



LIONEL

\$10.00
#610-0041-001
Issued 11-98

PARTS LIST AND EXPLODED DIAGRAMS SUPPLEMENT 41

Produced by Lionel®
50625 Richard W. Boulevard
Chesterfield, MI 48051-2493

CONTENTS

O and O27 gauges Diesel engines & Electrics

GG1 Electric	
Pennsylvania	(610-8316-001)
NW2 Diesel Switcher	
N.Y.C.	(601-8959-000)
Seaboard	(601-8582-000)
Phantom Locomotive	
Pratt's Hollow	(601-8860-000)

Rolling Stock

Operating Cars	
Aquarium Car/Command Controlled	
Lionel Lines	(601-9845-000)
Giraffe Car/Command Controlled	
African Transport	(601-9846-000)
Bay Window Caboose	
With Crew Talk	
Erie	(601-9742-00)
Southern Pacific	(601-9749-00)

Copyright© 1998
By Lionel
All Rights Reserved

Lionel® and American Flyer® are the registered trademarks of Lionel, Chesterfield Michigan

This supplement is designed to fit with two different publications, the *Lionel Service Manual* 1986 to 1998 and *Lionel Parts List and Exploded Diagrams*.

Each page has two numbers. The number for the *Lionel Service Manual* is indicated by parentheses, e.g., (B-81). The number which applies to *Lionel Parts Lists and Exploded Diagrams* is above the parentheses, e.g., S41: 1-1.

**INDEX TO
LIONEL PARTS LISTS AND EXPLODED DIAGRAMS
SUPPLEMENT 41**

ALPHABETICAL INDEX

**O AND 027 GAUGES
DIESEL ENGINES**

POWER UNITS

GG1 Electric S 41: 1-1,2,3,4,5,6
 610-8316-001 Pennsylvania
NW2 Diesel Switcher S 41:1-7,8,9,10,11
 601-8959-000 (622) N.Y.C.
 601-8582-000 (6250) Seaboard
Phantom Loco. S 41: 1-12,13,14,15,16
 601-8860-000 Pratt's Hollow

ROLLING STOCK

B.W. Caboose W/Crewtalk S 41: 7-1,2,3,4
 601-9742-000 Erie
 601-9749-000 Southern Pacific

OPERATING CARS

Aquarium Car S 41: 11-1,2
 601-9845-000 Lionel Lines
Giraffe Car S 41: 11-3,4
 601-9846-000 African Transport

NUMERICAL LISTINGS SUPPLEMENT 41

601-8582-000	S41: 1-7,8,9,10,11
601-8860-000	S41: 1-12,13,14,15,16
601-8959-000	S41: 1-7,8,9,10,11
601-9742-000	S41: 7-1,2,3,4
601-9749-000	S41: 7-1,2,3,4
601-9845-000	S41: 11-1,2
601-9846-000	S41: 11-3,4
610-8316-001	S41: 1-1,2,3,4,5,6

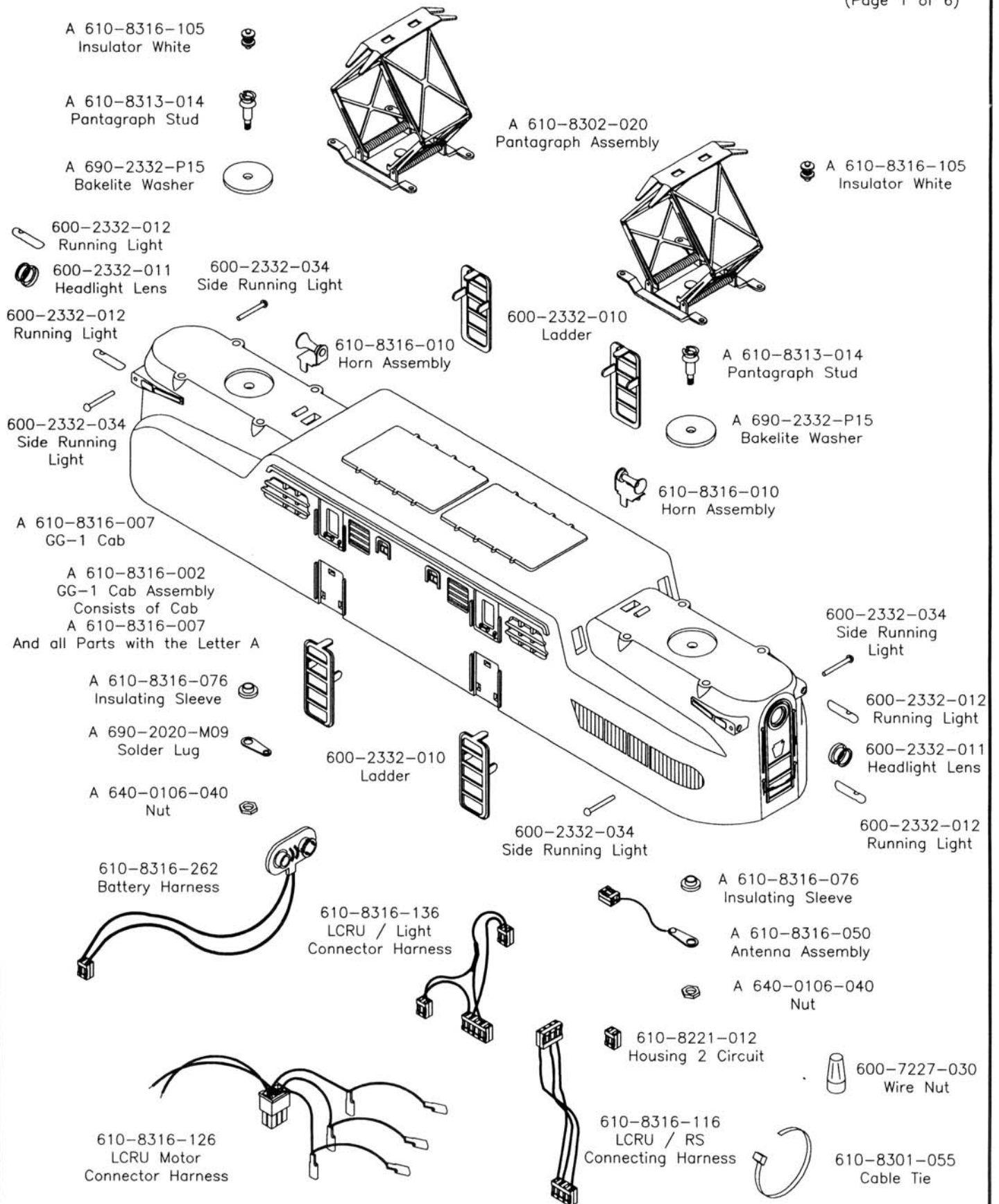
LIONEL SERVICE MANUAL

INDEX BY LETTER SUPPLEMENT 41

Description	Drawing
Diesel Locomotives Power Units	
GG1 Electric.	(B-81,2,3,4,5,6)
610-8316-001 Pennsylvania	
NW2 Diesel Switching Locomotive.....	(B-82,2,3,4,5)
601-8959-000 N.Y.C	
601-8582-000 Seaboard	
Phantom Locomotive.....	(B-83,2,3,4,5)
601-8860-000 Pratt's Hollow	
Rolling Stock	
Aquarium Car Command Controlled.....	(F-167,2)
601-9845-000 Lionel Lines	
Giraffe Car Command Controlled.....	(F-168,2)
601-9846-000 African Transport	
Bay Window Caboose W/Crewtalk.....	(F-169,2,3,4)
601-9742-000 Erie	
601-9749-000 Southern Pacific	

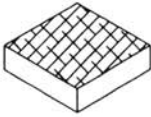
610-8316-001 GG-1 ELECTRIC LOCOMOTIVE

(Page 1 of 6)

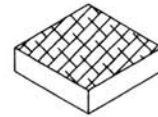


610-8316-001 GG-1 ELECTRIC LOCOMOTIVE

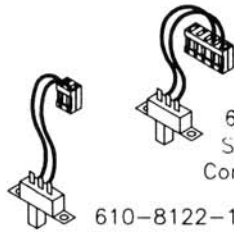
600-8265-518
Foam Pad



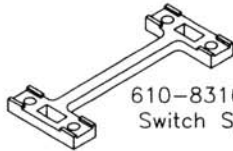
600-8265-518
Foam Pad



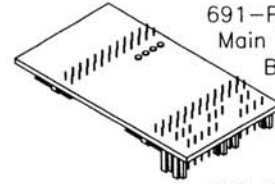
610-8316-117
Switch Lead and
Connector Assembly



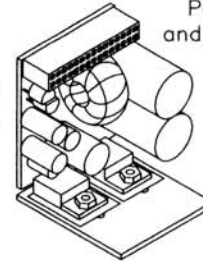
610-8122-136
Switch Lead and
Connector Assembly



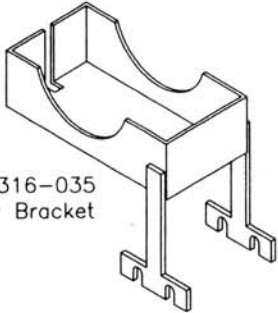
691-PCB1-02A
Main Terminal
Board



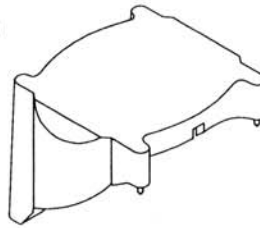
610-9845-256
Power Supply Board
and Heat Sink Assembly



610-8316-035
Battery Bracket

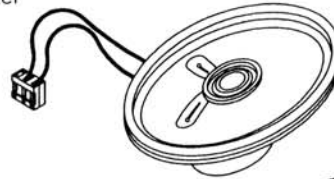


610-8316-425
Switch Spacer

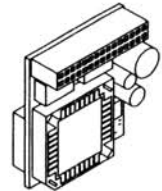


610-8316-185
Speaker Bracket
Top

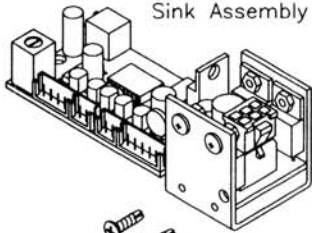
610-8316-536
Speaker



691-PCB1-028
Railsounds Circuit
Board GG-1



610-8316-256
LCRU Heat
Sink Assembly



600-0101-048
Screw



610-9749-136
Potentiometer Lead
Connection Assembly

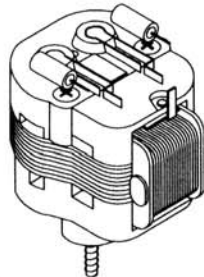


600-0101-048
Screw

610-8049-300
Lamp



610-8316-335
Rear Light Bracket

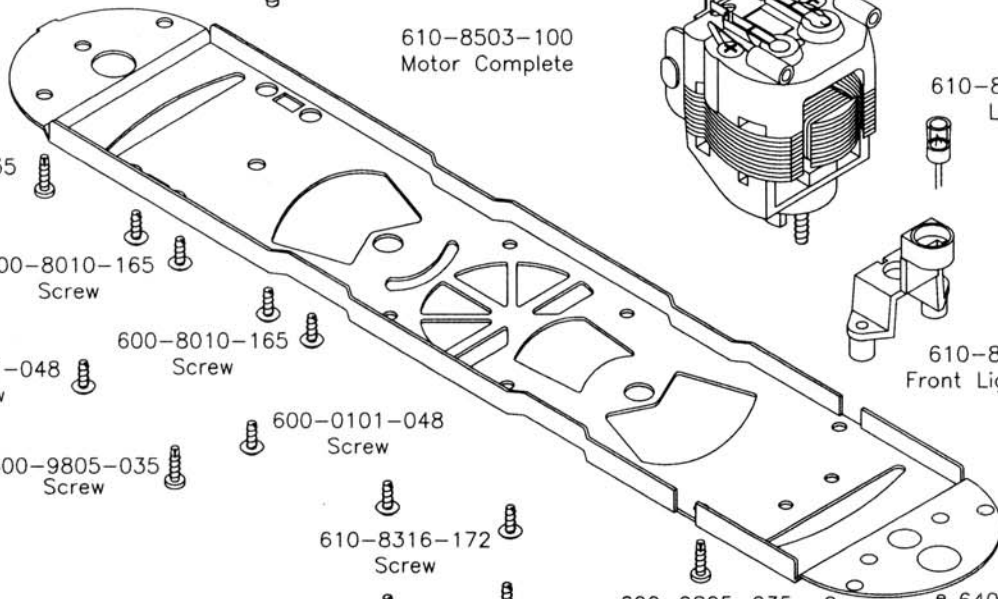


610-8316-195
Speaker Bracket
Bottom

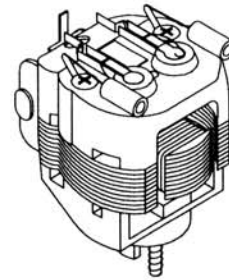
610-8007-170
Washer

610-8007-180
Hex Nut

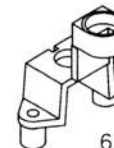
610-8316-111
GG-1 Frame



610-8503-100
Motor Complete



610-8049-300
Lamp



610-8316-235
Front Light Bracket

600-9805-035
Screw

600-8010-165
Screw

600-0101-048
Screw

600-8010-165
Screw

600-9805-035
Screw

600-0101-048
Screw

610-8316-172
Screw

600-9805-035
Screw

600-0101-048
Screw

640-8153-033
Screw

600-9805-035
Screw

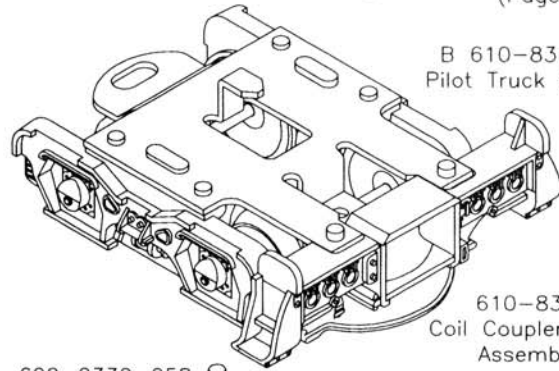
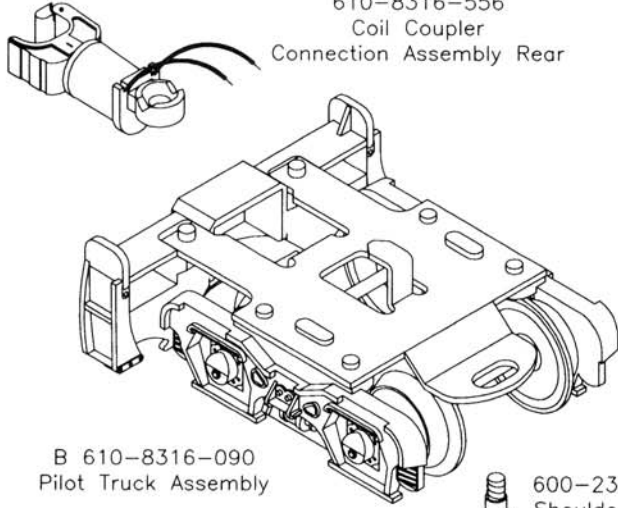
610-8316-001 GG-1 ELECTRIC LOCOMOTIVE

610-8316-255
Mounting Stud

610-8316-255
Mounting Stud

610-8316-556
Coil Coupler
Connection Assembly Rear

B 610-8316-090
Pilot Truck Assembly



610-8316-656
Coil Coupler Connection
Assembly Front

600-2330-058
Shoulder Screw



600-8240-071
Screw

B 610-8316-090
Pilot Truck Assembly

600-2330-058
Shoulder Screw

600-8240-071
Screw

*610-8316-025
Motor Truck
With Cherry
Switch

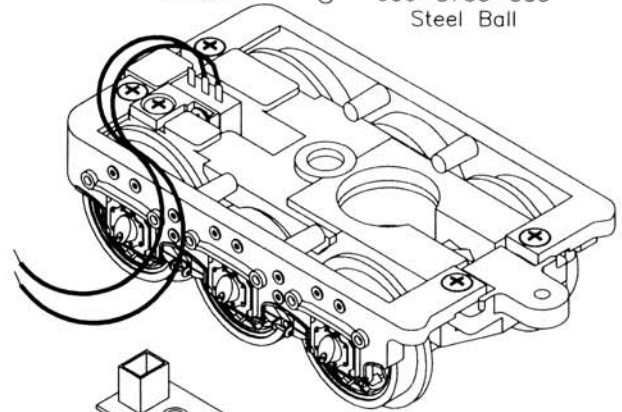
600-8753-345
Washer

600-8753-335
Steel Ball

F 610-8316-125
Motor Truck
Without Cherry
Switch

600-8753-345
Washer

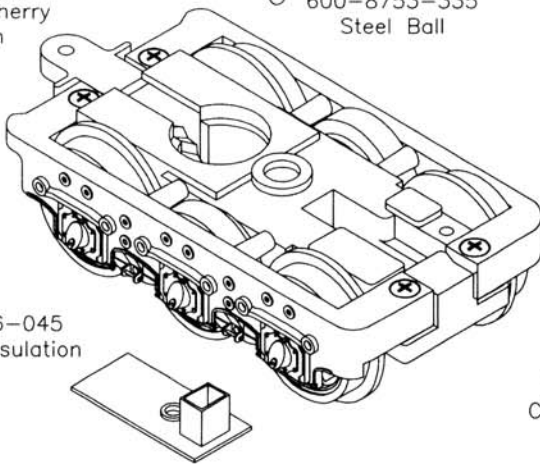
600-8753-335
Steel Ball



610-8316-045
Collector Insulation

610-8316-045
Collector Insulation

600-8753-325
Screw



C 610-8316-022
Collector Bracket

C 600-0671-107
Rivet

600-2333-042
Insulating Washer

C 600-0671-108
Collector Spring

C 610-8316-020
Collector Assembly
Consists of All Parts
With the Letter C

600-2333-042
Insulating Washer

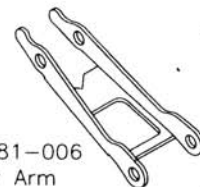
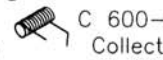
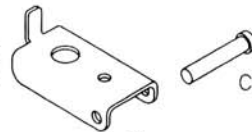
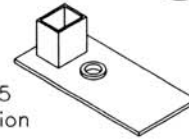
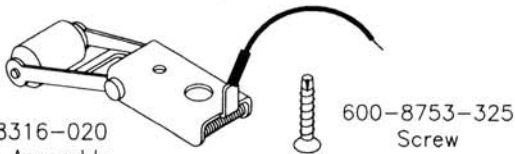
650-8400-550
Screw

C 600-0681-016
Collector Pin

650-8400-550
Screw

C 600-0681-006
Collector Arm

C 600-2330-018
Collector Roller



610-8316-001 GG-1 ELECTRIC LOCOMOTIVE

(Page 4 of 6)

B 610-8316-090
Pilot Truck Assembly
Consists of All Parts
With the Letter B

B 610-8316-057
Pilot Truck Frame

B 610-8303-080
Pilot Truck Side

B 610-8316-156
Wheel and Axle
Assembly

B 610-9027-150
Axle Bearing

B 610-8303-076
Pilot

B 610-9027-150
Axle Bearing

B 610-8316-156
Wheel and Axle
Assembly

B 610-8303-080
Pilot Truck Side

B 610-9027-150
Axle Bearing

D 610-8316-545
Plain Wheel Bearing and
Knurled Magnetic Axle
Assembly Consists of All
Parts With the Letter D

D 610-8316-042
Plain Wheel

*600-8306-637
Screw

F 610-8316-125
Motor Truck Without
Cherry Switch Consists
of All the Same Parts as
610-8316-025
Except For the Cherry Switch,
Cherry Switch Mounting
Bracket, and the Two Screws.
It Also Consists of All
Parts With the Letter F.

D 610-8316-184
Bearing

*600-2330-036
Center Wheel

*610-8303-036
Truck Side L.H.

F 610-8316-042
Plain Wheel

*600-0623-022
Worm Wheel

F 610-8316-184
Bearing

*600-0622-184
Self Lube Bearing

*610-8316-027
Motor Truck Frame

D 610-8316-184
Bearing

D 610-2353-029
Magntraction
Knurled Axle

*600-0622-184
Self Lube Bearing

*600-0622-028
Dowel Pin

F 610-8316-184
Bearing

*610-8316-032
Flanged Gear
Wheel

*600-2330-038
Pinion Gear

E 610-8316-550
Center Gear Wheel
and Axle Assembly
Consists of All Parts
With the Letter E

*600-8306-637
Screw

E 600-2330-028
Plain Axle

F 610-2353-030
Magntraction
Plain Axle

F 610-8316-540
Plain Wheel and
Magnetic Axle Assembly
Consists of All Parts
With the Letter F

E 610-8316-036
Center Gear Wheel

*610-8316-032
Flanged Gear
Wheel

*600-8306-637
Screw

*610-8303-035
Truck Side R.H.

610-8316-001 GG-1 ELECTRIC LOCOMOTIVE

(Page 5 of 6)

*610-8316-025
Motor Truck Assembly
With Cherry Switch
Consists of All
Parts With *

D 610-8316-545
Plain Wheel Bearing and
Knurled Magnetic Axle
Assembly Consists of All
Parts With the Letter D

*600-8306-637
Screw

*610-8303-035
Truck Side R.H.

*610-8316-032
Flanged Gear Wheel

D 610-2353-029
Magntraction
Knurled Axle

E 610-8316-036
Center Gear Wheel

*600-8306-637
Screw

*610-8316-165
Mounting Bracket

*610-8221-146
Cherry Switch Lead and
Connection Assembly

*600-2330-038
Pinion Gear

E 600-2330-028
Plain Axle

*640-8251-033
Screw

*600-0622-028
Dowel Pin

D 610-8316-184
Bearing

*610-8316-032
Flanged Gear
Wheel

*610-8316-225
Cam Double Lobe

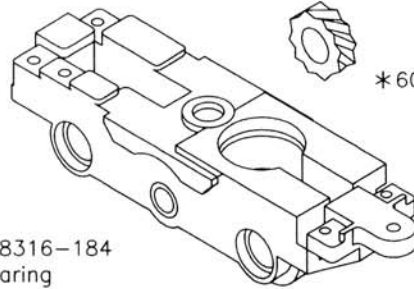
*600-0622-184
Self Lube Bearing

*600-2330-038
Pinion Gear

D 610-2353-029
Magntraction
Knurled Axle

*600-0622-028
Dowel Pin

*600-0623-022
Worm Wheel



*610-8316-027
Motor Truck Frame

D 610-8316-184
Bearing

D 610-8316-042
Plain Wheel

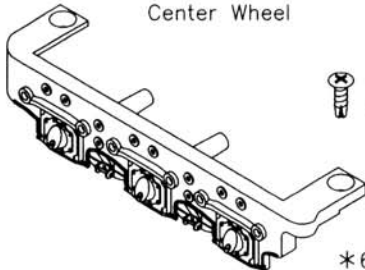
*600-0622-184
Self Lube Bearing

*600-8306-637
Screw

D 610-8316-184
Bearing

*600-2330-036
Center Wheel

D 610-8316-042
Plain Wheel

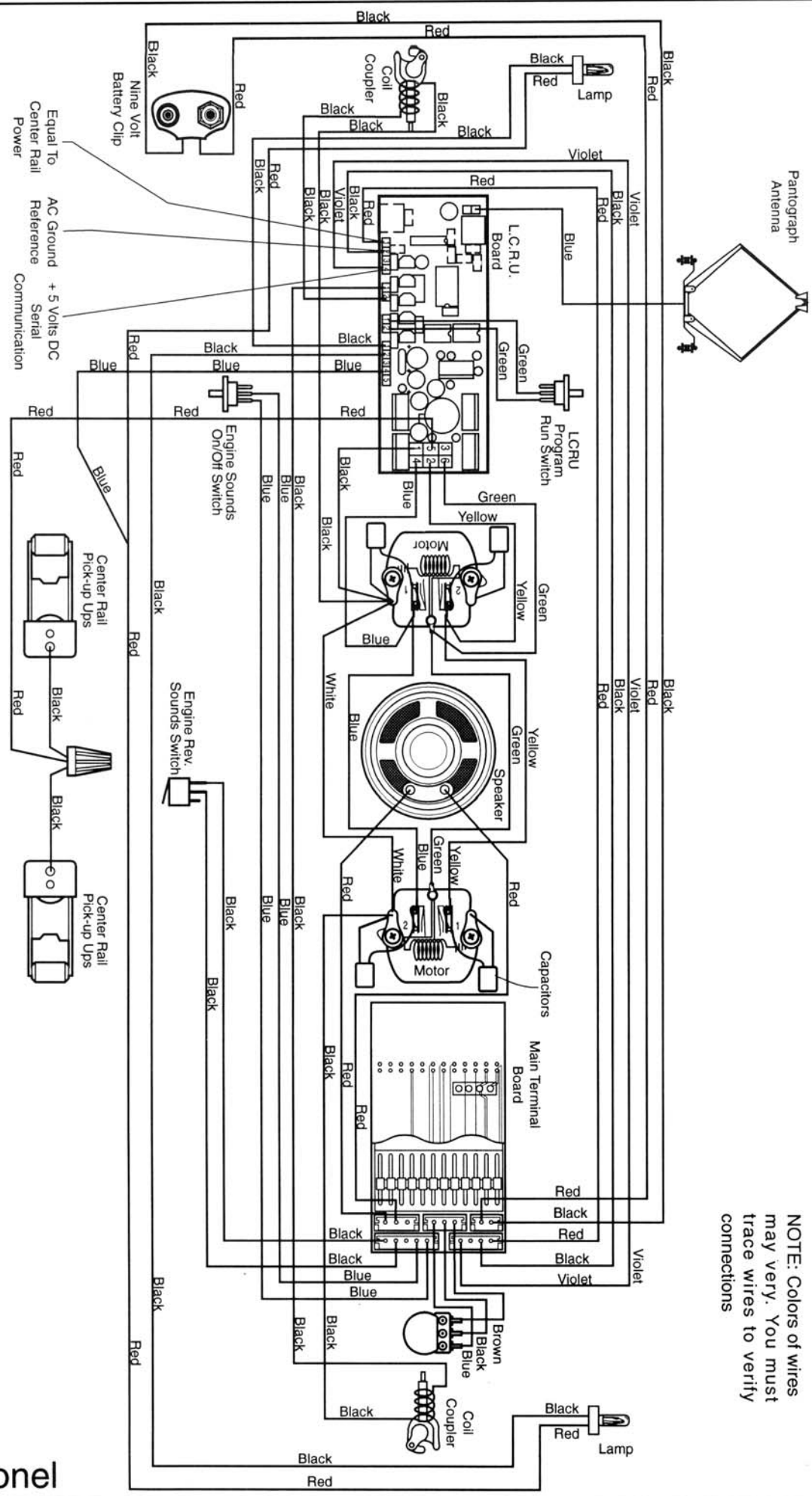


*600-8306-637
Screw

*610-8303-036
Truck Side L.H.

E 610-8316-550
Center Gear Wheel
and Axle Assembly
Consists of All Parts
With the Letter E

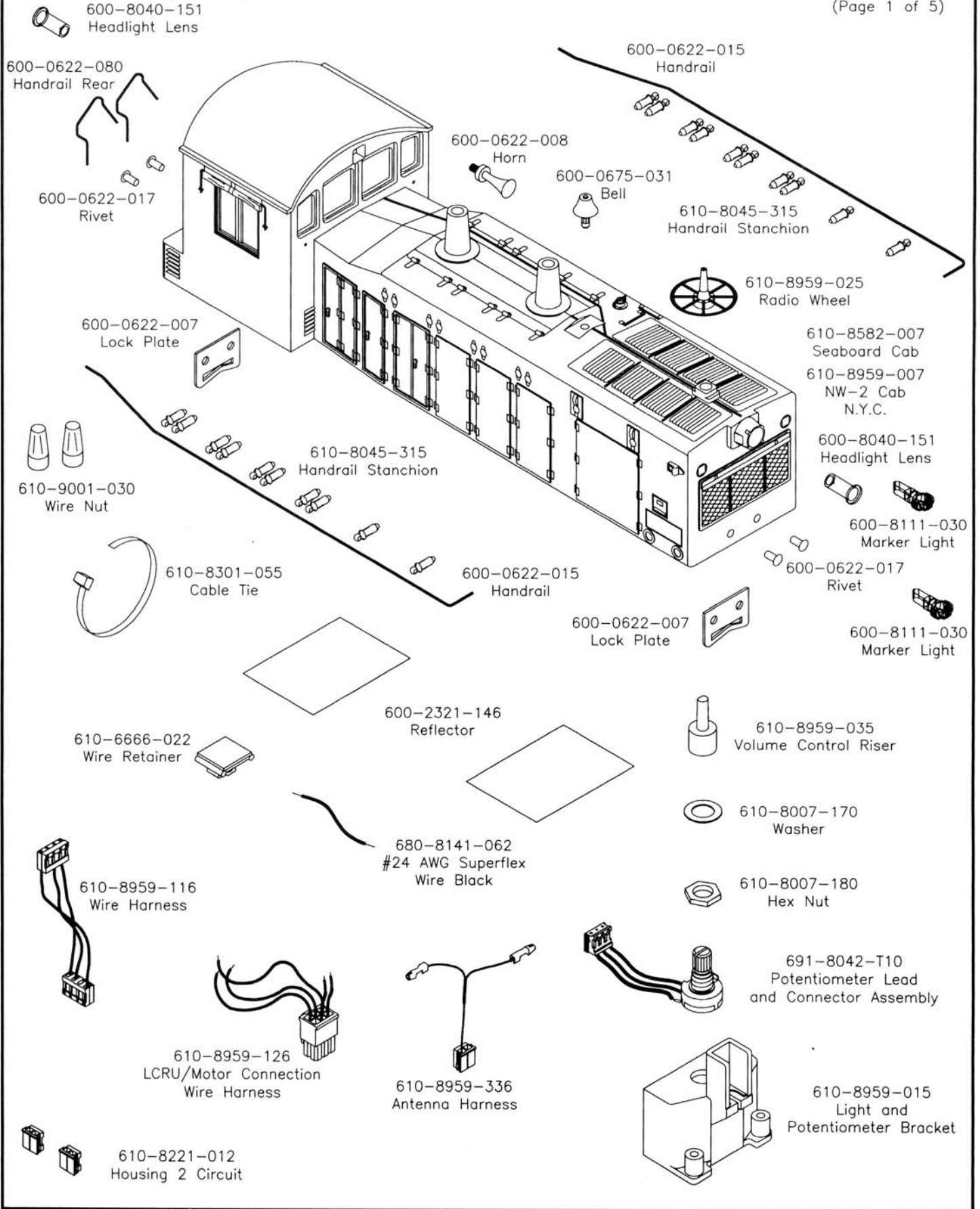
610-8316-001 PENNSYLVANIA GG-1 ELECTRIC LOCOMOTIVE PICTORIAL WIRING DIAGRAM



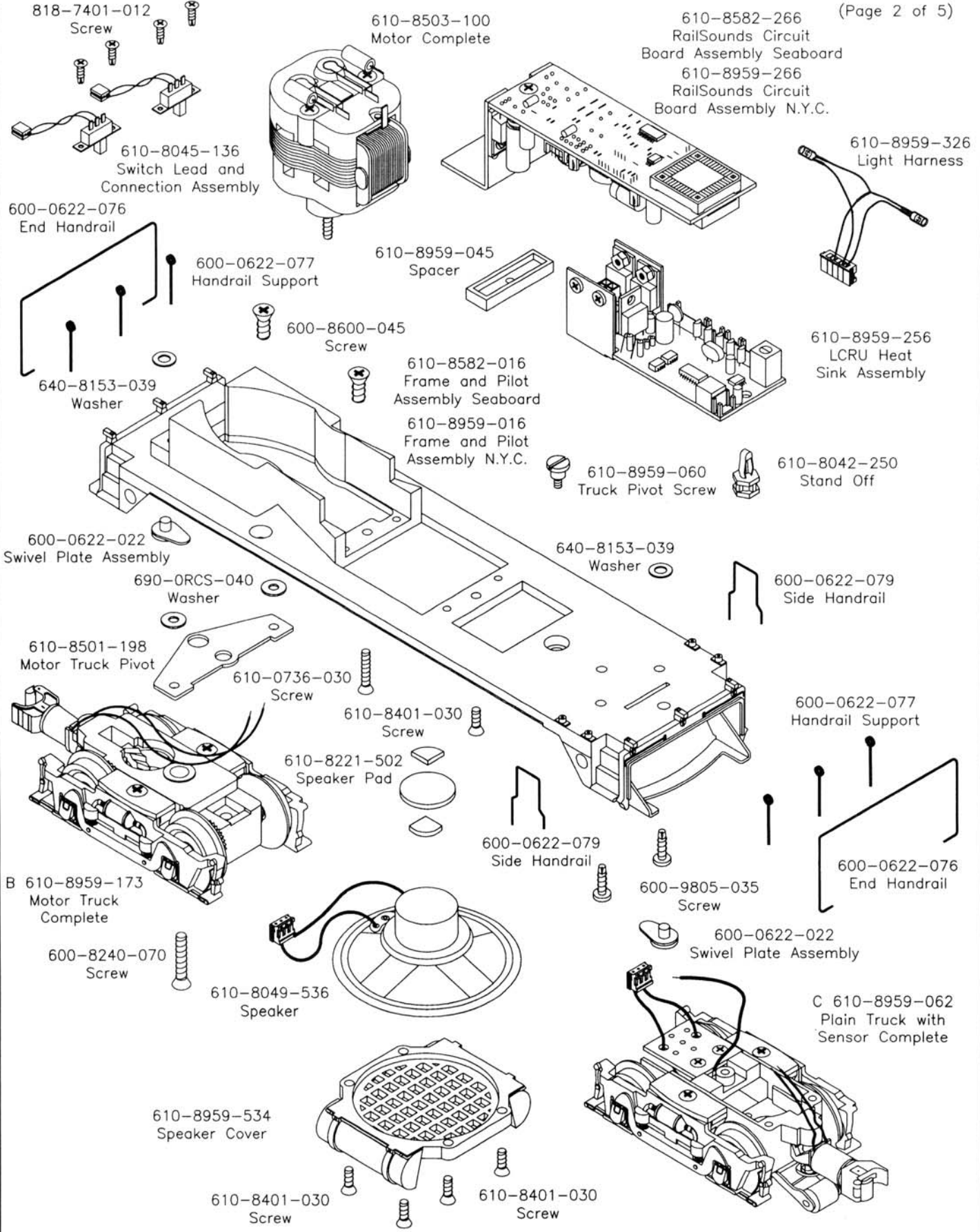
NOTE: Colors of wires may vary. You must trace wires to verify connections



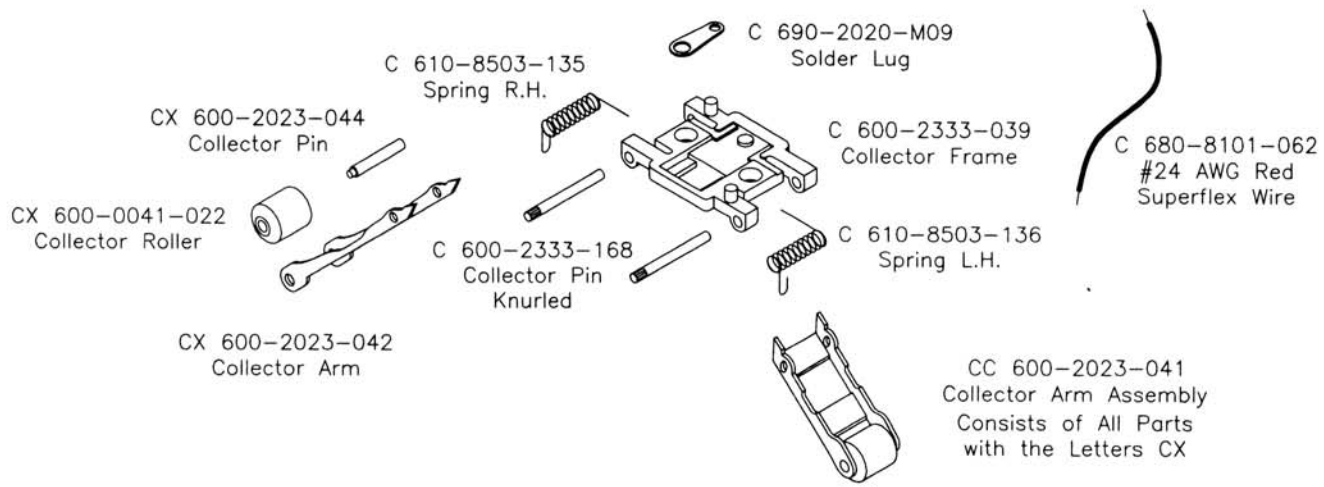
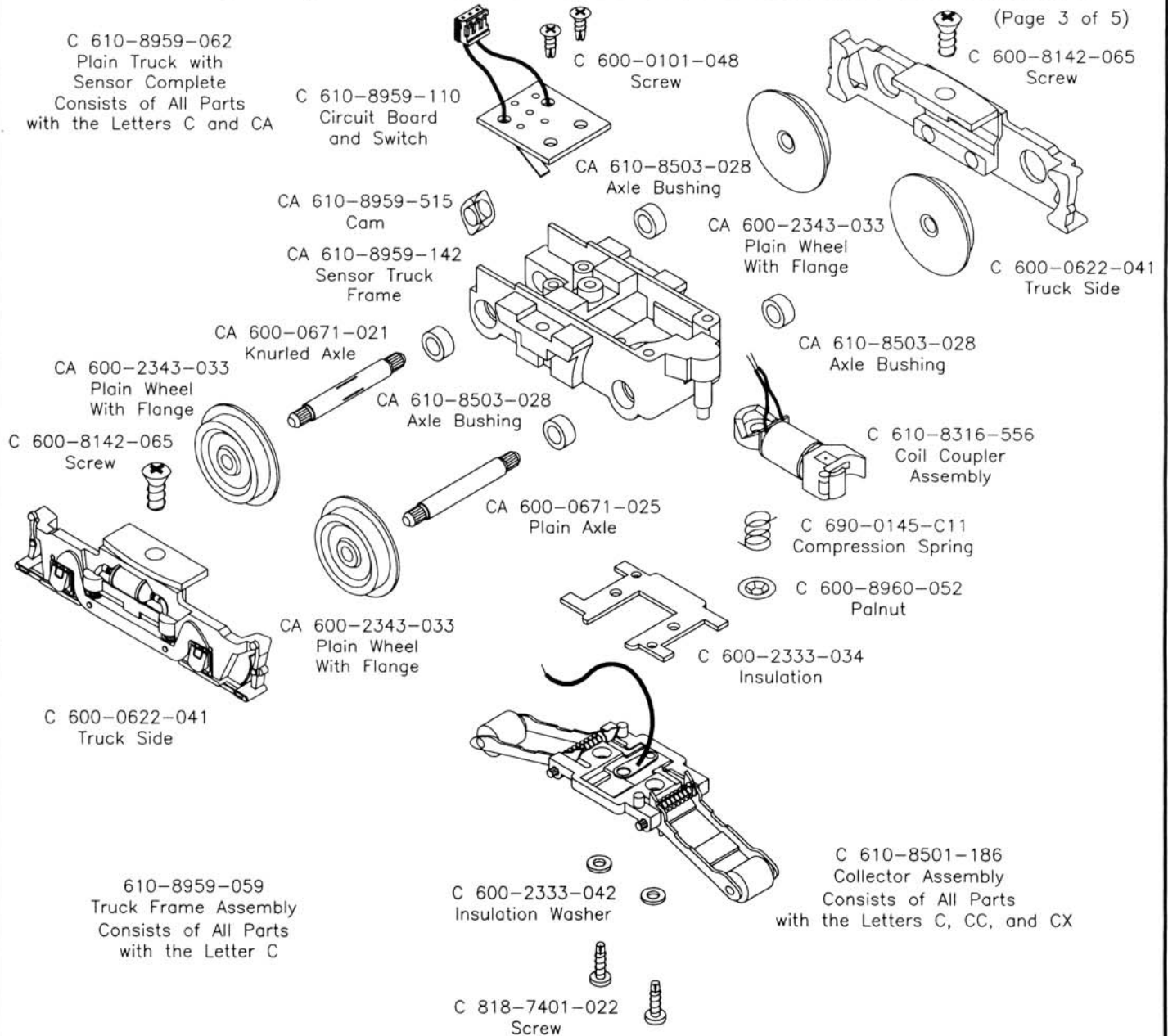
6-18959 (622) N.Y.C. NW2 DIESEL SWITCHING LOCOMOTIVE
 6-18582 (6250) SEABOARD NW2 DIESEL SWITCHING LOCOMOTIVE



6-18959 (622) N.Y.C. NW2 DIESEL SWITCHING LOCOMOTIVE
 6-18582 (6250) SEABOARD NW2 DIESEL SWITCHING LOCOMOTIVE



6-18959 (622) N.Y.C. NW2 DIESEL SWITCHING LOCOMOTIVE
 6-18582 (6250) SEABOARD NW2 DIESEL SWITCHING LOCOMOTIVE



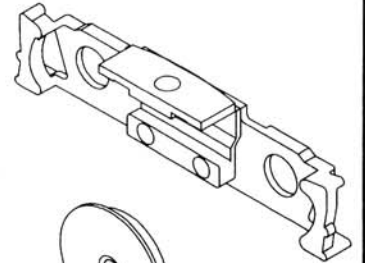
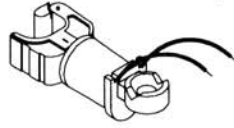
6-18959 (622) N.Y.C. NW2 DIESEL SWITCHING LOCOMOTIVE
 6-18582 (6250) SEABOARD NW2 DIESEL SWITCHING LOCOMOTIVE

B 610-8959-173
 Motor Truck
 Complete Consists of
 All Parts with the Letters
 B, BA, BBA, and BXA

B 600-8142-065
 Screw

B 610-8316-556
 Coil Coupler
 Assembly

B 600-0622-041
 Truck Side
 Plain Wheel Side



B 690-0145-C11
 Compression Spring



BA 600-2343-033
 Plain Wheel

BA 600-8950-020
 Self Lube Bearing



B 600-8960-052
 Palnut



BA 600-0623-022
 Worm Wheel

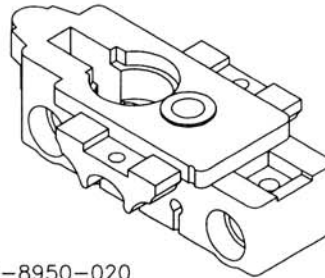


BA 600-2343-033
 Plain Wheel

BA 600-8950-020
 Self Lube Bearing



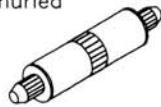
BXA 600-8950-060
 Geared Wheel and Knurled
 Axle Assembly Consists of All
 Parts with the Letters BXA



BA 610-8503-009
 Motor Truck Frame

BXA 600-8950-020
 Self Lube Bearing

BXA 610-2353-029
 Magnetic Axle
 Assembly Knurled



BA 610-8501-028
 Dowel Pin

BXA 600-8950-035
 Geared Drive Wheel



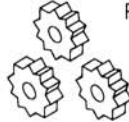
BA 600-8950-020
 Self Lube Bearing



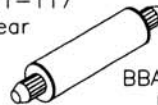
B 600-8142-065
 Screw



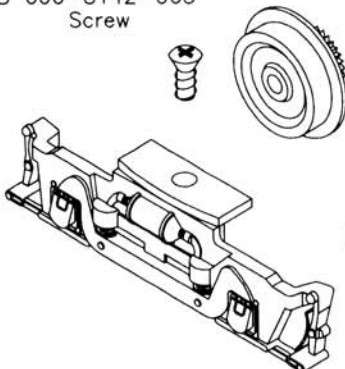
BA 610-8501-117
 Pinion Gear



BBA 610-2353-030
 Plain Magnetic
 Axle Assembly



600-0622-173
 Motor Truck Frame
 Assembly Consists of All
 Parts with the Letter A Added

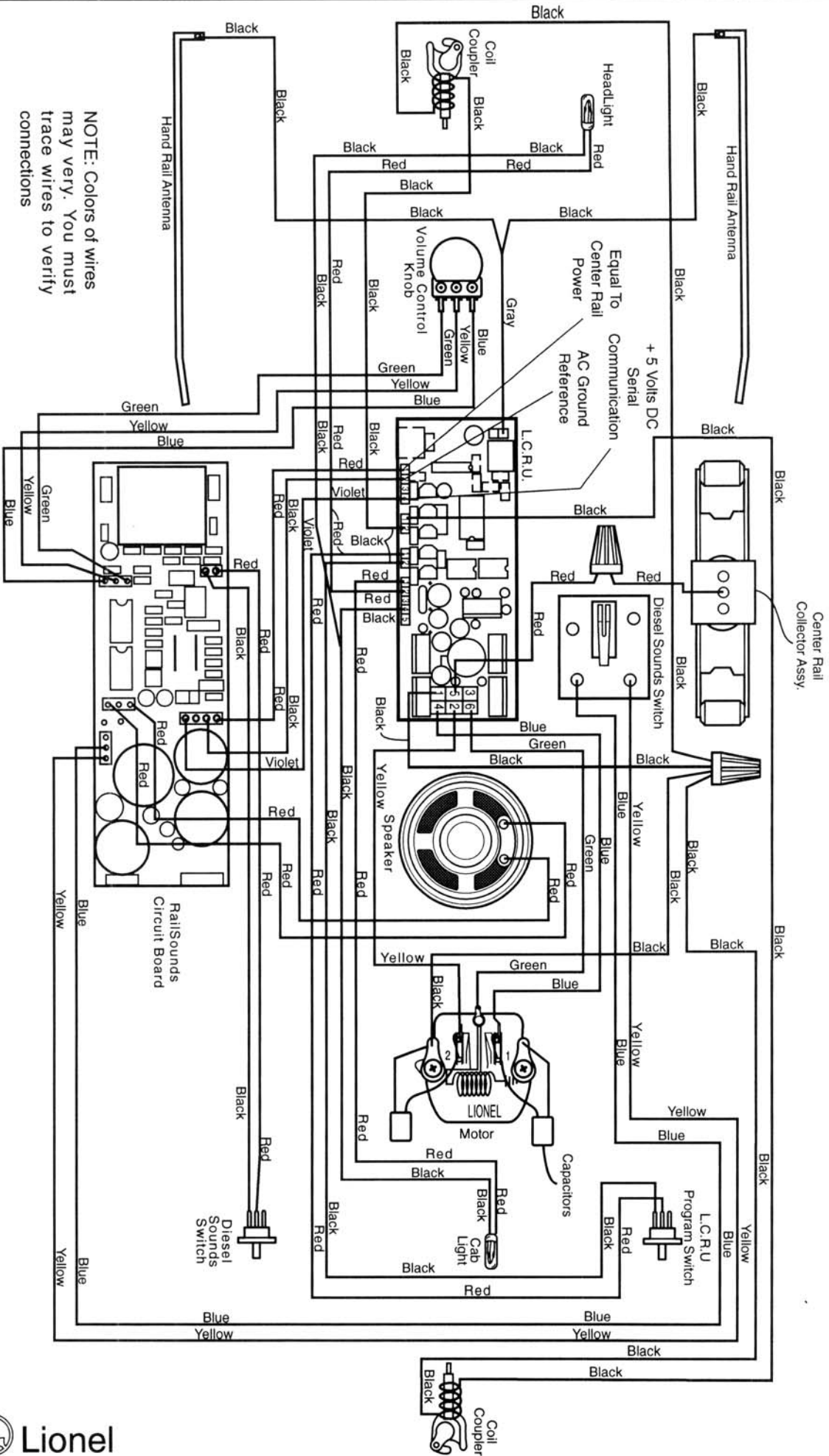


BBA 600-8950-035
 Geared Drive Wheel

B 610-8959-085
 Truck Side
 Gear Wheel Side

BBA 600-8950-064
 Geared Wheel and Axle
 Assembly Consists of All
 Parts with the Letters BBA

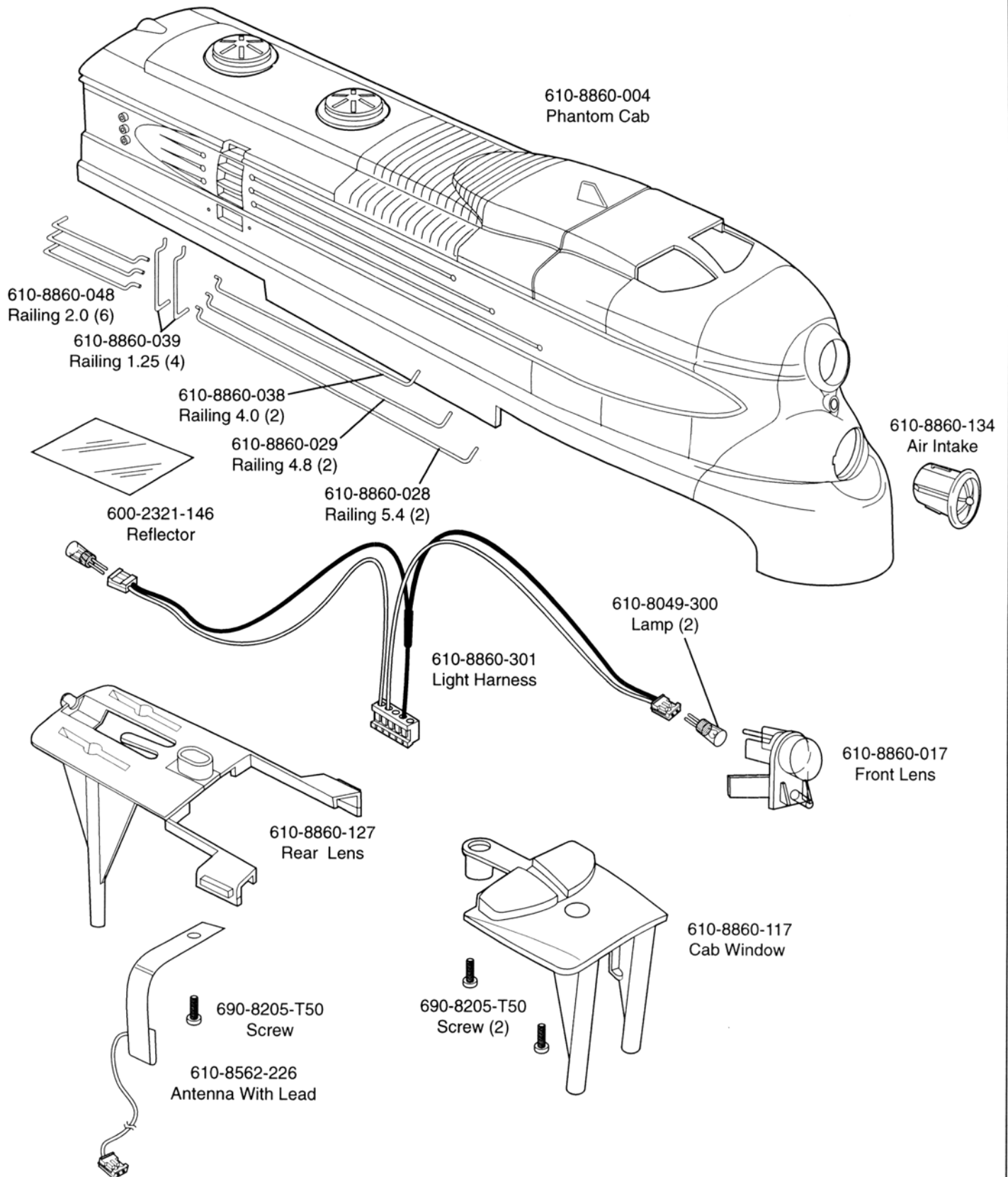
6-18959 (622) N.Y.C. NW2 DIESEL SWITCHING LOCOMOTIVE
 6-18582(6250) SEABOARD NW-2 DIESEL SWITCHING LOCOMOTIVE
 PICTORIAL WIRING DIAGRAM



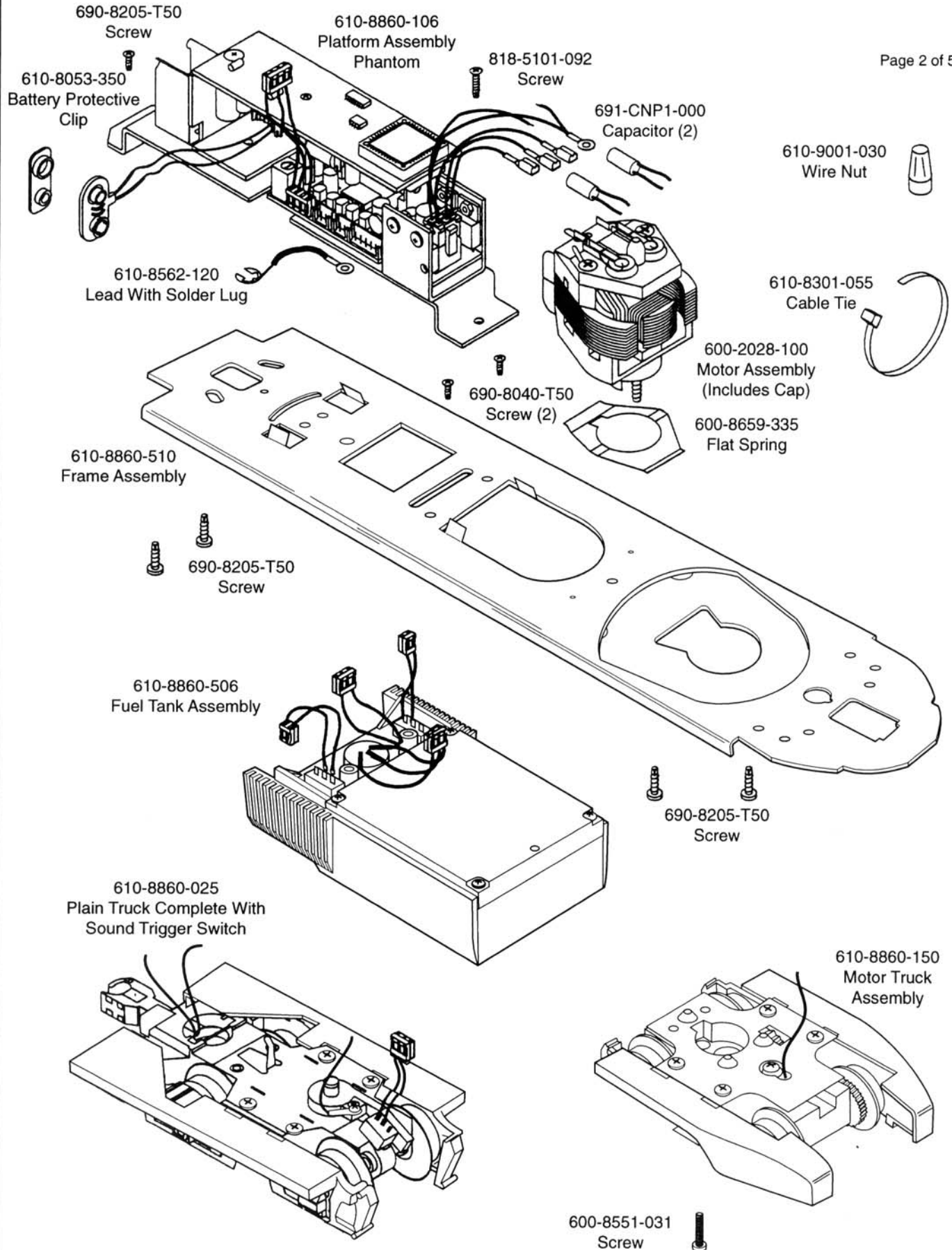
NOTE: Colors of wires may vary. You must trace wires to verify connections



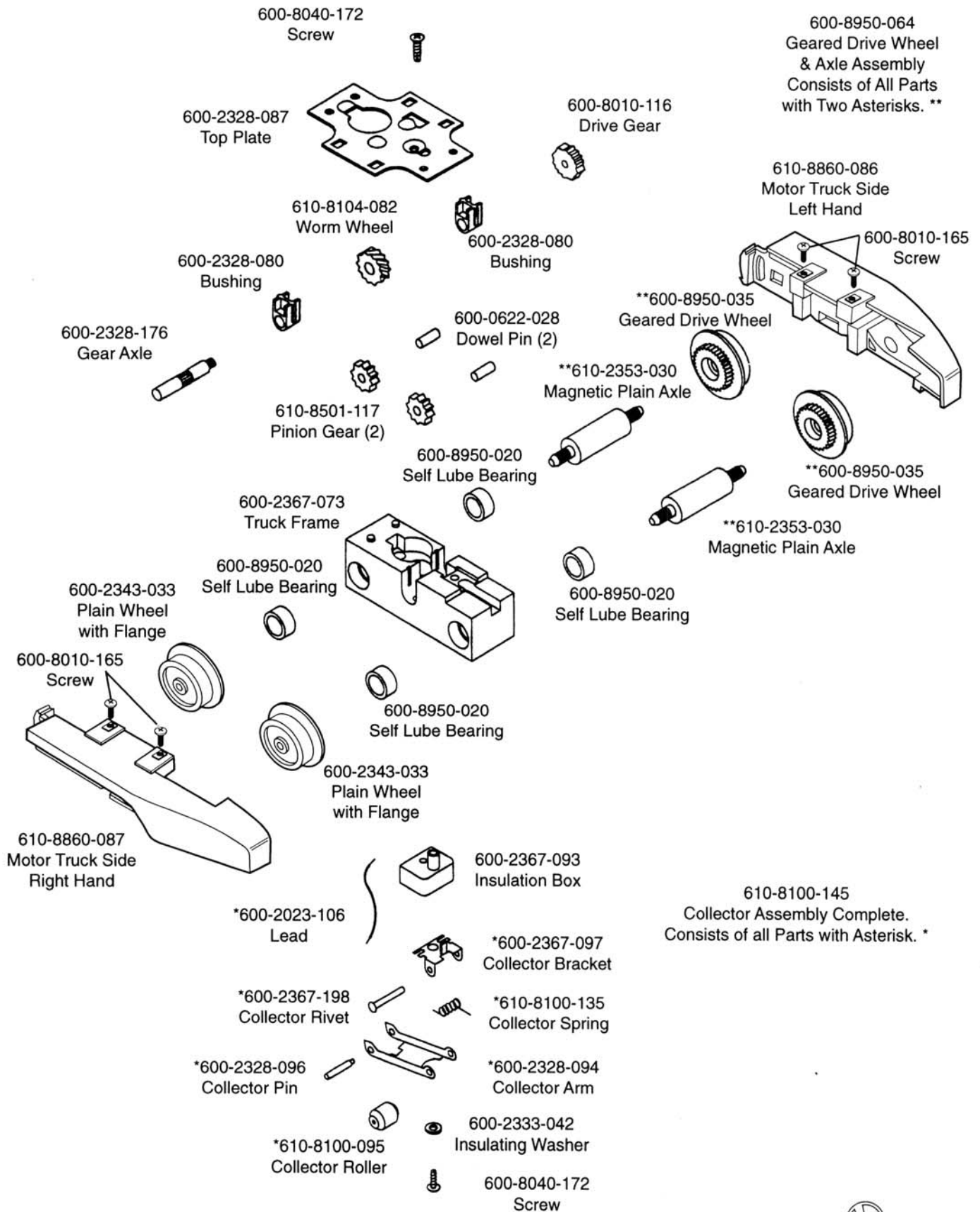
601-8860-000 PHANTOM LOCOMOTIVE



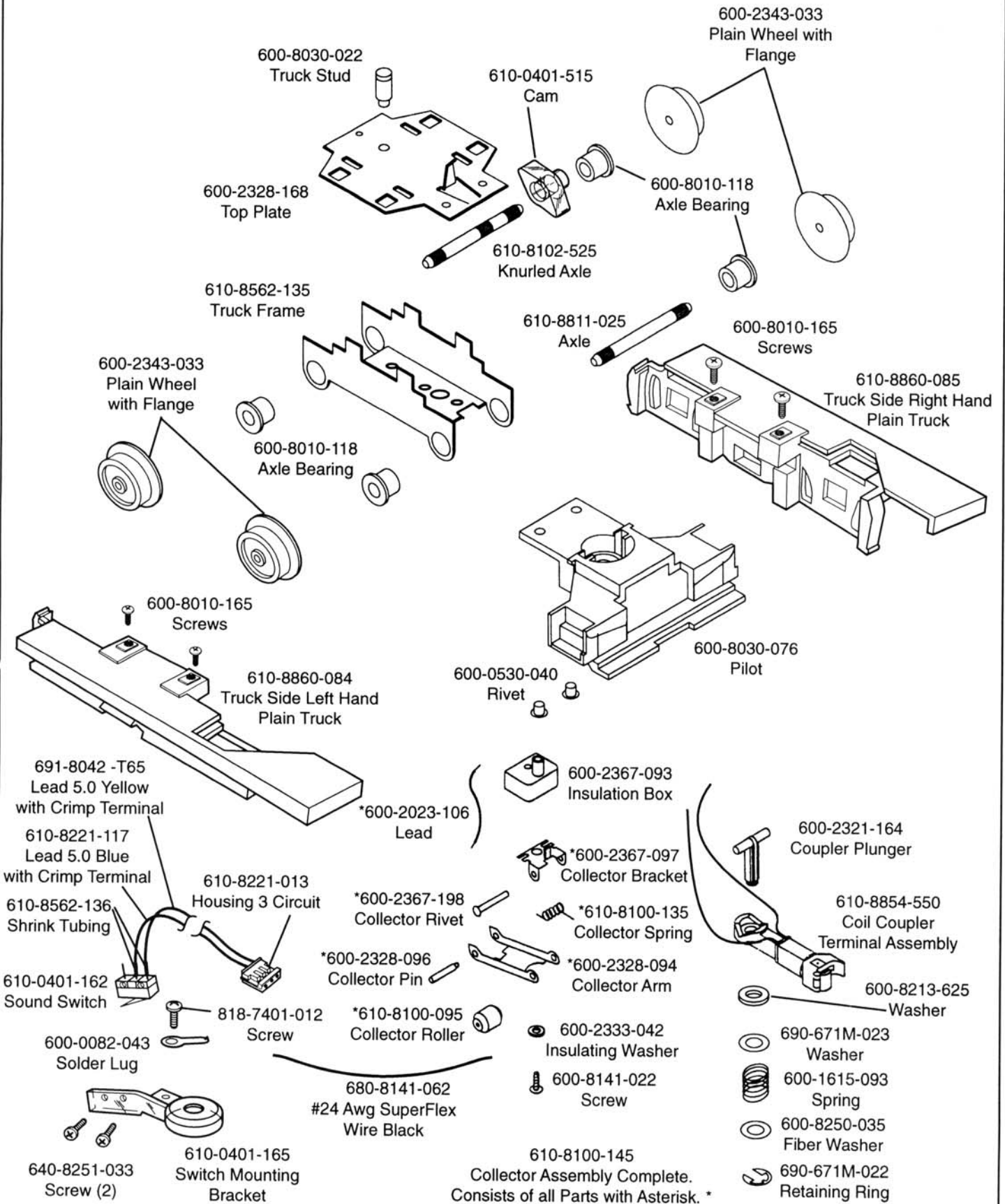
601-8860-000 PHANTOM LOCOMOTIVE



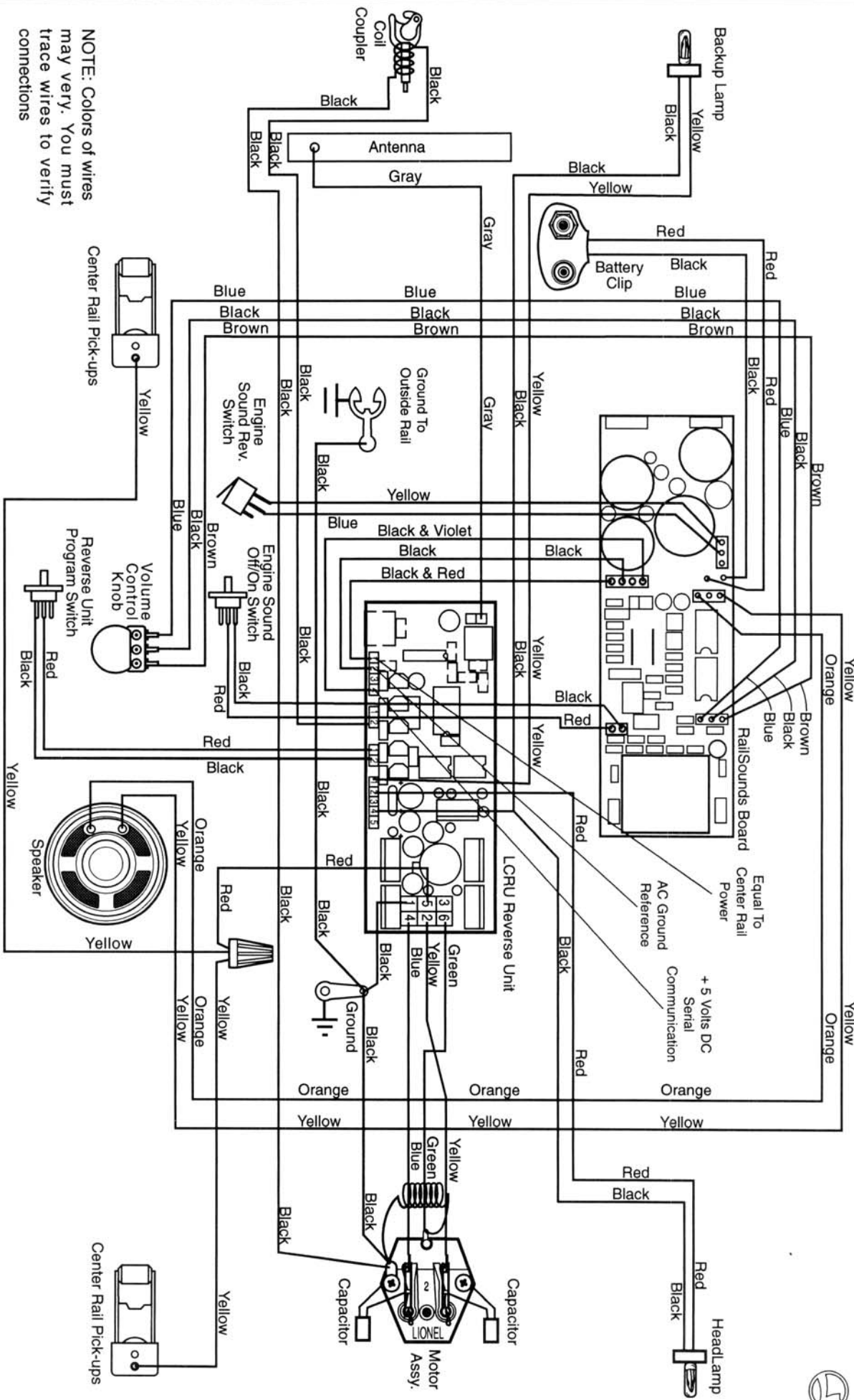
610-8860-150 PHANTOM MOTOR TRUCK ASSEMBLY BREAKDOWN



610-8860-025 PHANTOM PLAIN TRUCK ASSEMBLY BREAKDOWN

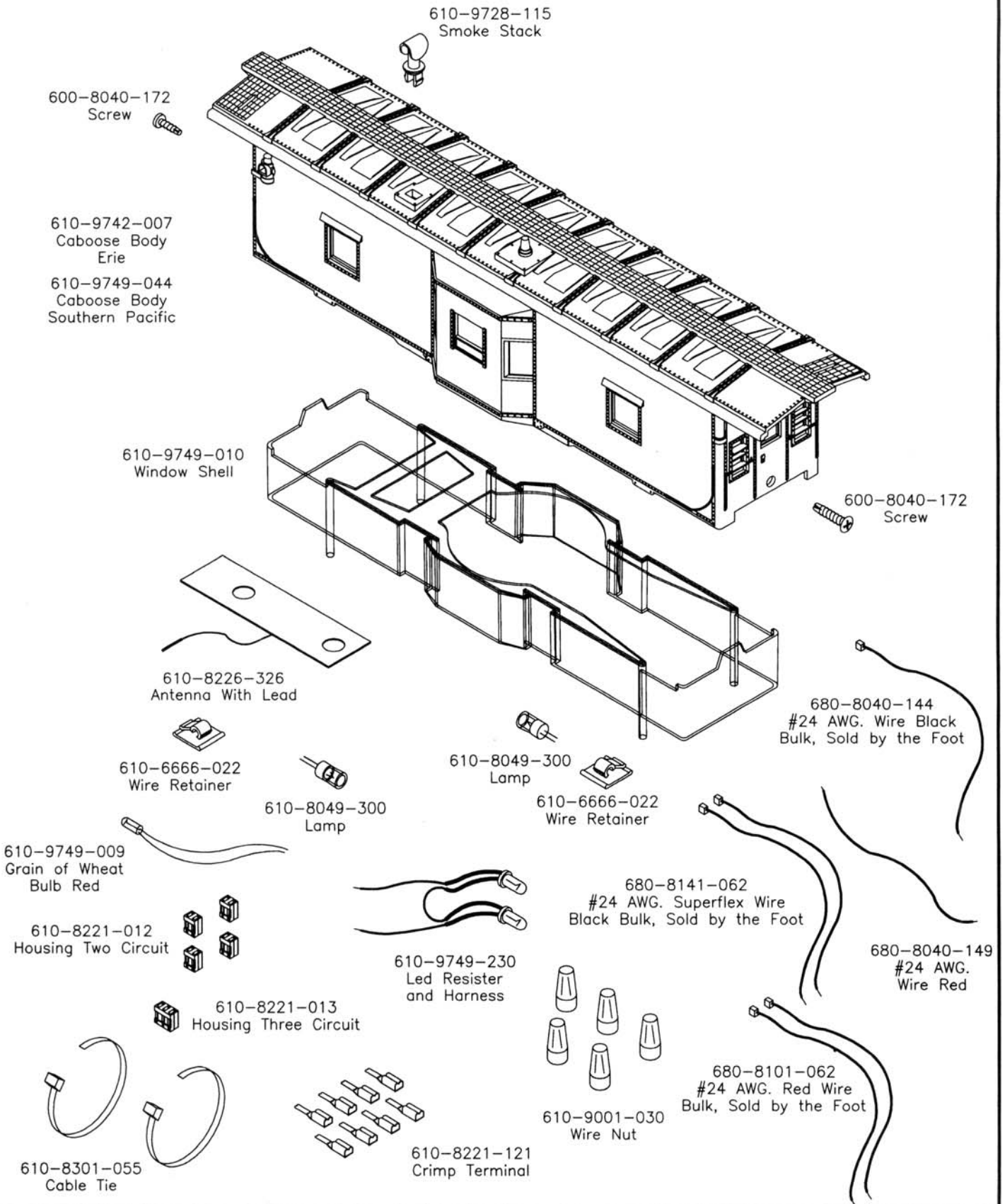


601-8860-000 THE PHANTOM LOCOMOTIVE PICTORIAL WIRING DIAGRAM

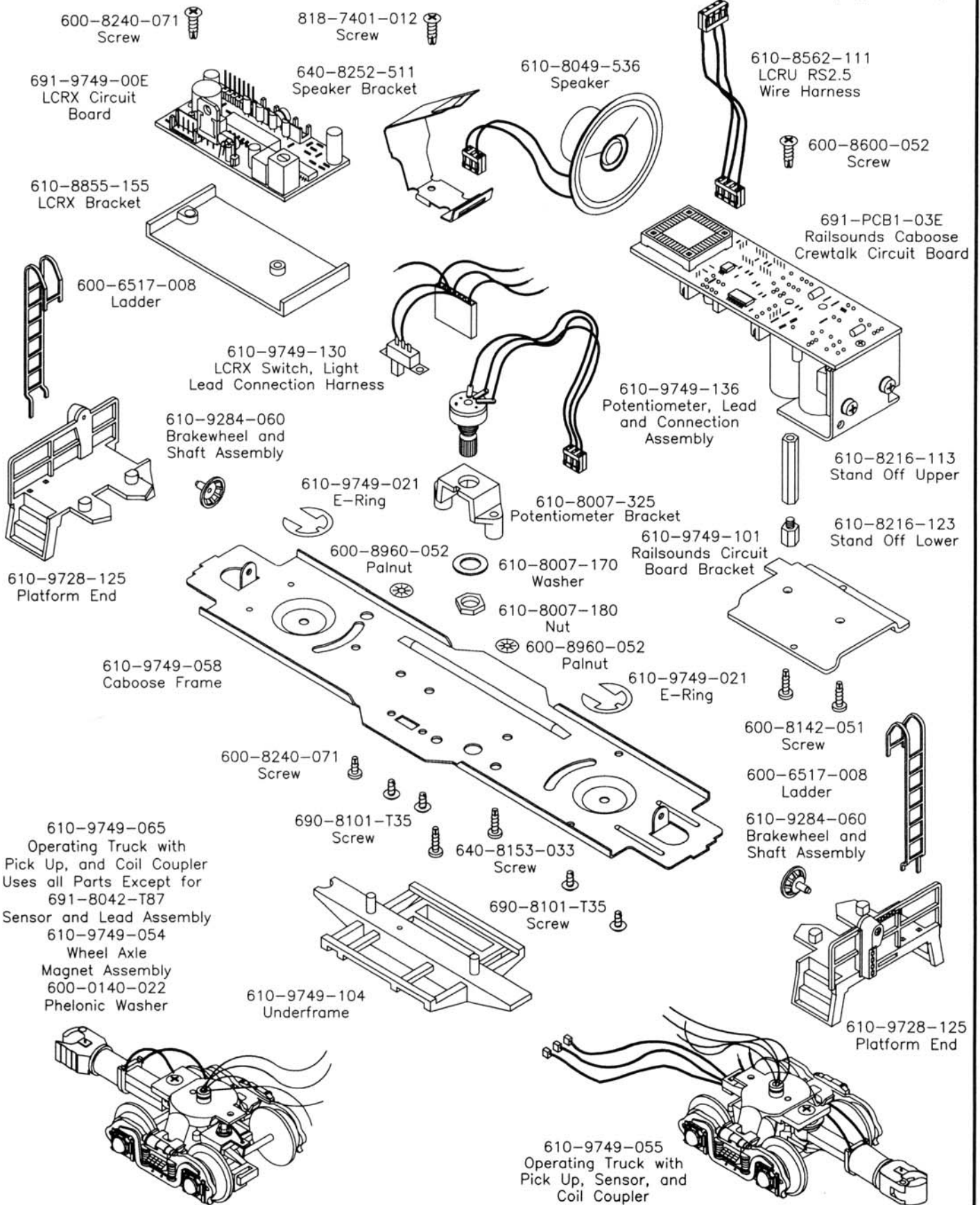


NOTE: Colors of wires may vary. You must trace wires to verify connections

601-9742-000 ERIE BAY WINDOW CABOOSE
 601-9749-000 SOUTHERN PACIFIC BAY WINDOW CABOOSE
 WITH CREW TALK AND COIL COUPLERS (Page 1 of 4)



601-9742-000 ERIE BAY WINDOW CABOOSE
 601-9749-000 SOUTHERN PACIFIC BAY WINDOW CABOOSE
 WITH CREW TALK AND COIL COUPLERS

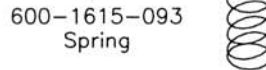
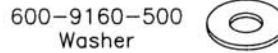
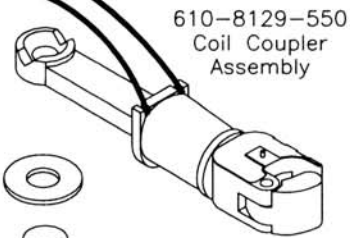
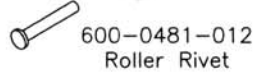
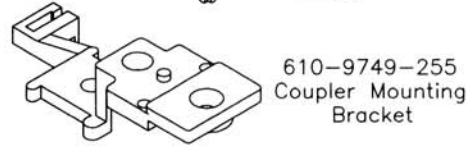
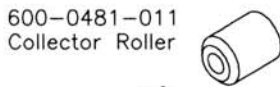
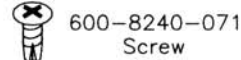
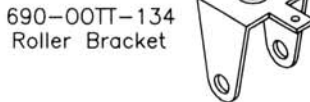
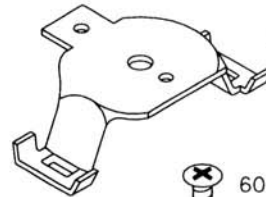
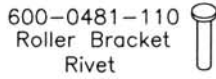


610-9749-055 OPERATING TRUCK WITH PICK UP, SENSOR AND COIL COUPLER



680-8142-062
#24 AWG. Superflex
Wire Black, Bulk
Sold by the Foot

680-2763-144
#24 AWG. Wire Black
with White Tracer
Sold by the Foot



610-9749-056
Truck Frame Assembly
Consists of All Parts
With *

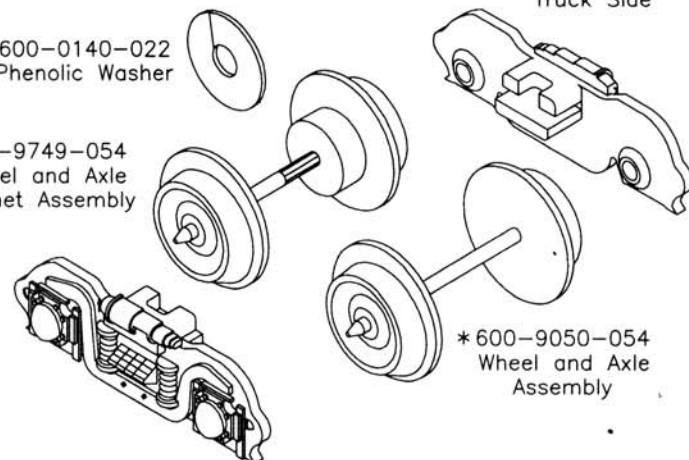


*600-0487-003
Truck Side

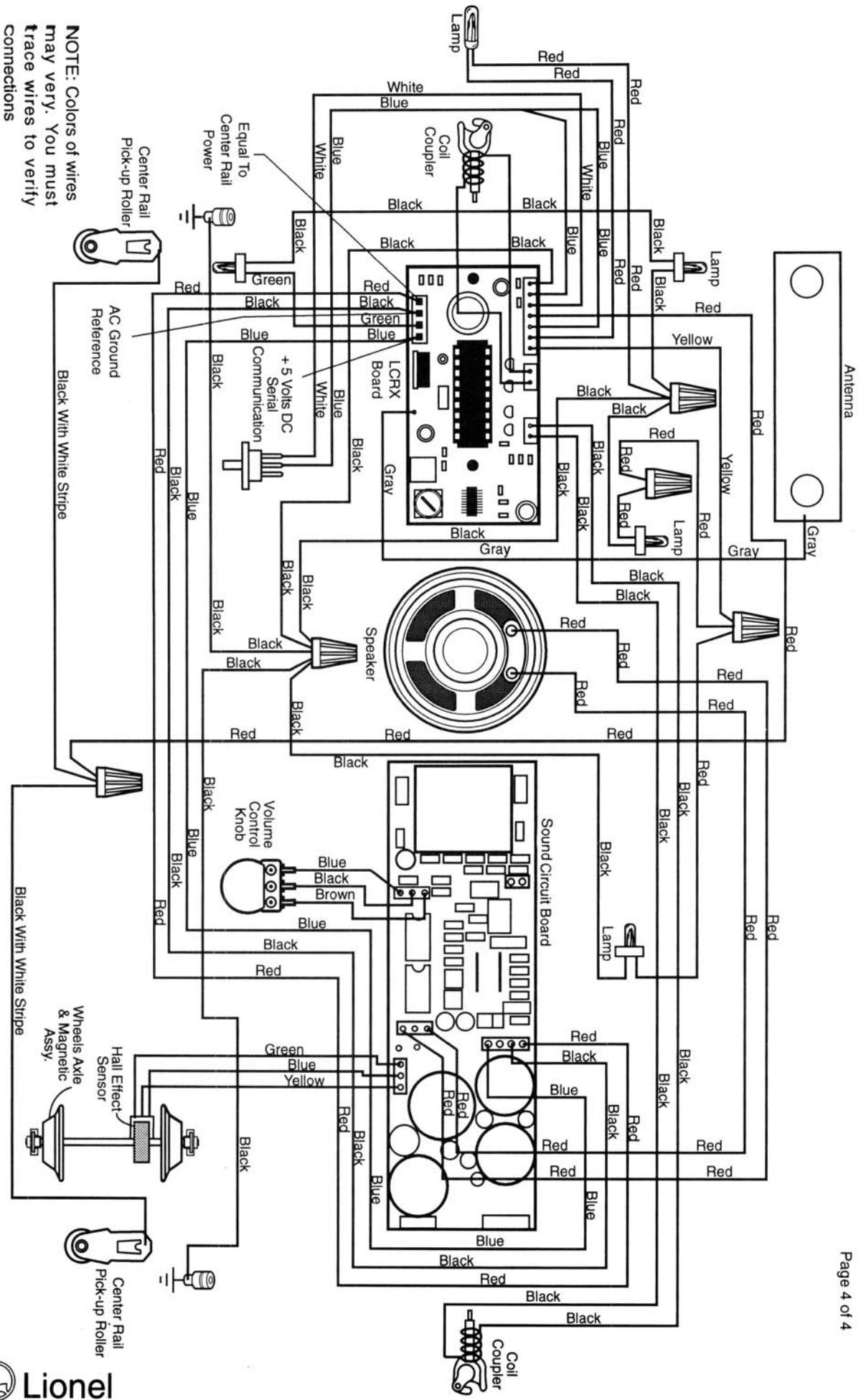
600-0140-022
Phenolic Washer

*610-9749-054
Wheel and Axle
Magnet Assembly

*600-0487-003
Truck Side



601-9742-000 ERIE BAY WINDOW CABOOSE WITH CREW TALK & COIL COUPLERS
 601-9749-000 SOUTHERN PACIFIC BAY WINDOW CABOOSE WITH CREW TALK & COIL COUPLERS
 PICTORIAL WIRING DIAGRAM



NOTE: Colors of wires may vary. You must trace wires to verify connections



6-19845 COMMAND CONTROL AQUARIUM CAR

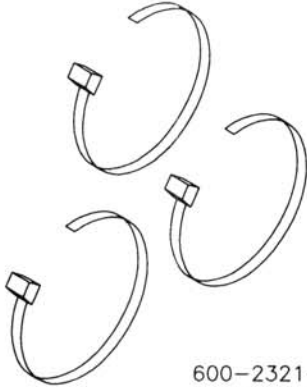
(Page 1 of 2)

610-9284-060
Brake Wheel and
Shaft Assembly

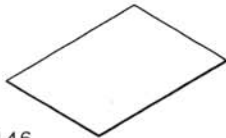


610-9845-007
Aquarium Car Body

610-8301-055
Cable Tie



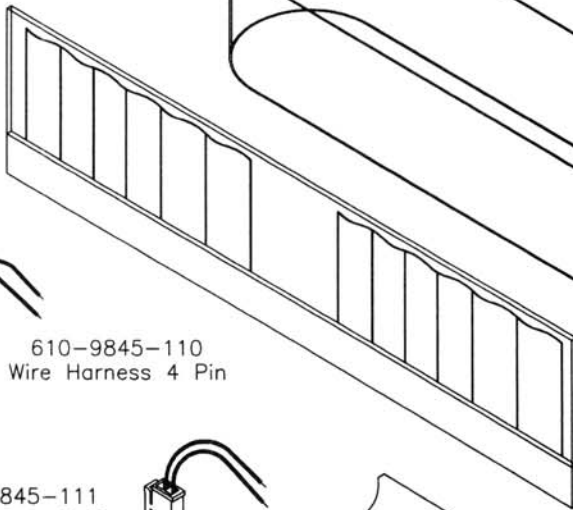
600-2321-146
Reflector



600-9700-025
Screw



610-9845-034
Window Panel Wavy



610-9845-034
Window Panel Wavy



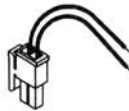
610-9845-110
Wire Harness 4 Pin

610-9845-105
Belt Aquarium Car



610-8221-013
Housing Three Circuit

610-9845-111
Wire Harness 2 Pin



610-8221-012
Housing Two Circuit



610-9845-017
Housing Seven Circuit



691-8042-T11
Lead 7.0 with Crimp
Terminal Blue



691-8042-T87
Sensor Lead and
Terminal Assembly



691-8042-T12
Lead 7.0 with Crimp
Terminal Yellow



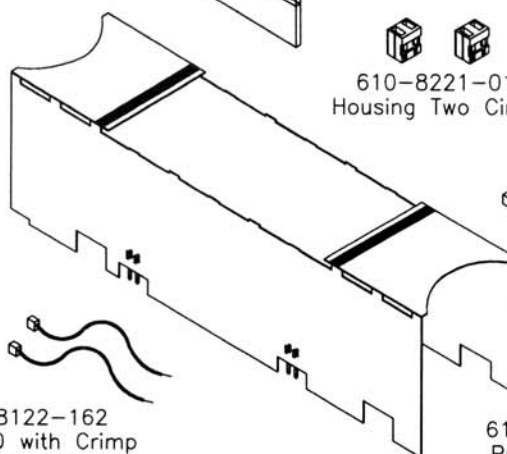
610-8221-119
Lead 5.0 with Crimp
Terminal Brown



610-8122-162
Lead 6.0 with Crimp
Terminal Black



610-9845-010
Printed Screen
Aquarium Car



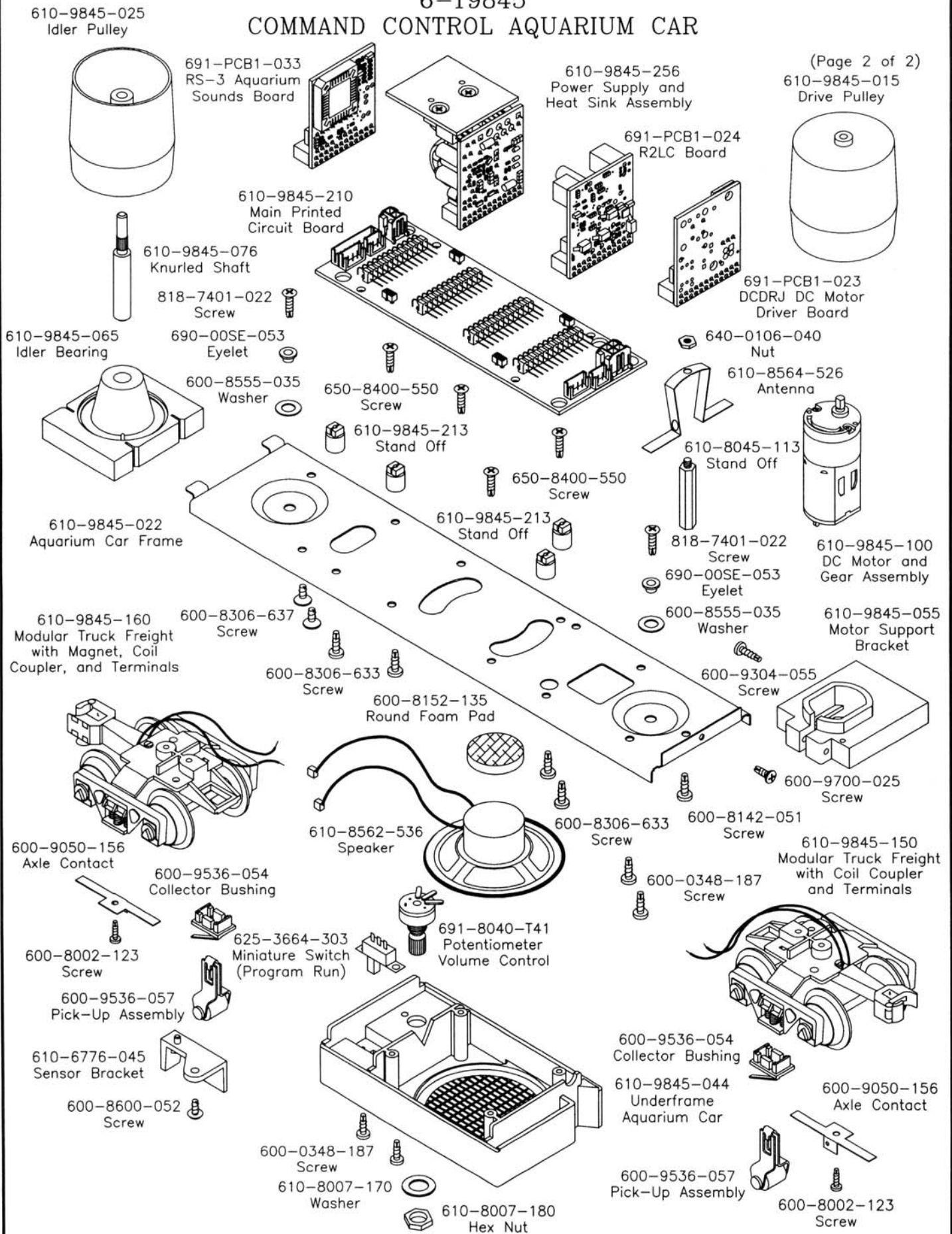
691-8042-T13
Lead 7.0 with Crimp
Terminal Green



6-19845

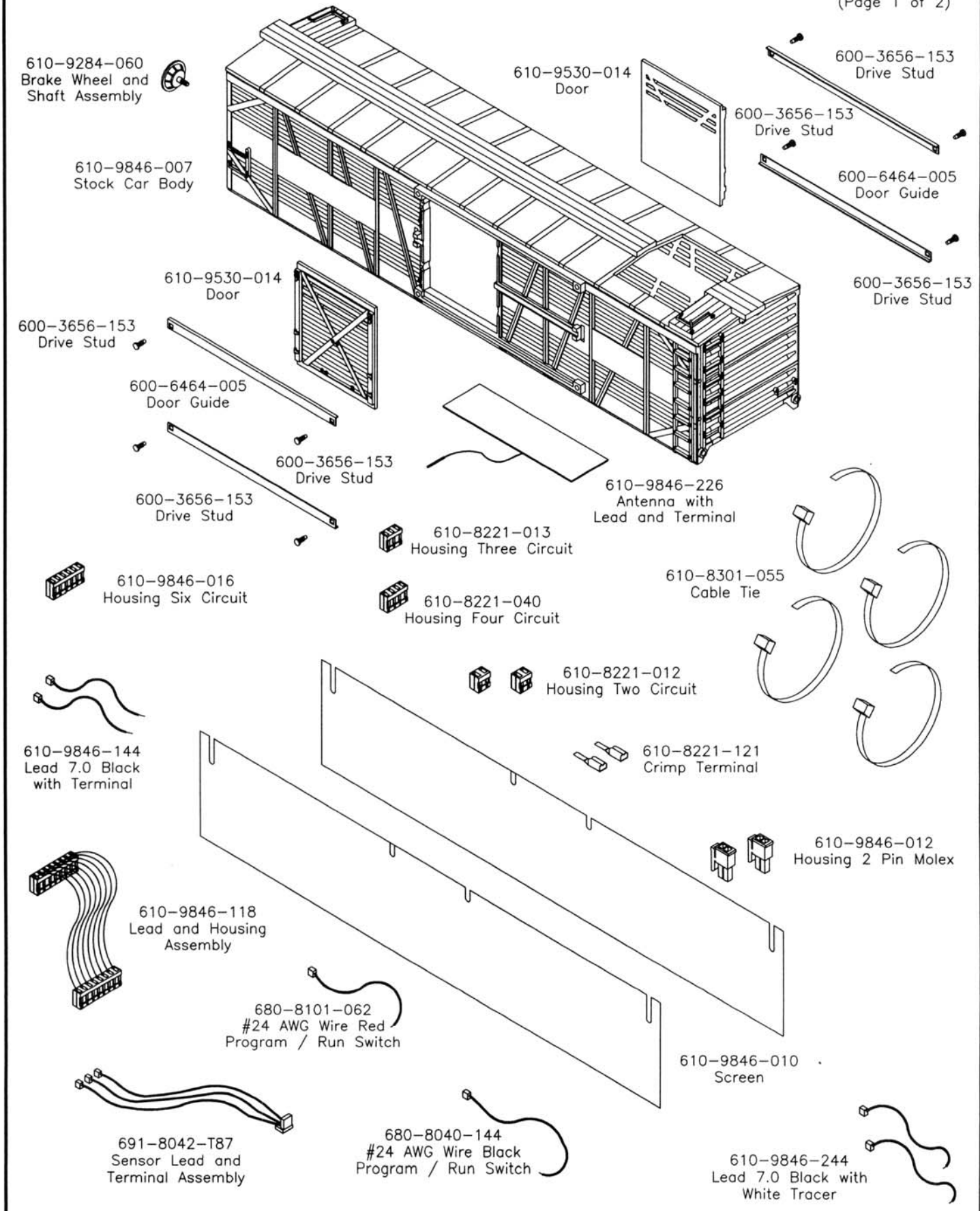
COMMAND CONTROL AQUARIUM CAR

(Page 2 of 2)



6-19846 COMMAND CONTROL ANIMATED GIRAFFE CAR

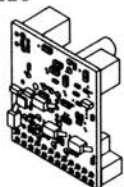
(Page 1 of 2)



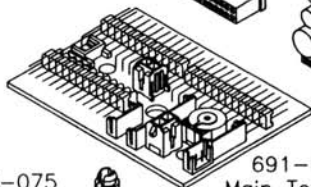
6-19846 COMMAND CONTROL ANIMATED GIRAFFE CAR

(Page 2 of 2)

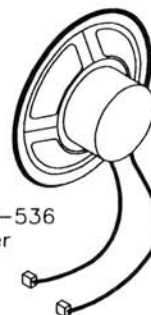
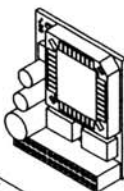
691-PCB1-024
Command Control
Board R2LC



610-9845-256
Power Supply and
Heat Sink Assembly



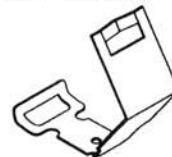
691-PCB1-02F
Railsounds Board
Rev. 3



610-9846-536
Speaker

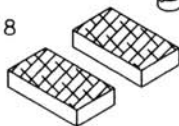
600-8010-035
Screw

640-8252-511
Speaker Bracket



610-9846-075
Stand Off
(2 Included with Board)

600-8265-518
Foam Pad

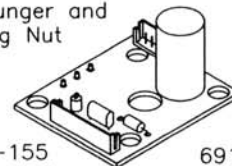


691-PCB1-030
Main Terminal Board



610-9846-150
Solenoid with Terminals
Includes Plunger and
Mounting Nut

610-9738-055
Washer



600-3376-018
Weight

818-7401-022
Screw

690-00SE-053
Eyelet

600-9700-025
Screw

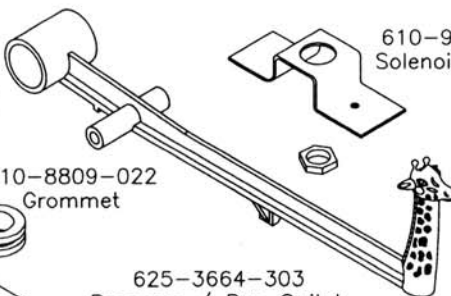
610-8809-022
Grommet

625-3664-303
Program / Run Switch

610-9846-155
Solenoid Bracket

691-PCB1-046
Circuit Board
Animal

610-9846-075
Stand Off
(Included with Board)



610-6603-107
Giraffe Head

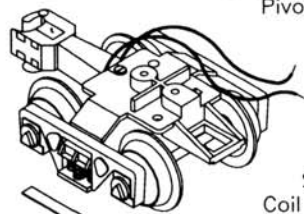
610-8809-022
Grommet

600-9570-107
Washer

610-6651-015
Pivot Pin

818-7401-022
Screw

690-00SE-053
Eyelet



610-9845-160
Sensor Truck with
Coil Coupler and Magnet

600-8600-052
Screw

600-8600-052
Screw

600-8600-052
Screw

600-8600-052
Screw

600-8600-052
Screw

610-9846-100
Frame

600-9050-156
Axle Contact

600-9536-054
Collector Bushing

600-3376-013
Lever

610-6629-012
E-Ring

600-0101-089
Compression Ring

600-9570-107
Washer

610-9845-150
Plain Truck with
Coil Coupler

600-8002-123
Screw

600-9536-057
Pick-Up Assembly

600-3376-016
Tension Spring

610-6629-050
Pinion Shaft

600-0101-089
Compression Ring

600-9536-054
Collector Bushing

600-9050-156
Axle Contact



610-6776-045
Sensor Bracket

600-8600-052
Screw

610-6629-012
E-Ring

600-9536-057
Pick-Up Assembly



600-8002-123
Screw