8002-T01



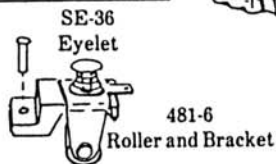
# EXTENDED VISION CABOOSE



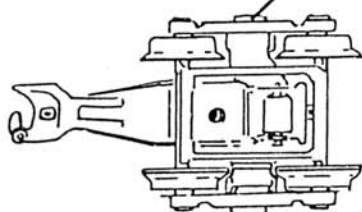
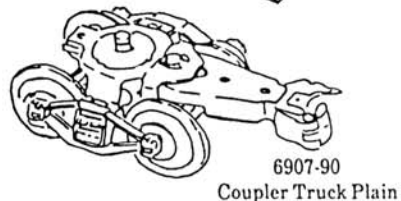
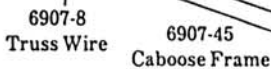
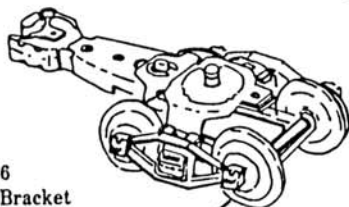
# SCALE CABOOSE



- 481-10 Rivet
- TCL-45 Spring



- 481-11 Roller
- 481-12 Rivet

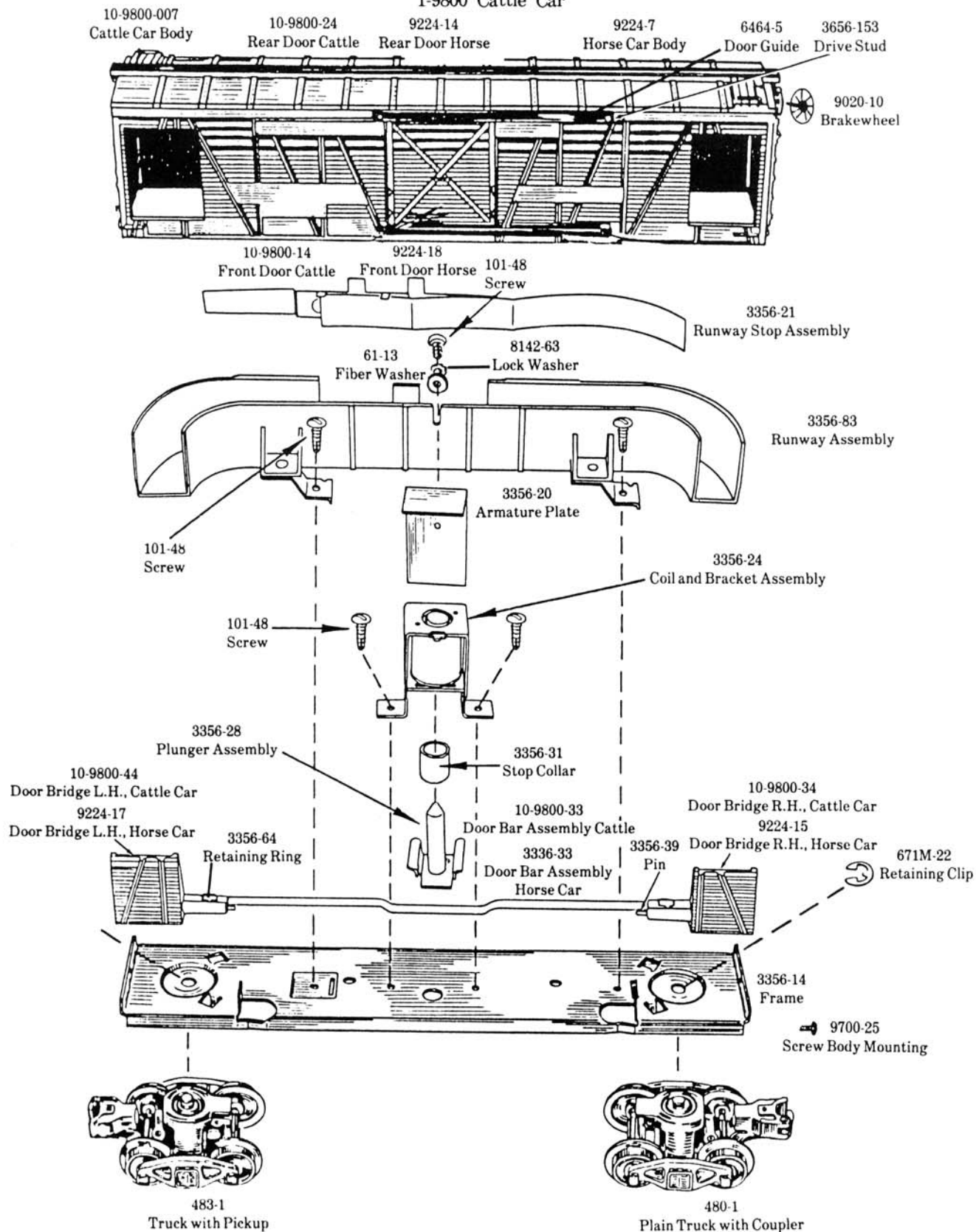


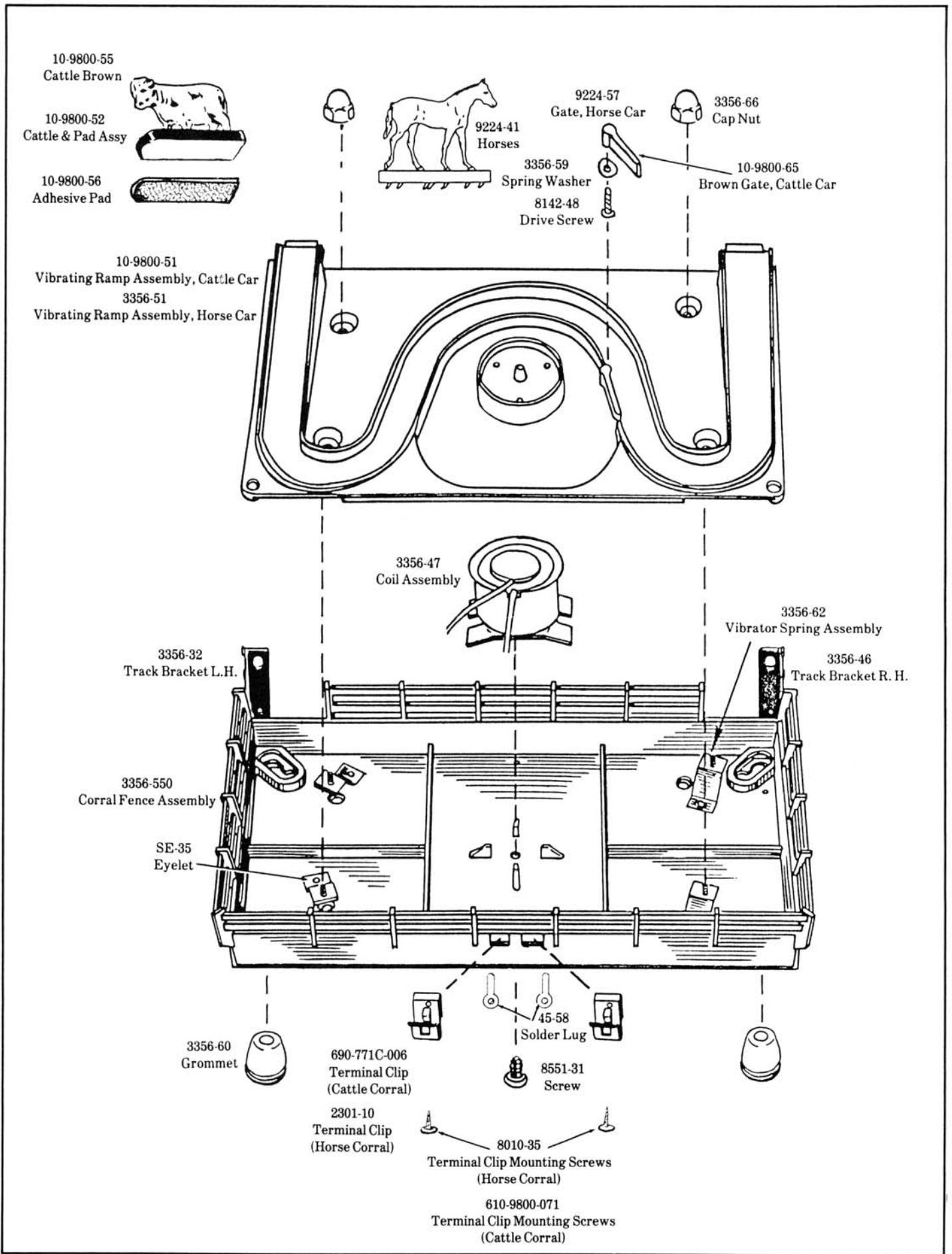
Bottom Frame for 6907-90 is 487-12

8352-310 LAMP only

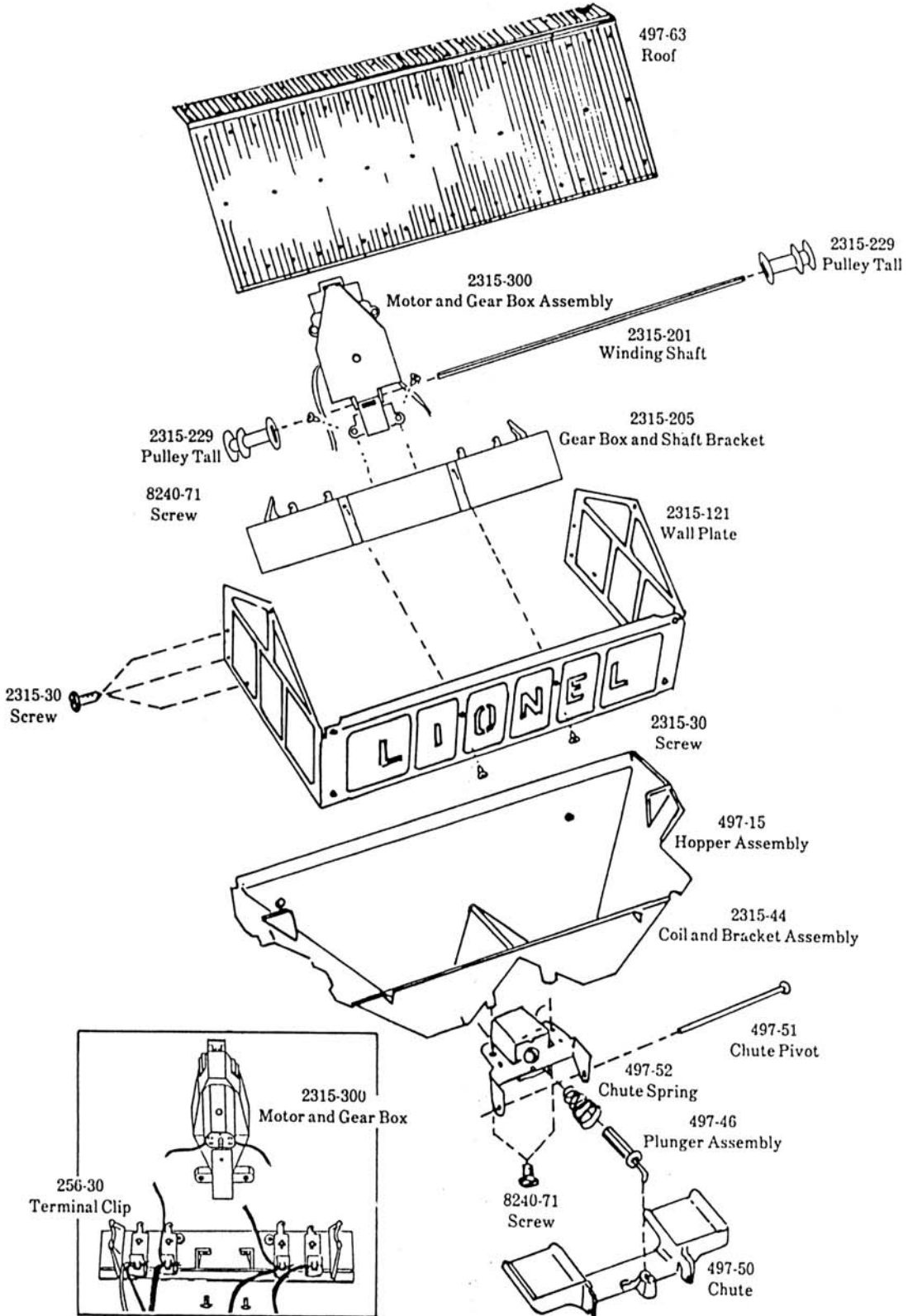
# OPERATING HORSE AND CATTLE CAR

9224 Horse Car  
1-9800 Cattle Car

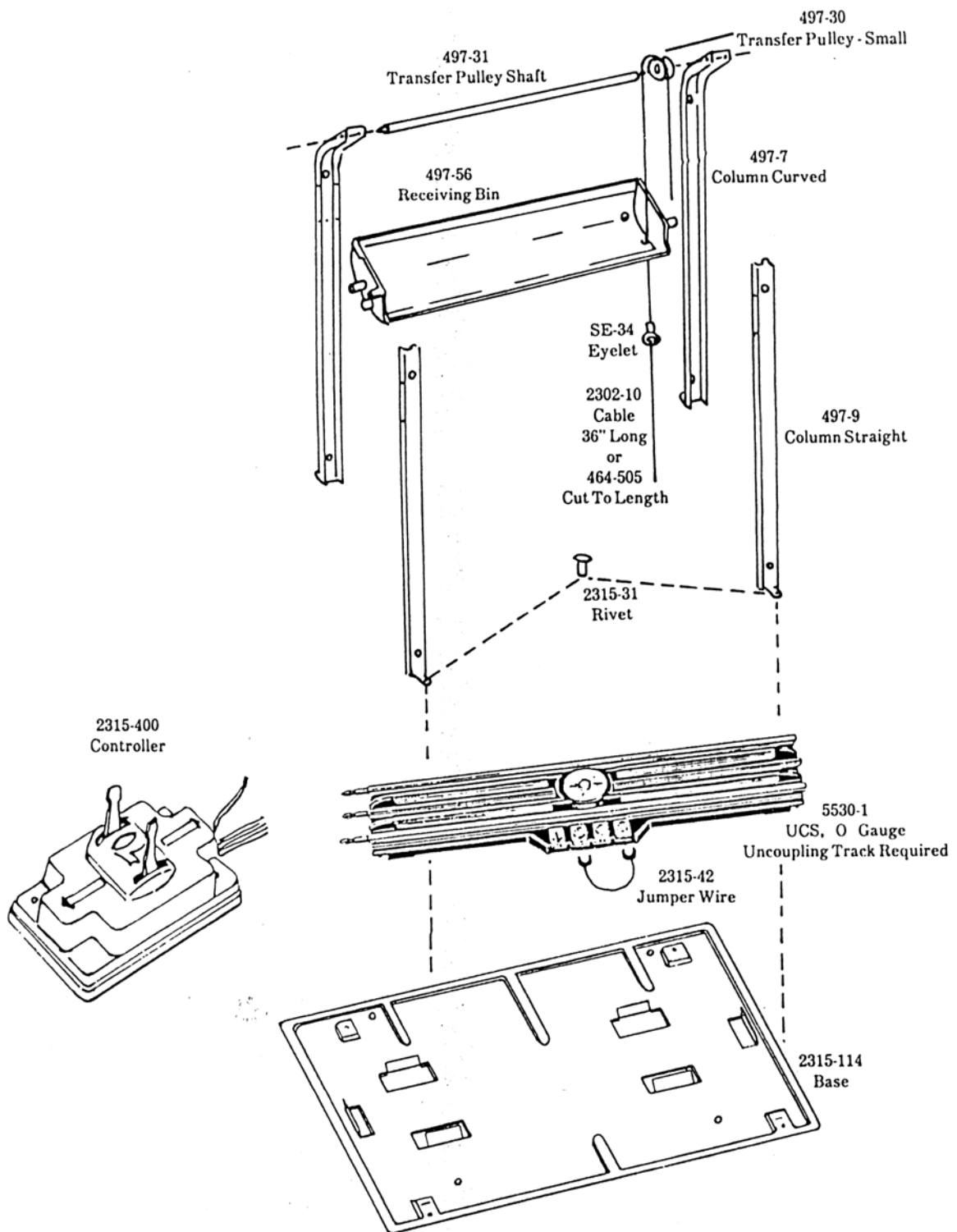




# 2315 COALING STATION







**NOTE:**

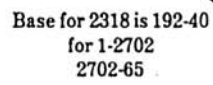
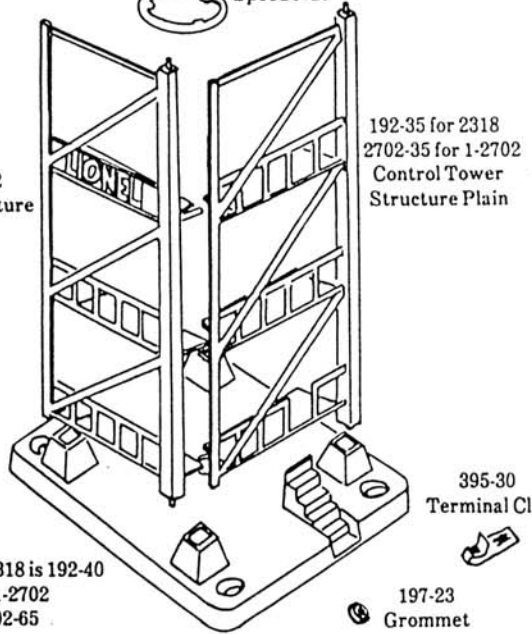
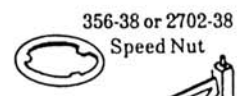
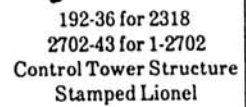
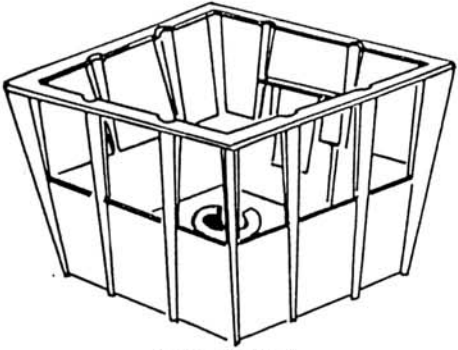
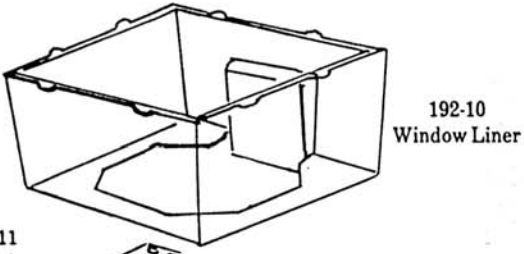
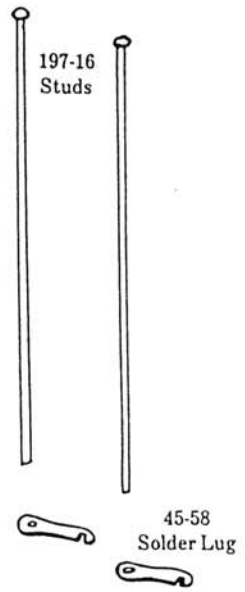
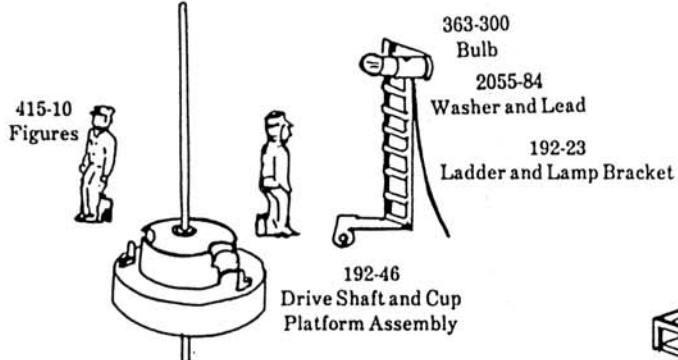
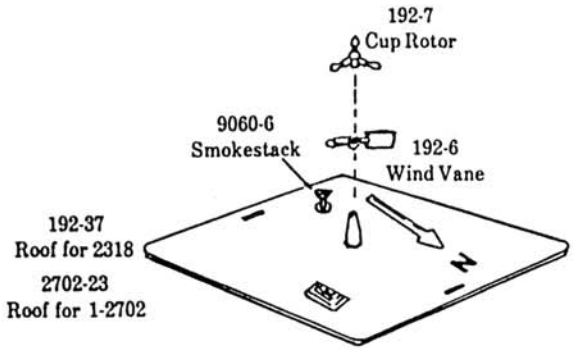
If unit does not function, switch lead from controller to opposite post on transformer. If you wish to use separate transformer to operate your Coaling Station, connect lead from Controller to one terminal of transformer. Connect other terminal of transformer to outside rail of track.

Instruction sheet shows wiring diagram for Lionel Trains Inc. produced cars and old Lionel twin bin car (Part No. 3359).

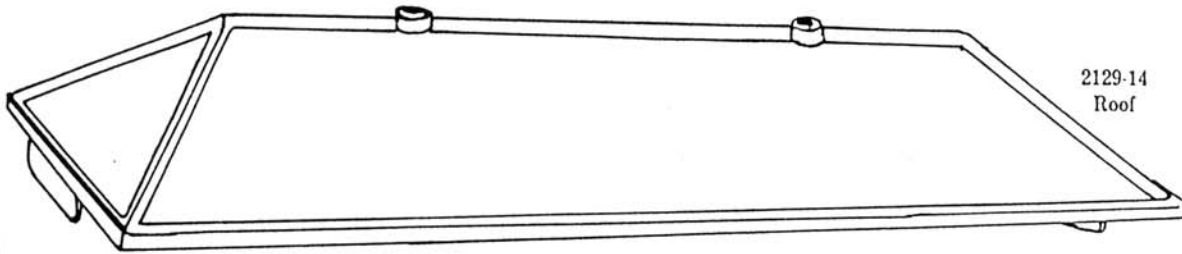
For operation with old Lionel type 3469 cars the following wiring diagram should be used:

- 1) Connect jumper wire to terminal No. 1 (far left) and terminal No. 4 (far right) on UCS track. Black wire remains connected to terminal No. 1.
- 2) Connect white lead wire to No. 2 terminal (2nd left).

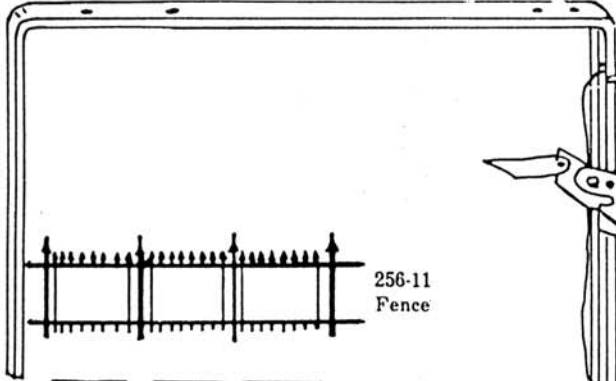
# 2318 OPERATING CONTROL TOWER



2323 OPERATING AND 2129 NON-OPERATING FREIGHT STATION



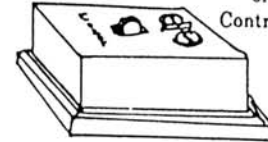
256-8  
Roof Support Assembly  
(2129 only)



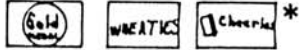
356-15  
Roof Support and Trip Assembly  
(2323 only)

363-300  
Lamp

5901-1  
Control Switch  
or 5903-1  
Control Switch



\* Decal Sheet  
2129-10  
Includes All Decals



\*\*Note: 2323-23 Baggage Truck  
Includes Figure and Front and Rear Pads.

2129-4  
Building

\*\*2323-23  
Baggage Truck

415-10  
Figure



356-25  
Front Pad

356-26  
Rear Pad

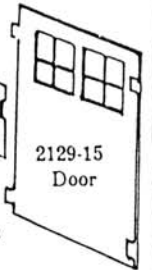


356-14  
Adjusting Screw

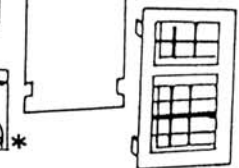


132-16  
Door Glass

132-14  
Window Glass

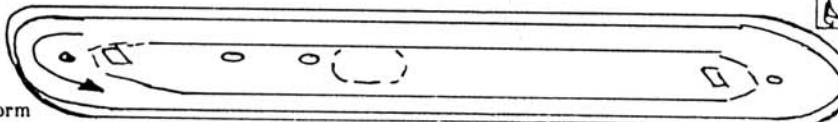


2129-15  
Door



2129-12  
Window Frame

2323-7  
Vibrating Platform

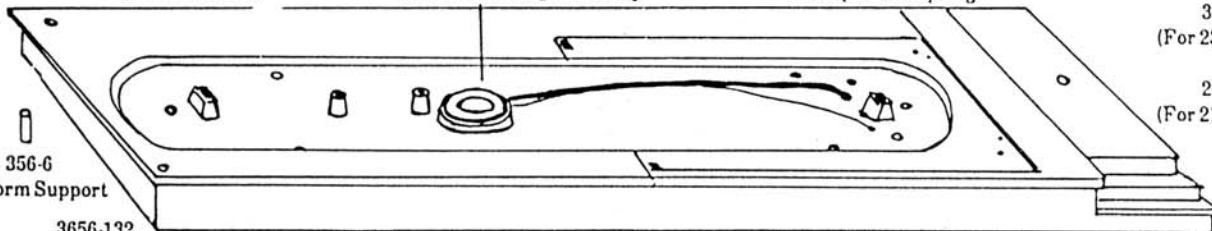


356-48  
Suspension Spring

2323-21  
Coil and Housing Assembly

356-48  
Suspension Spring

356-6  
Platform Support



3656-132  
Adjusting Nut

356-38  
Retaining Ring

3656-132  
Adjusting Nut

8010-172  
Screw

1970-16  
Speed Nut

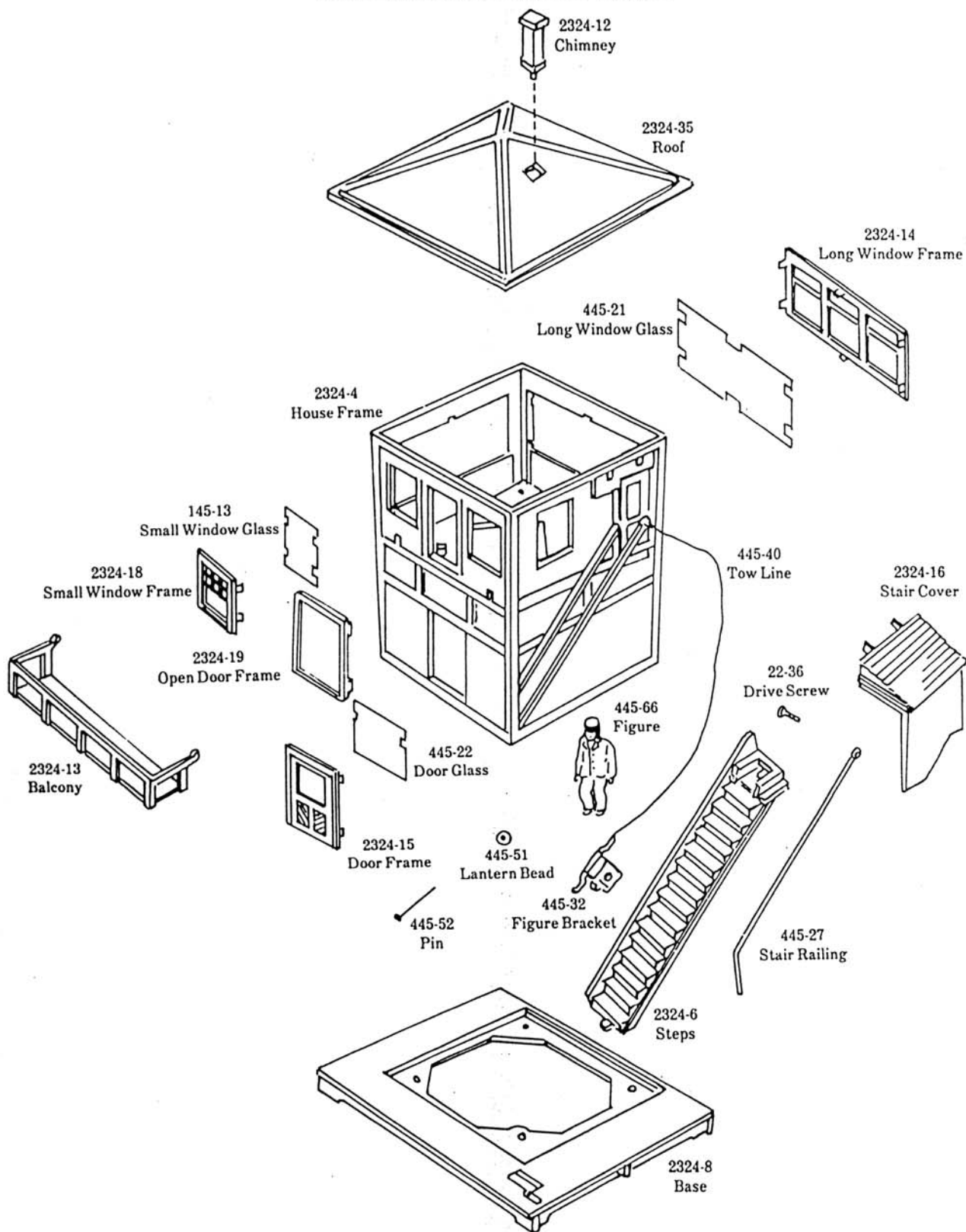
256-30  
Terminal Clip

356-4  
(For 2323 Base)

256-3  
(For 2129 Base)



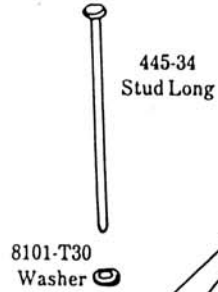
# 2324 OPERATING SWITCH TOWER



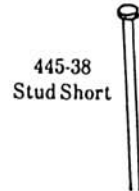


445-66  
Figure

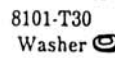
SE-23  
Eyelet



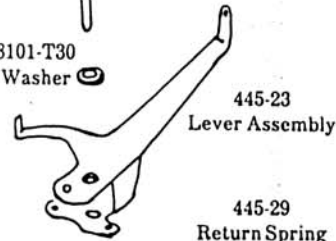
445-34  
Stud Long



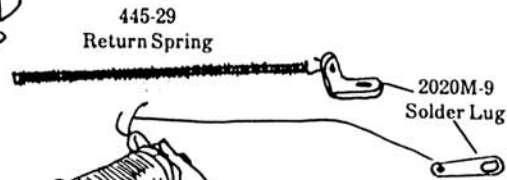
445-38  
Stud Short



8101-T30  
Washer



445-23  
Lever Assembly

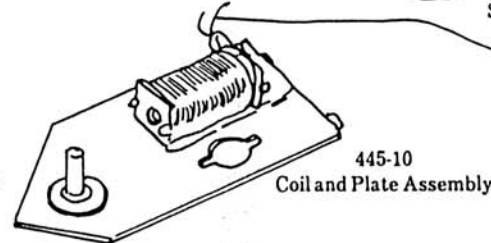


445-29  
Return Spring

2020M-9  
Solder Lug



445-35  
Plunger



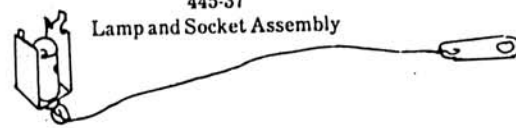
445-10  
Coil and Plate Assembly



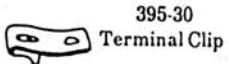
363-300  
Lamp



445-65  
Connecting Link



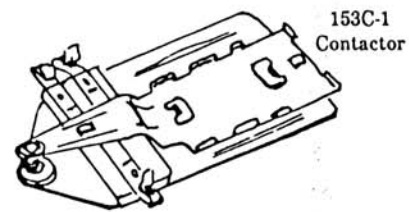
445-37  
Lamp and Socket Assembly



395-30  
Terminal Clip



1970-16  
Speed Nut

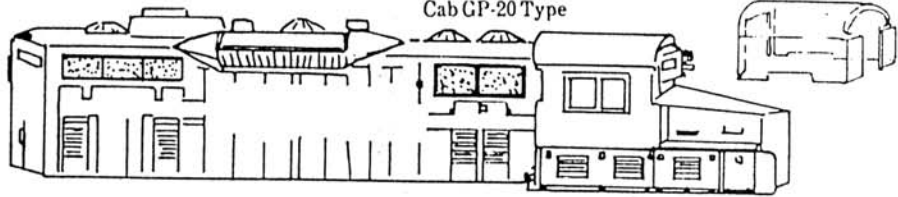


153C-1  
Contactor

# AMERICAN FLYER GP-7, 9 & 20 DIESEL LOCOMOTIVES

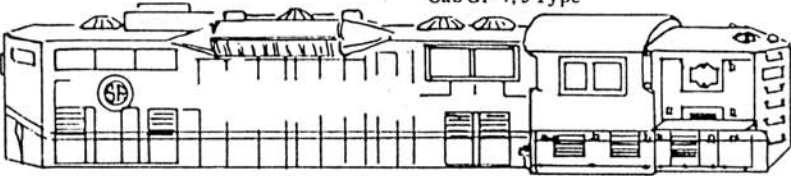
40-8459-15  
GP-7,9, or GP-20 Window Shell

40-8XXX-2  
Cab GP-20 Type



40-8459-35  
GP-20 only  
Windshield

40-8XXX-2  
Cab GP-7, 9 Type



40-8459-45  
GP-20 only  
Lamp Bracket

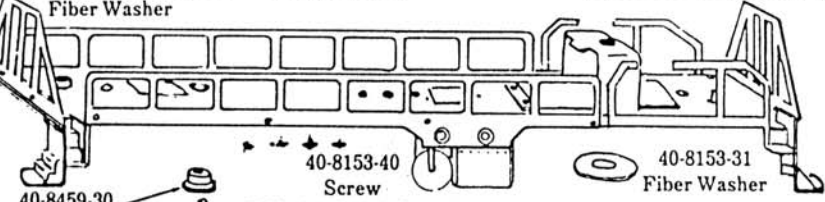
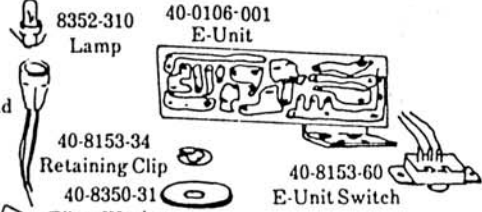
40-8350-24  
Horn

40-8350-25  
Headlight & Number Board



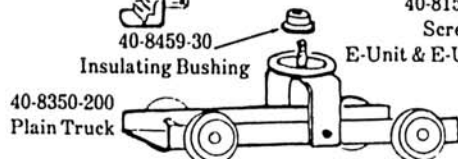
Note:  
Headlight and numberboards  
Two used on GP-7 & 9  
One used on GP-20

Note:  
GP-7 Cabs do not  
include Dynamic Brake Hatch



8352-310 Lamp  
8352-320 Lamp Socket & Lead  
40-8153-34 Retaining Clip  
40-8350-31 Fiber Washer  
40-8XXX-514 Frame Assembly Black or White  
40-8551-513 Frame Assembly: Santa Fe

8352-310 Lamp  
8352-320 Lamp Socket w/Leads  
40-8153-34 Retaining Clip  
40-8459-30 Insulating Bushing



40-8350-200 Plain Truck

40-8153-40 Screw  
E-Unit & E-Unit Switch

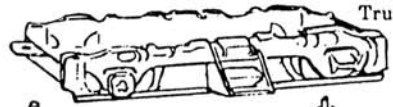
8040-T50 Screw

40-8153-31 Fiber Washer

40-8251-140 Yoke & Stud Assembly



40-9700-57 Coupler  
40-8153-75 Leaf Spring



40-8350-82 Truck Side Assembly

Note: Truck Assembly includes Coupler, Spring & Shoe

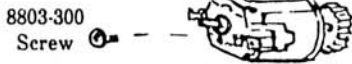
40-8153-38 Rivet  
40-8153-36 Screw

40-8153-84 Collector Frame

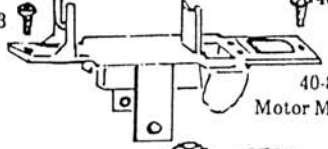
40-8153-85 Collector Spring

40-8153-83 Collector Shoe

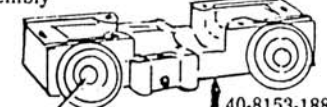
40-8251-120 AF Motor & Gear Assembly  
40-8251-111 Gear Cover



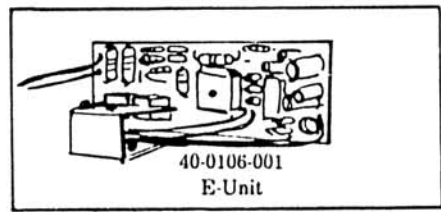
8803-300 Screw  
40-8251-33 Screw  
40-8251-110 Motor Mount Bracket



40-8251-109 Shaft & Gear Assembly  
40-8350-102 Motor Frame & Wheel Assembly



Assembly Break Down  
40-8153-184 Worm Wheel Two  
40-8153-175 Solid Wheel & Axle Assembly One  
40-8153-190 Traction Wheel Two



40-0106-001 E-Unit

40-8153-189 Axle Bushing Not Shown

40-8153-171 Axle

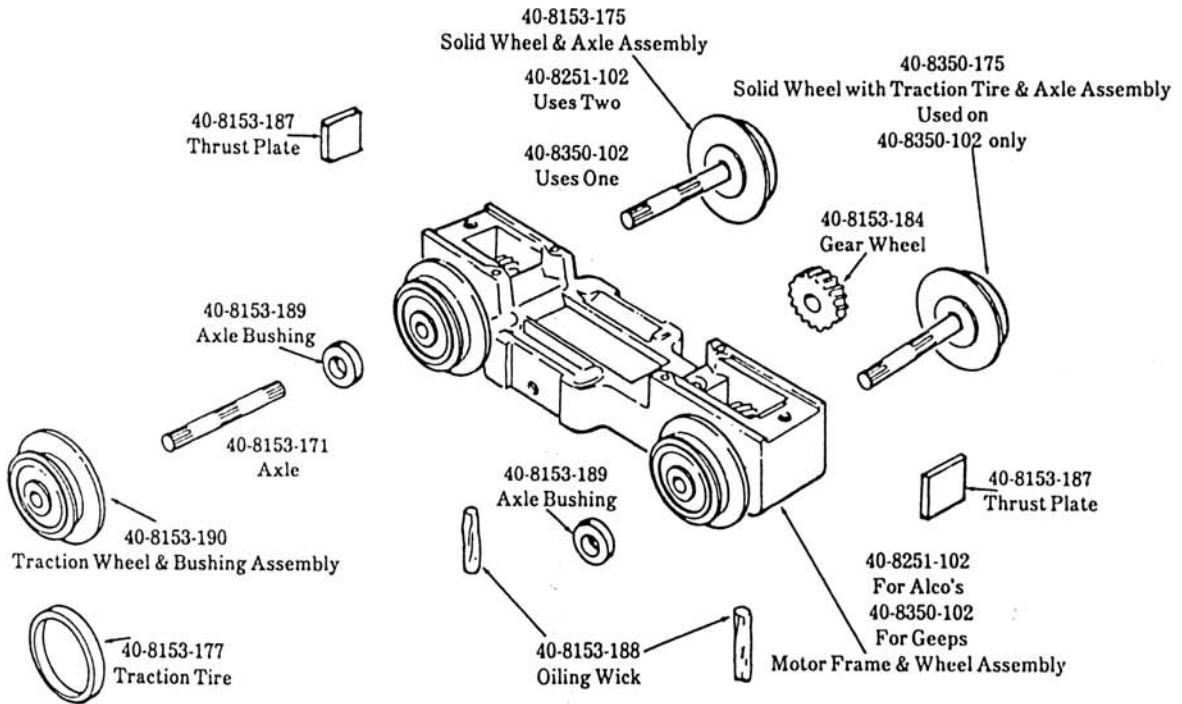
40-8153-188 Wick

40-8350-186 Solid Traction Wheel

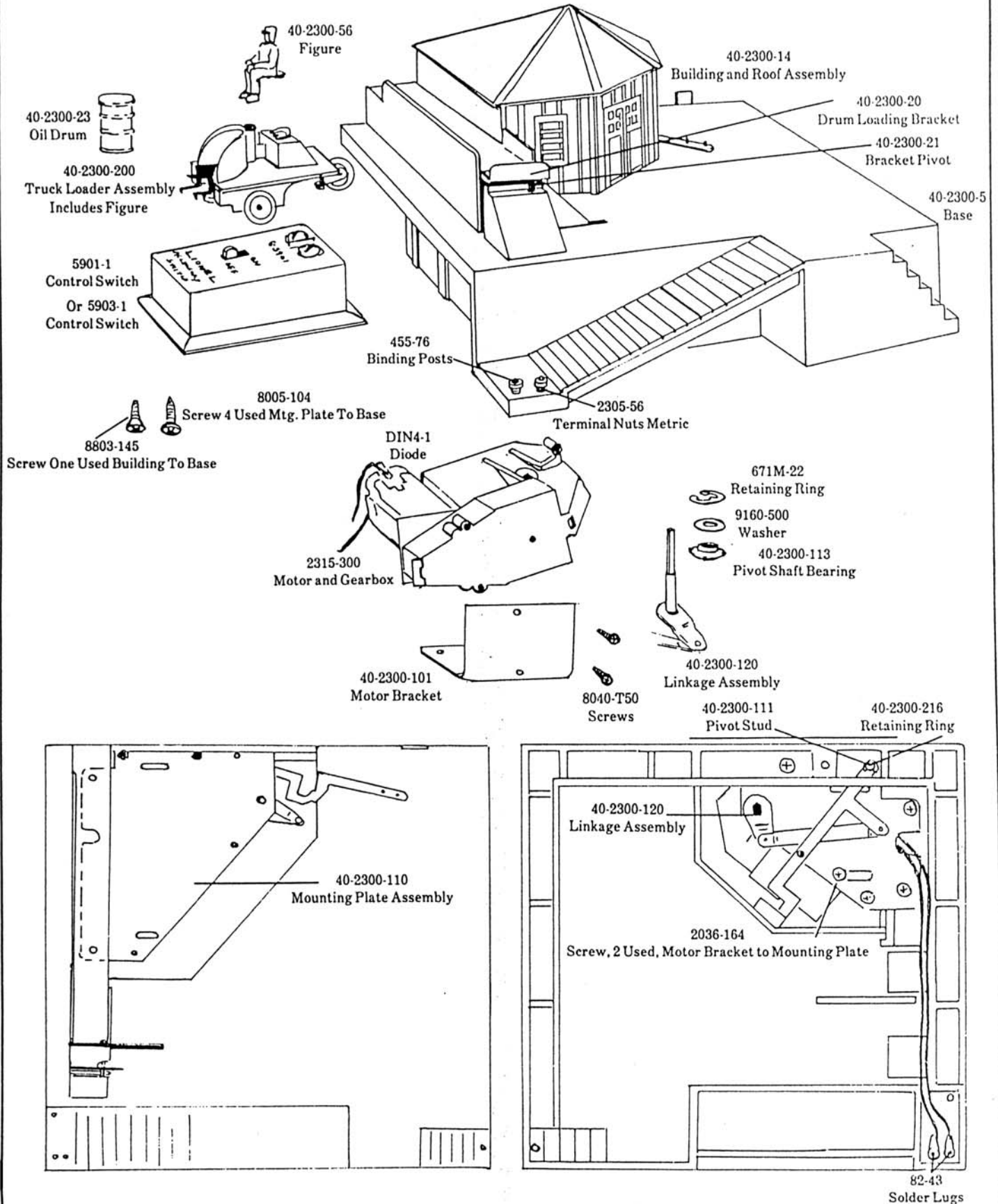
AMERICAN FLYER GEEP & ALCO DC MOTOR  
FRAME AND WHEEL ASSEMBLY

40-8251-102  
Alco's

40-8350-102  
Geeps



# 4-2300 AMERICAN FLYER OIL DRUM LOADER





# 4-2321 AMERICAN FLYER SAW MILL

