



\$10.00
#610-0045-001
ISSUED 06-2002

LIONEL

PARTS LIST AND PICTORIAL DIAGRAMS SUPPLEMENT 45

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

CONTENTS

DIESEL ENGINE

COMMAND

H-12-44 SWITCHER

6-18847 SANTA FE
6-18848 PENNSYLVANIA
6-18876 CHICAGO & NORTHWESTERN

C420

6-18588 DELAWARE & HUDSON
6-18589 LEHIGH VALLEY

6-28505 MONON
6-28507 NEW HAVEN

CONVENTIONAL

C420

6-18591 DELAWARE & HUDSON
6-18592 LEHIGH VALLEY
6-28506 MONON
6-28508 NEW HAVEN
6-18590 NICKEL PLATE ROAD
6-28516 J.C.PENNEY LH & HUDSON VALLEY
6-28515 SERVICE STATION

STEAM LOCOMOTIVES

COMMAND

HARRIMAN CONSOLIDATION 2-8-0

6-28036 SOUTHERN PACIFIC
6-28038 UNION PACIFIC

CONVENTIONAL

6-28037 SOUTHERN PACIFIC
6-28039 UNION PACIFIC

ELECTRIC

COMMAND

EP-5

6-18319 NEW HAVEN
6-28518 PENNSYLVANIA

ACCESSORIES

6-14101 RED BARON PYLON

ROLLING STOCK

6-26707 ARC WELDING CAR

GENERAL WIRING DIAGRAMS

STEAM/TENDER

2-10-4 COMMAND W/ODYSSEY
2-6-6-2 ARTICULATED COMMAND W/ODYSSEY
2-6-6-4 ARTICULATED COMMAND NON-ODYSSEY
2-8-8-4 ARTICULATED COMMAND W/ODYSSEY
4-6-6-4 LIONMASTER COMMAND W/ODYSSEY
TYPICAL COMMAND NON-ODYSSEY
TYPICAL CONVENTIONAL NON-ODYSSEY
4-6-4 HUDSON JR. W/SS AND RS TENDERS
6-28063 PENNSYLVANIA TI 4-4-4-4 3RAIL

DIESEL

DASH 9-44CW COMMAND W/ODYSSEY
TYPICAL CONV./COMMAND NON-ODYSSEY
TYPICAL COMMAND W/ODYSSEY
SD40-2 CAB-LIGHT WIRING W/ODYSSEY
FM 6-18321 JERSEY CENTRAL
FM 6-18322 LACKAWANNA
FM 6-18327 VIRGINIAN

ACCESSORIES

6-32998 & 6-14133 LIONEL HOBBY SHOP
6-14134 TRIPLE ACTION MAGNET CRANE

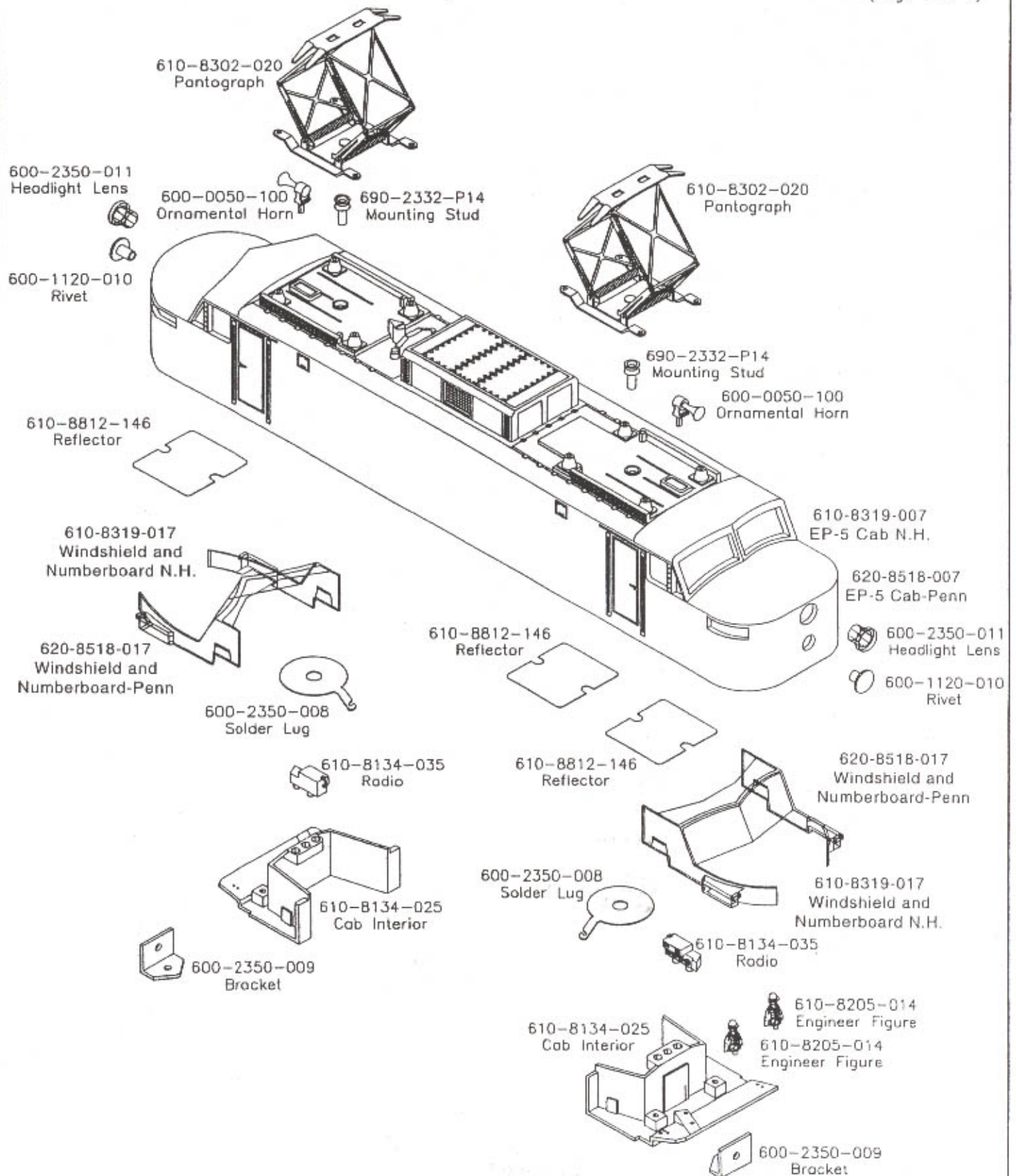
COPYRIGHT©2002

By Lionel LLC®
All Rights Reserved

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

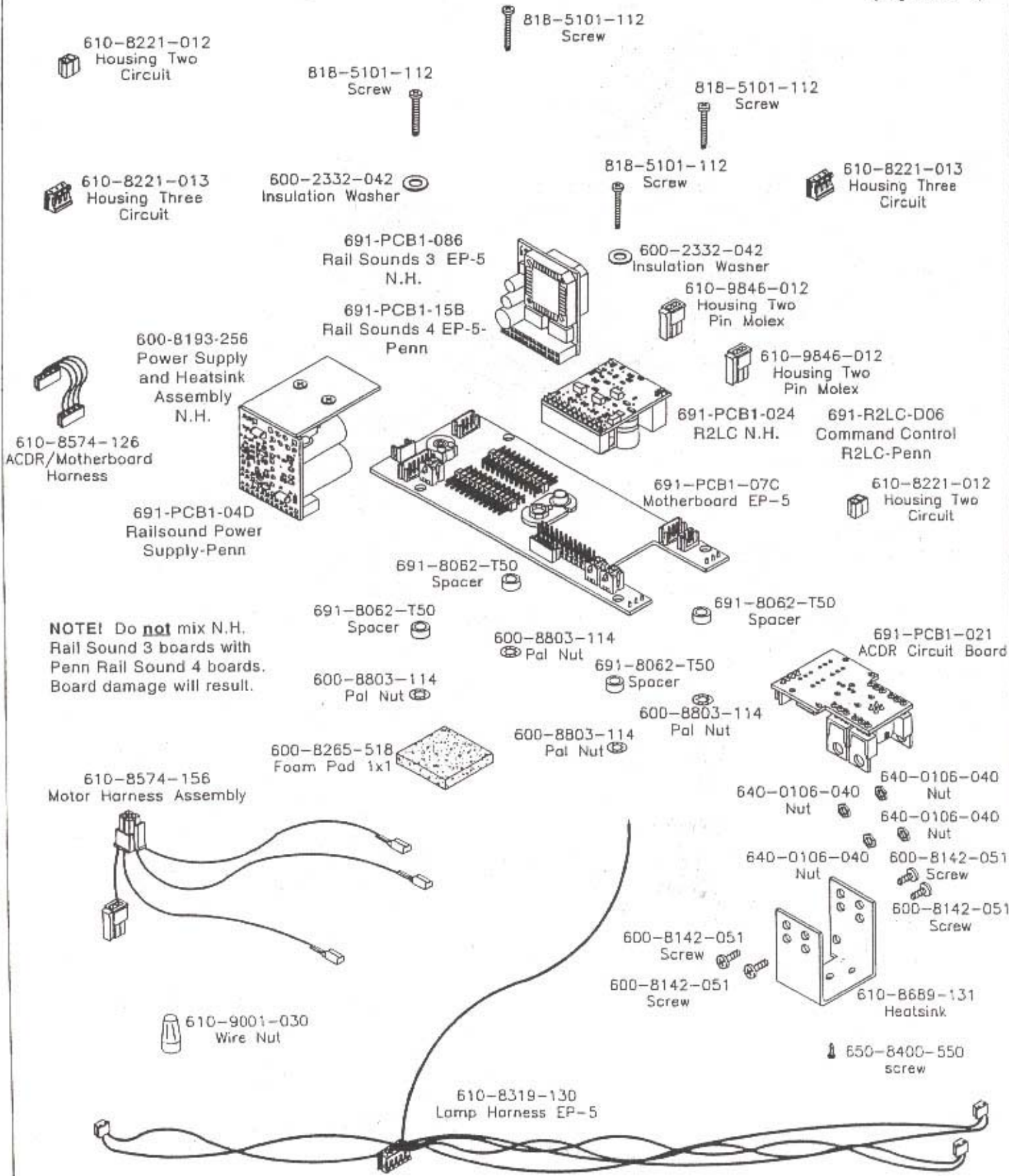
6-18319 EP-5 New Haven Electric Locomotive 6-28518 EP-5 Pennsylvania Electric Locomotive

(Page 1 of 6)



6-18319 EP-5 New Haven Electric Locomotive 6-28518 EP-5 Pennsylvania Electric Locomotive

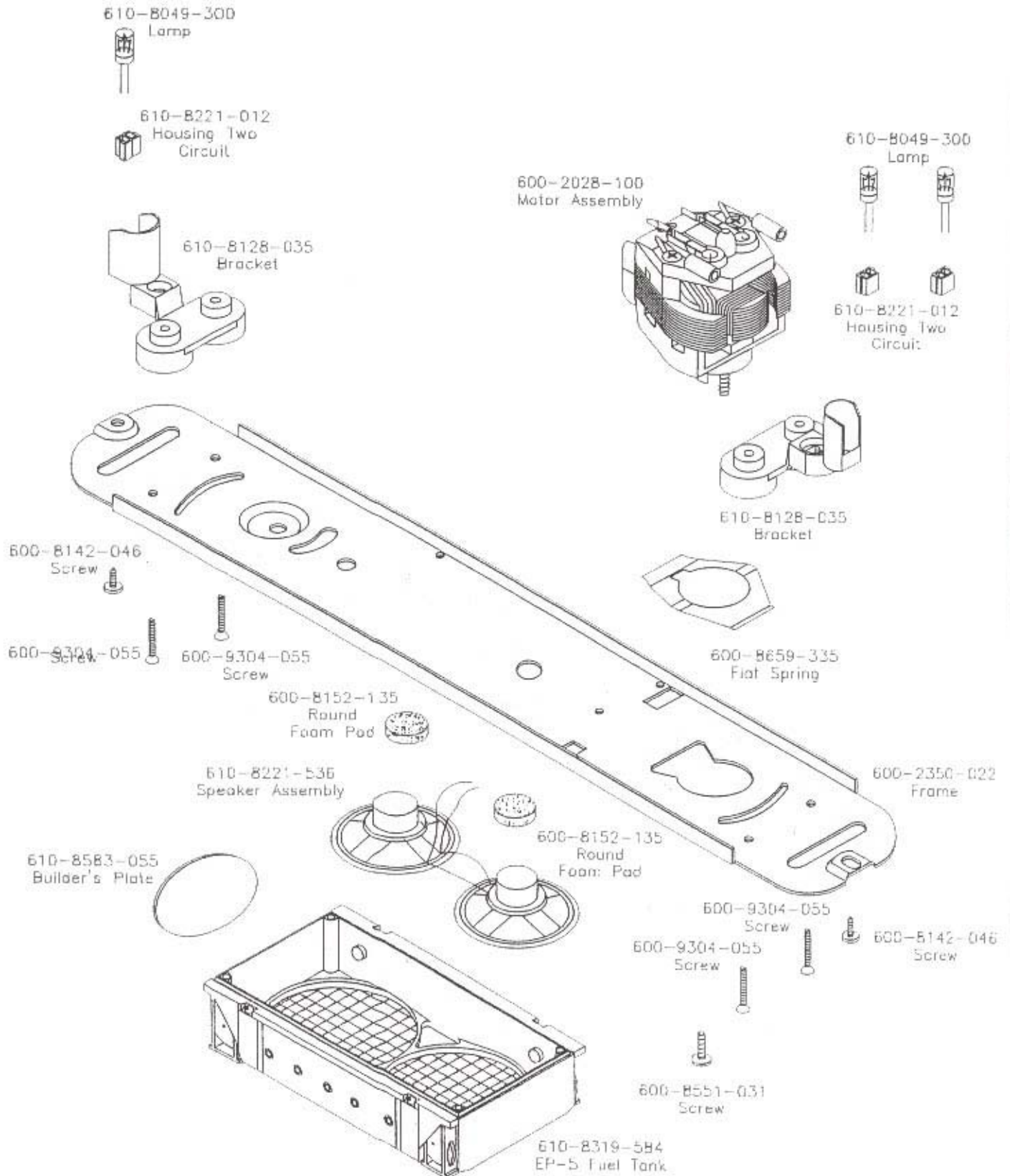
(Page 2 of 6)



NOTE! Do not mix N.H. Rail Sound 3 boards with Penn Rail Sound 4 boards. Board damage will result.

6-18319 EP-5 New Haven Electric Locomotive 6-28518 EP-5 Pennsylvania Electric Locomotive

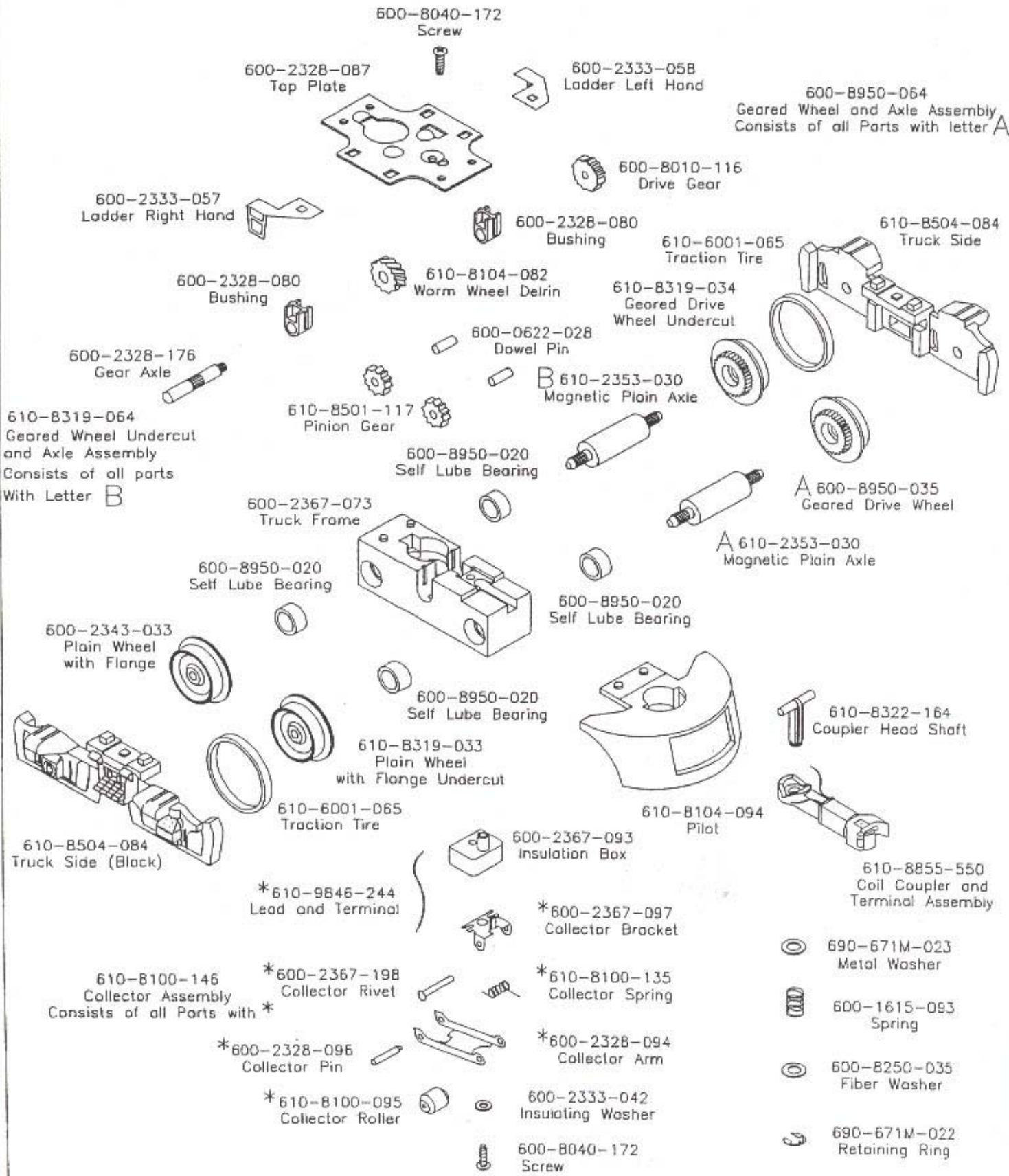
(Page 3 of 6)



610-8319-570 Motor Truck With Coil Coupler

6-18319 EP-5 New Haven / 6-28518 EP-5 Pennsylvania

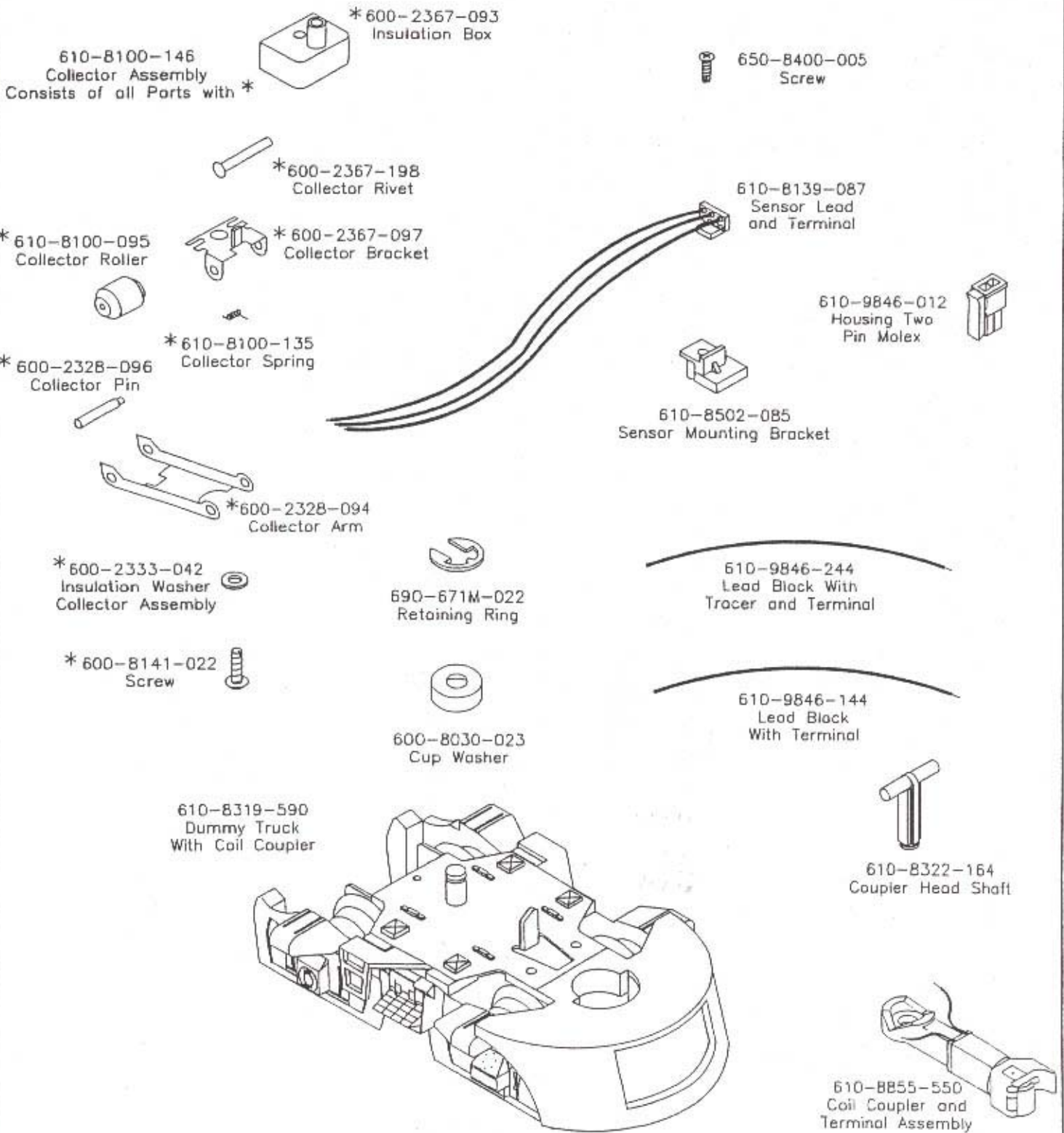
(Page 4 of 6)



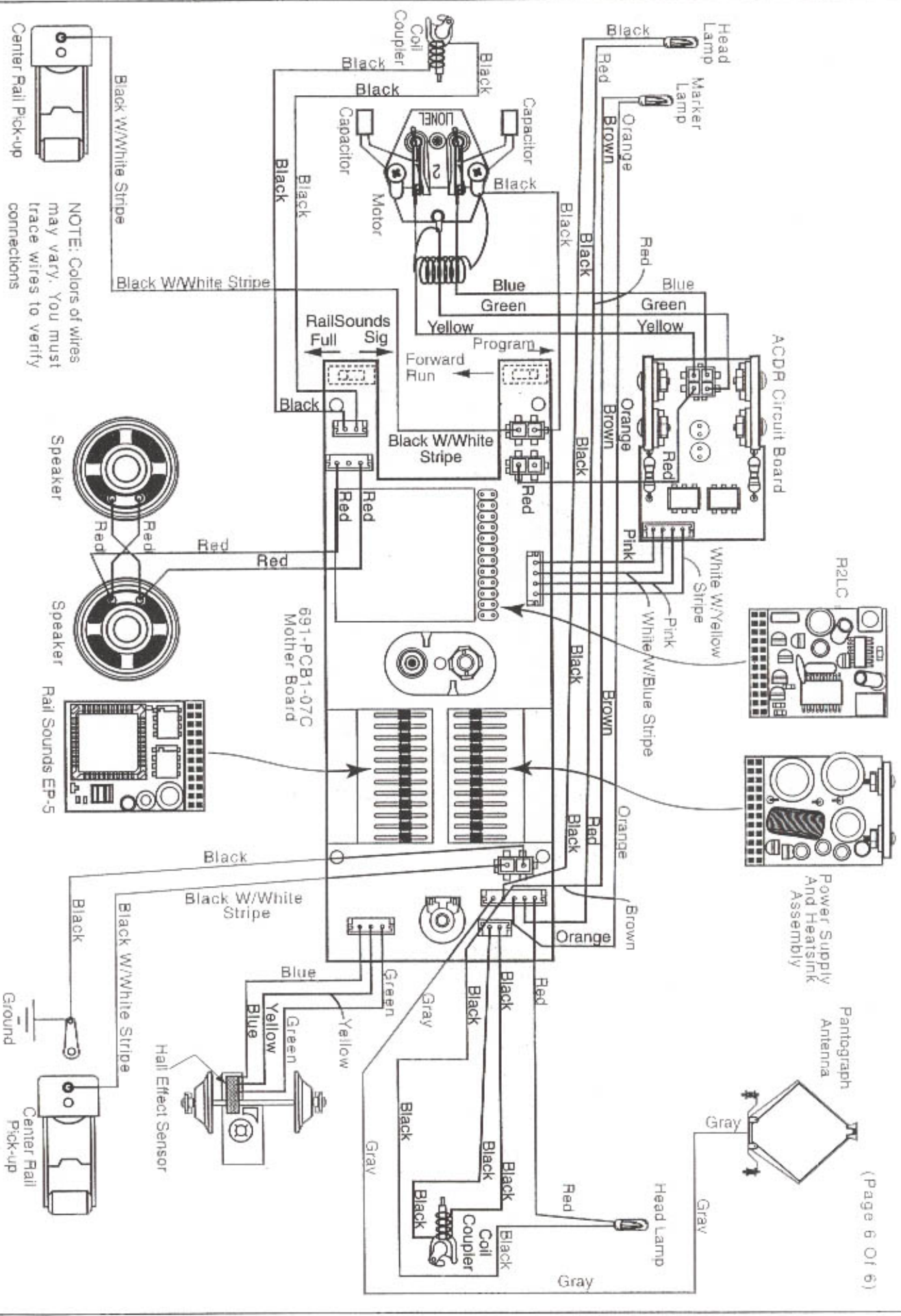
610-8319-590 Dummy Truck With Coil Coupler

6-18319 EP-5 New Haven / 6-28518 EP-5 Pennsylvania

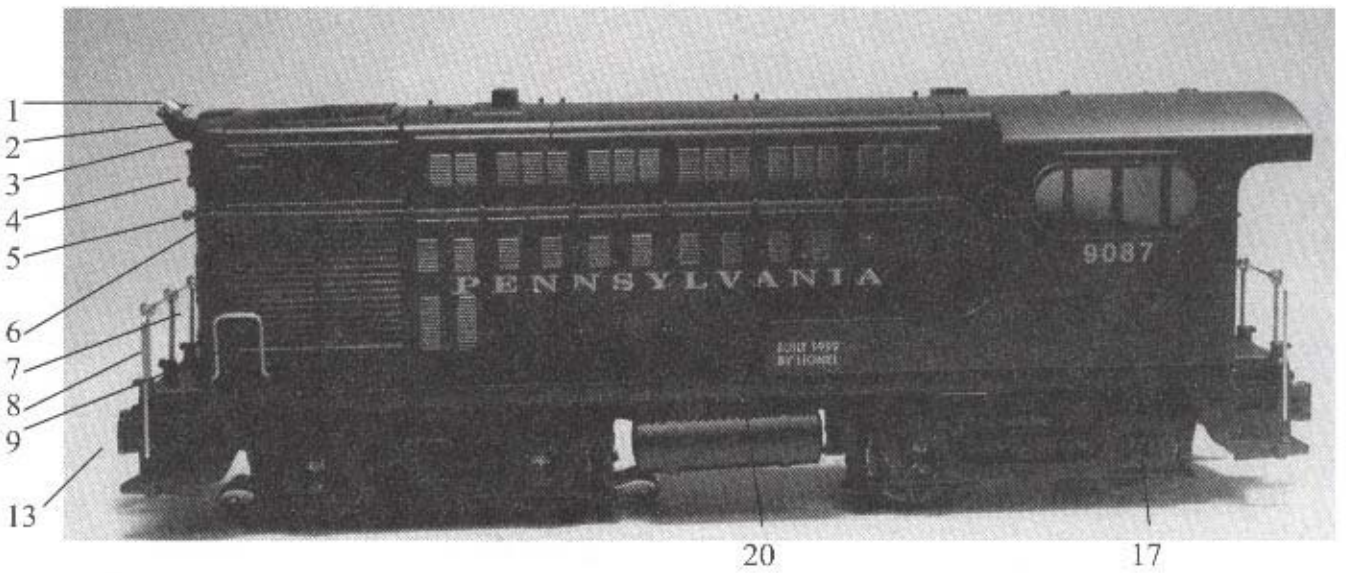
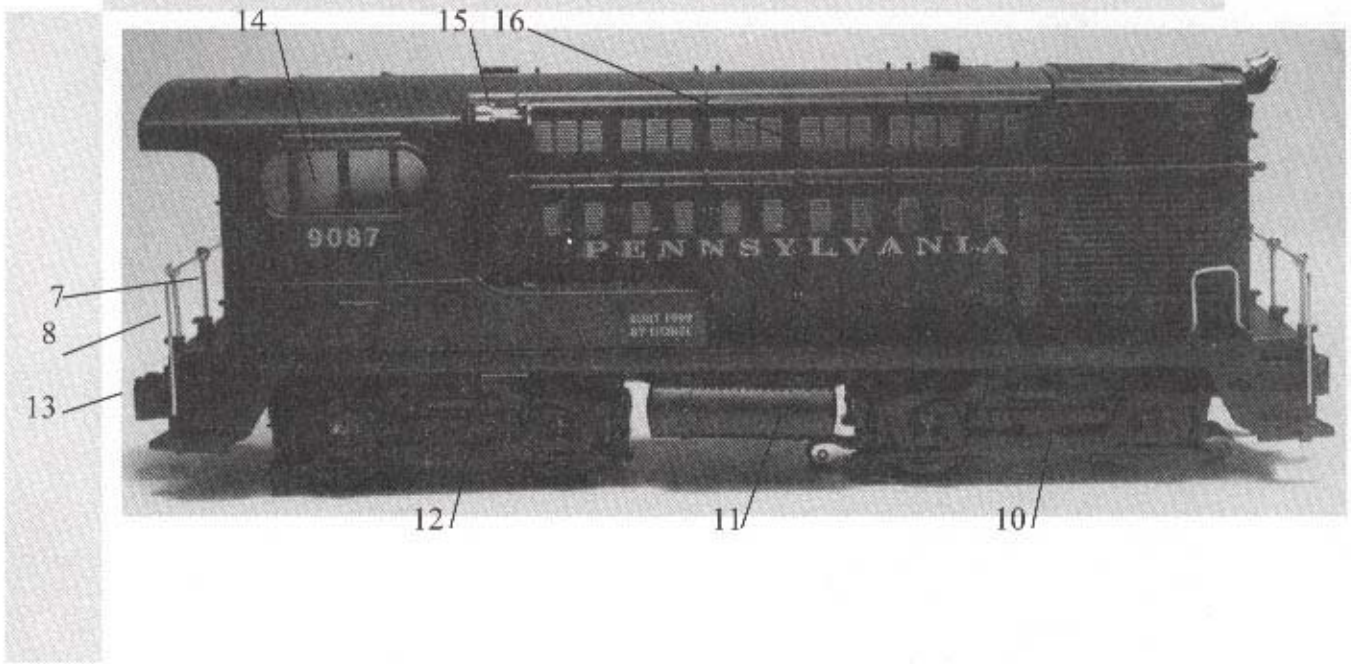
(Page 5 of 6)



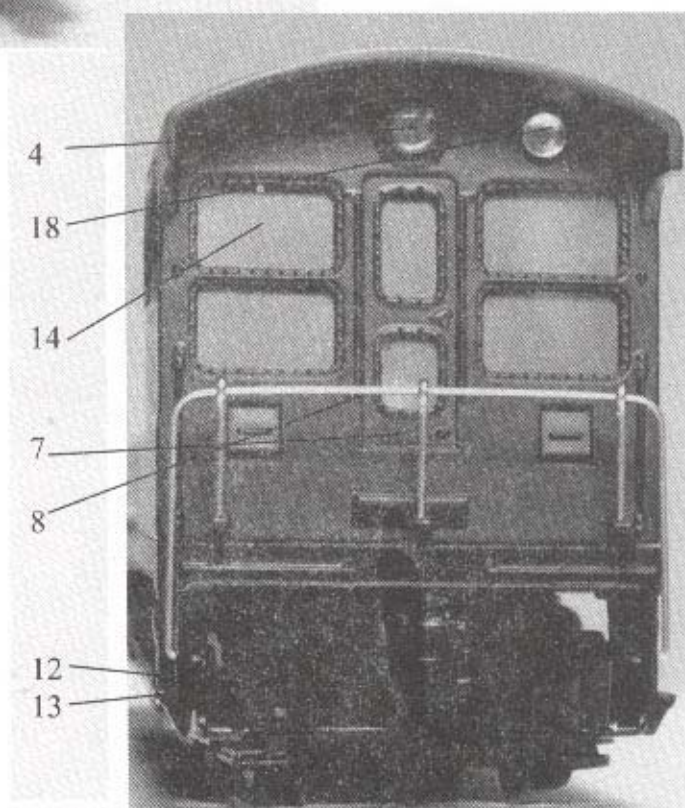
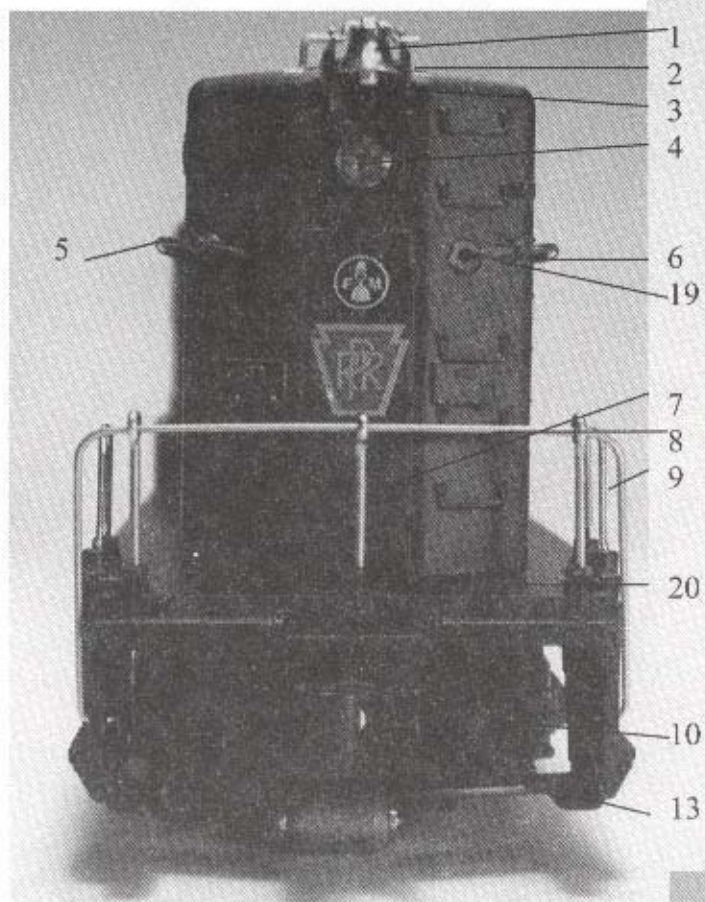
6-18319 EP-5 NEW HAVEN LOCOMOTIVE 6-28518 EP-5 PENNSYLVANIA LOCOMOTIVE PICTORIAL WIRING DIAGRAM



H-12-44 SWITCHERS



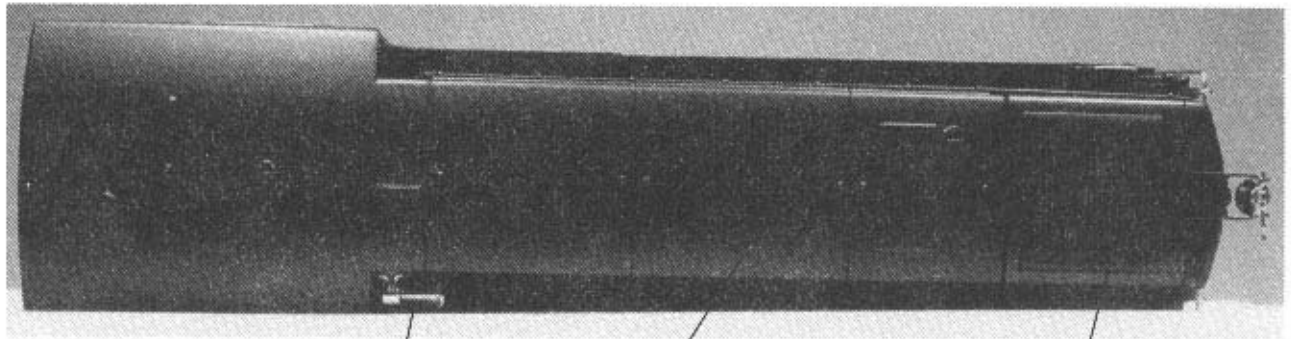
H-12-44 SWITCHERS



S45:1-8



H-12-44 SWITCHERS

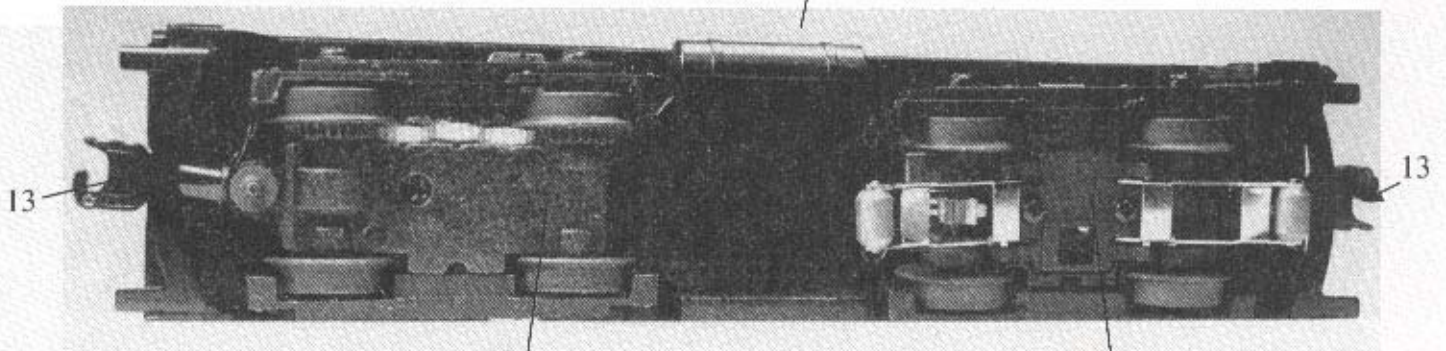


15

16

21

11



13

12

10

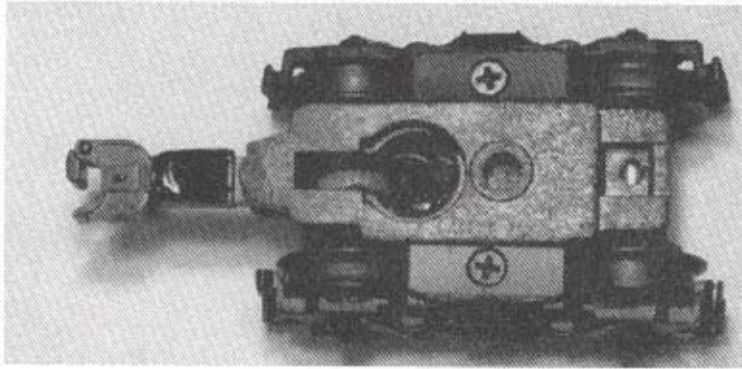
13



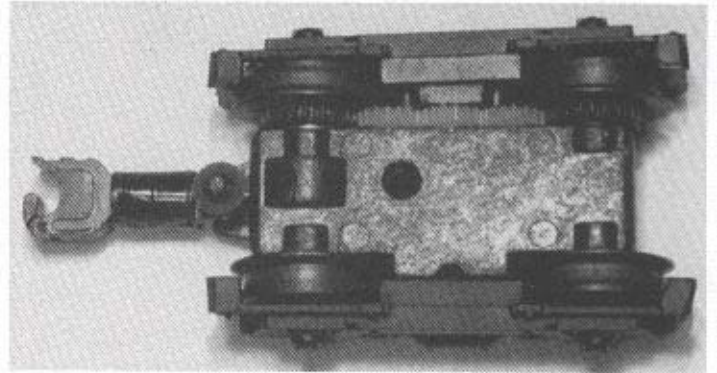
H-12-44 SWITCHER

REF. NO	PART NUMBER	QUANTITY		DESCRIPTION
		PER UNIT		
1	690-700E-233	1		BELL COMPLETE
2	600-8508-118	1		BELL BRACKET
3	600-8002-123	1		BELL BRACKET SCREW #2X3/16
4	600-8040-151	2		HEADLIGHT LENS
5	610-8848-300	18		STANCHIONS
6	610-8848-336	2		ANTENNA HARNESS
7	600-0622-077	6		HANDRAIL SUPPORT
8	600-0622-076	2		FRAME END RAIL
9	600-0622-079	2		SIDE HANDRAIL
10	610-8959-062	1		PLAIN SENSOR TRUCK COMPLETE
11	610-8959-534	1		SPEAKER COVER
12	610-8848-101	1		MOTOR TRUCK COMPLETE
13	610-8316-556	2		COIL COUPLER
14	610-8848-010	1		WINDOW SHELL
15	600-0050-100	1		HORN ZAMACK
16	610-8848-002 PENNSY 610-8876-002 C&NW 610-8847-002 SANTA FE	1		CAB
17	610-8879-110	1		PULLMOR MOTOR DIVISION PLAQUE
18	610-8007-031	1		HORN
19	610-8042-075	2		INSULATOR
20	610-8848-016	1		FRAME/PILOT ASSEMBLY
21	610-8848-155 PENNSY 610-8876-155 C&NW 610-8847-155 SANTA FE	1		HATCH COVER

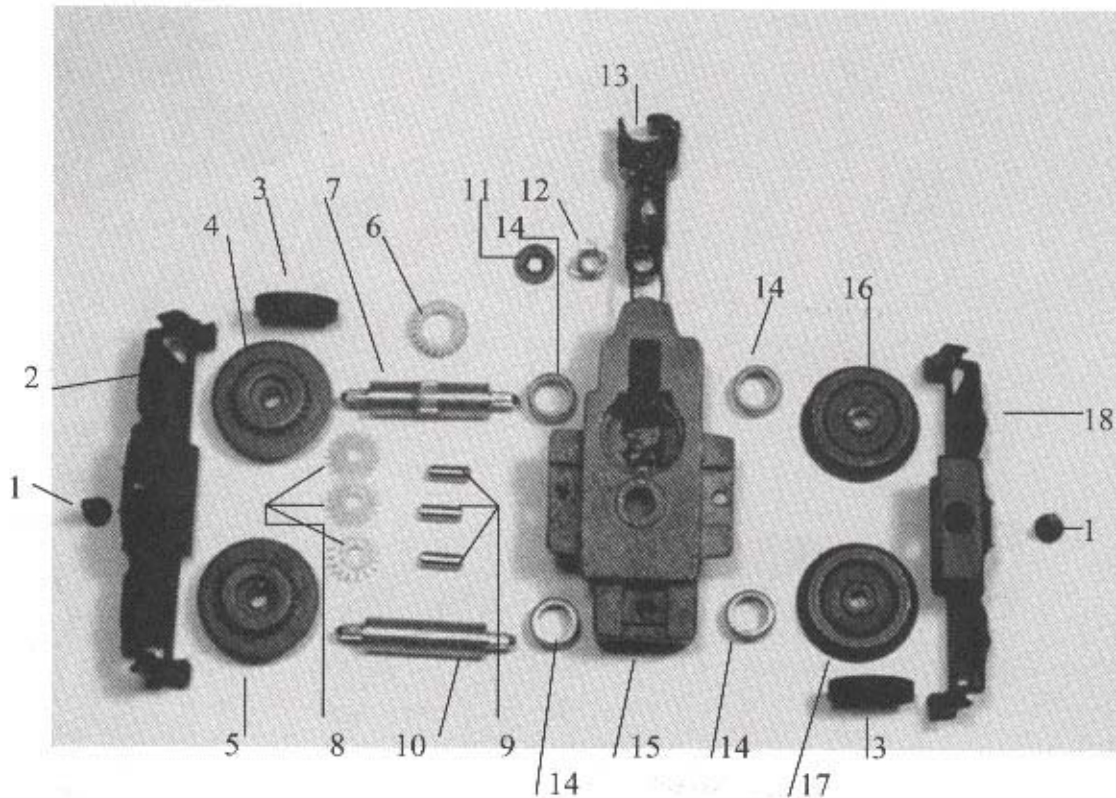




TOP VIEW



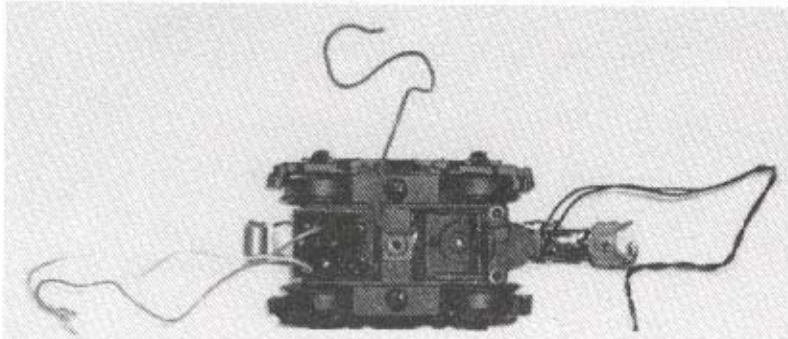
BOTTOM VIEW



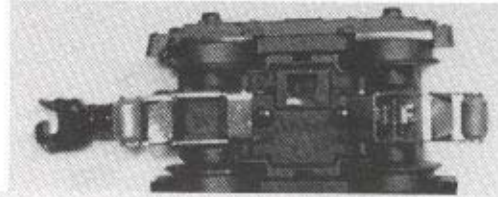
H-12-44 MOTOR TRUCK BREAKDOWN

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	600-8600-045	2	TRUCK SIDE SCREW
2	610-8959-085	1	TRUCK SIDE GEARED
3	610-6001-065	2	TRACTION TIRE
4	610-8319-034	1	GEARED WHEEL W/UNDERCUT
5	600-8950-035	1	GEAR DRIVE WHEEL
6	610-8848-022	1	WORM WHEEL DELRIN
7	610-2353-029	1	AXLE ASSEMBLY, MAG-KNURLED
8	610-8501-117	3	PINION GEAR
9	610-8501-028	3	DOWEL PIN
10	610-2353-030	1	AXLE ASSEMBLY, MAG-PLAIN
11	600-8960-052	1	PALNUT
12	690-0145-C11	1	COMPRESSION SPRING
13	610-8316-556	1	COIL COUPLER ASSEMBLY
14	600-8950-020	4	SELF LUBE BEARING
15	610-8503-009	1	MOTOR TRUCK FRAME
16	600-2343-033	1	PLAIN WHEEL SIDE W/FLANGE
17	610-8319-033	1	PLAIN WHEEL SIDE W/ UNDERCUT
18	600-0622-041	1	TRUCK SIDE PLAIN

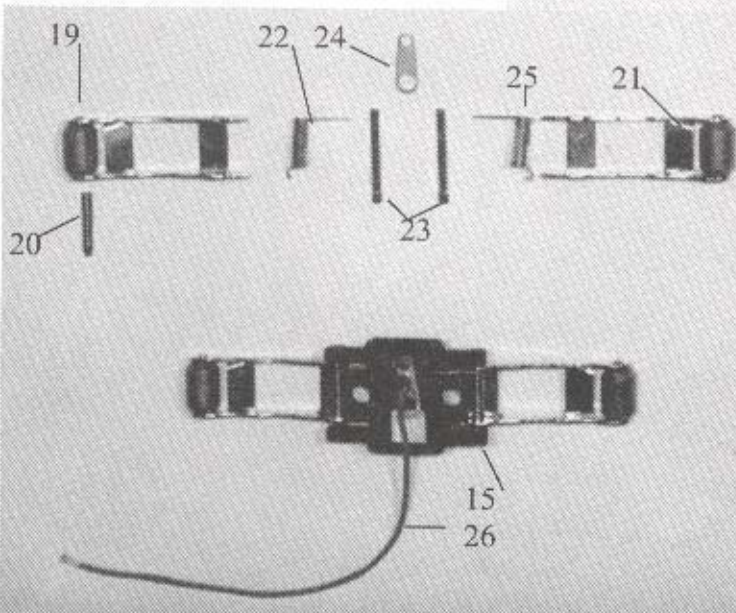
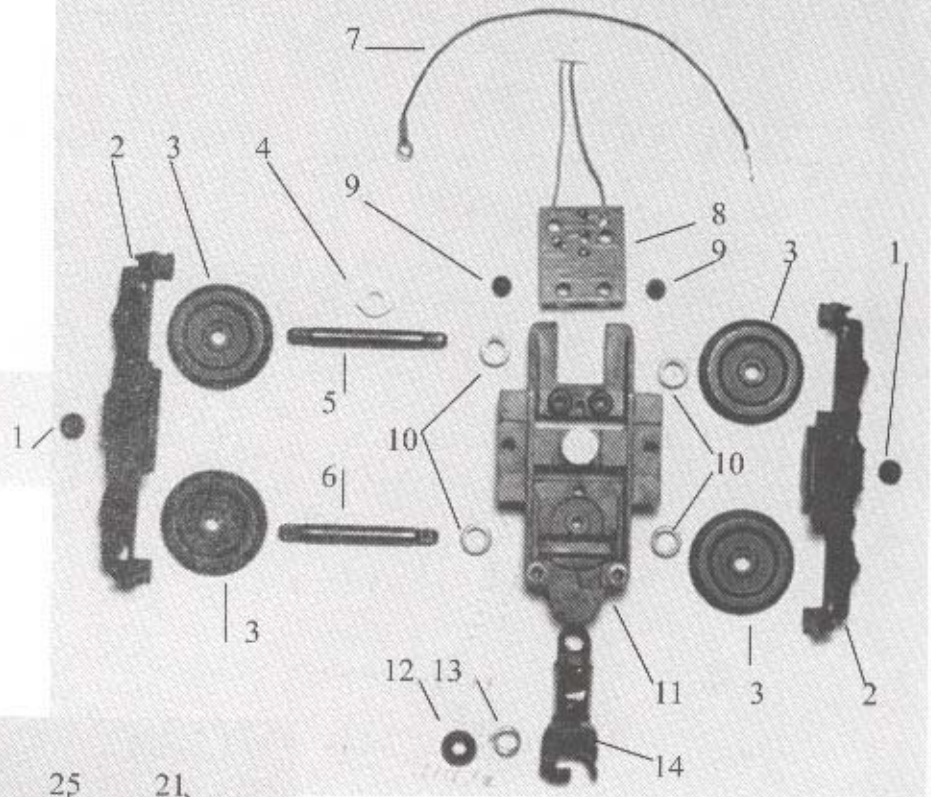
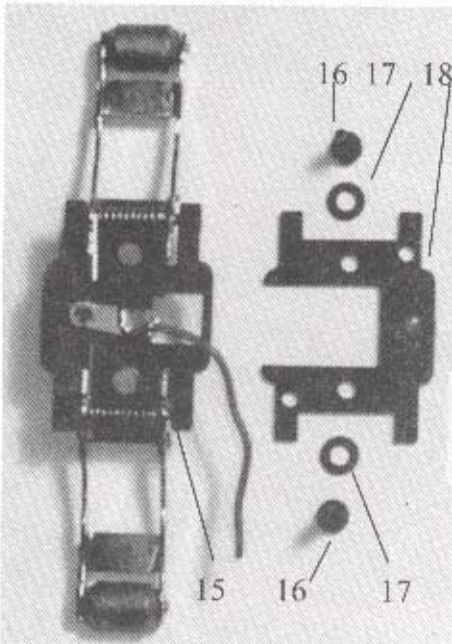




TOP VIEW



BOTTOM VIEW

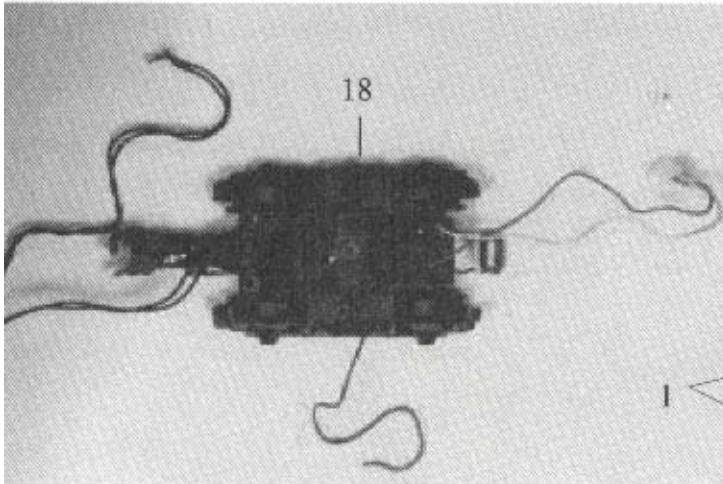


H-12-44 PLAIN SENSOR TRUCK

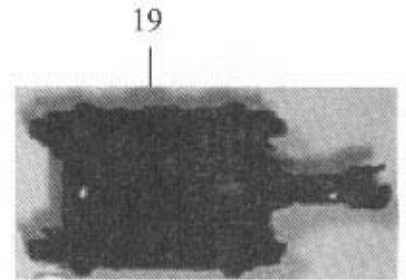
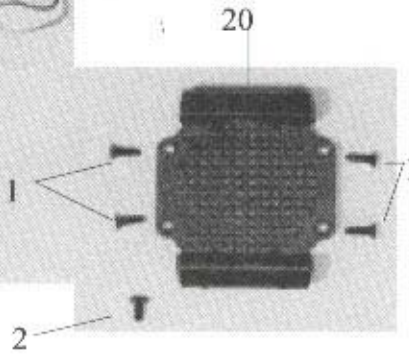
REF. NO.	PART NUMBER	QUANTITY		DESCRIPTION
		PER UNIT		
1	600-8142-065	2		SCREW #6-32X7/16
2	600-0622-041	2		TRUCK SIDE
3	600-2343-033	4		PLAIN WHEEL W/ FLANGE
4	610-8959-515	1		CAM (SOUND) CLEAR
5	600-0671-021	1		KNURLED AXLE
6	600-0671-025	1		PLAIN AXLE
7	600-8008-123	1		LEAD W/TERMINAL
8	610-8959-110	1		CIRCUIT BOARD W/CHERRY SWITCH
9	600-8304-165	2		SCREW #4-40X1/4
10	610-8503-028	4		AXLE BUSHING
11	610-8959-142	1		SENSOR TRUCK FRAME
12	600-8960-052	1		PALNUT
13	690-0145-C11	1		COMPRESSION SPRING
14	610-8316-556	1		COIL COUPLER
15	610-8501-186	1		COLLECTOR ASSEMBLY COMPLETE
16	818-7401-022	2		SCREW #4X3/8
17	600-2333-042	2		INSULATION WASHER
18	600-2333-034	1		INSULATION
19	600-0041-022	2		COLLECTOR ROLLER
20	600-2023-044	2		COLLECTOR PIN
21	600-2023-041	2		COLLECTOR ARM ASSEMBLY
22	610-8503-135	1		SPRING R.H.
23	600-2333-168	2		COLLECTOR PIN KNURLED
24	690-2020-M09	1		SOLDER LUG
25	610-8503-136	1		SPRING L.H.
26	680-8101-062	1		#24 AWG RED SUPERFLEX



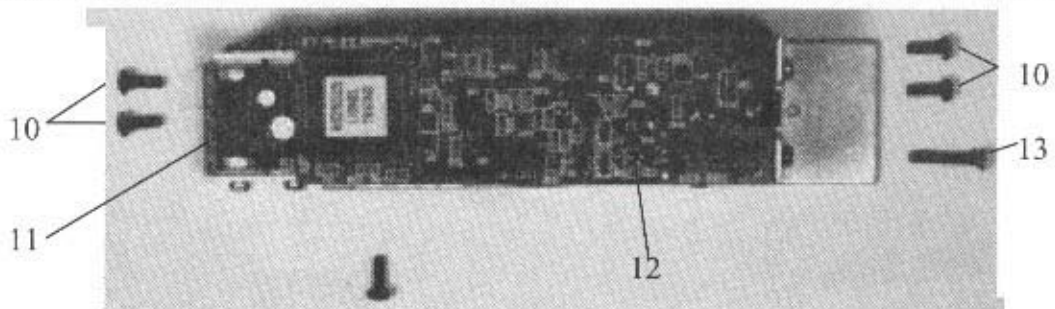
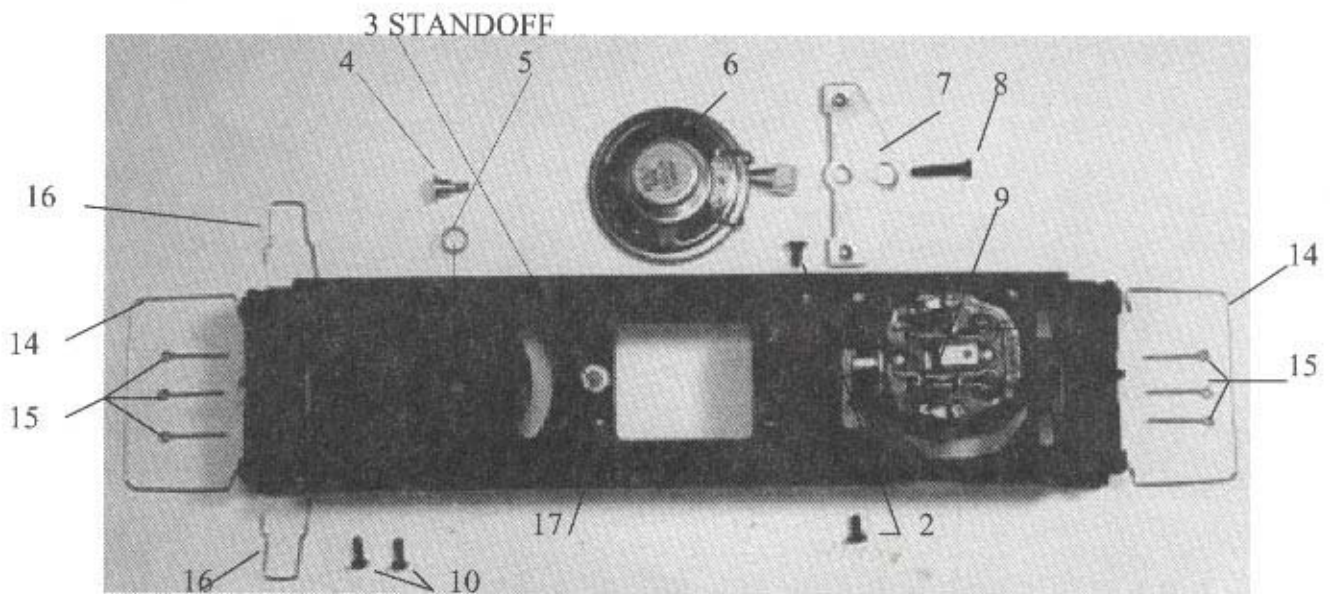
H-12-44 SWITCHER CHASSIS



TOP VIEW PLAIN SENSOR TRUCK



TOP VIEW MOTOR TRUCK



10 |
UNDER LCRU

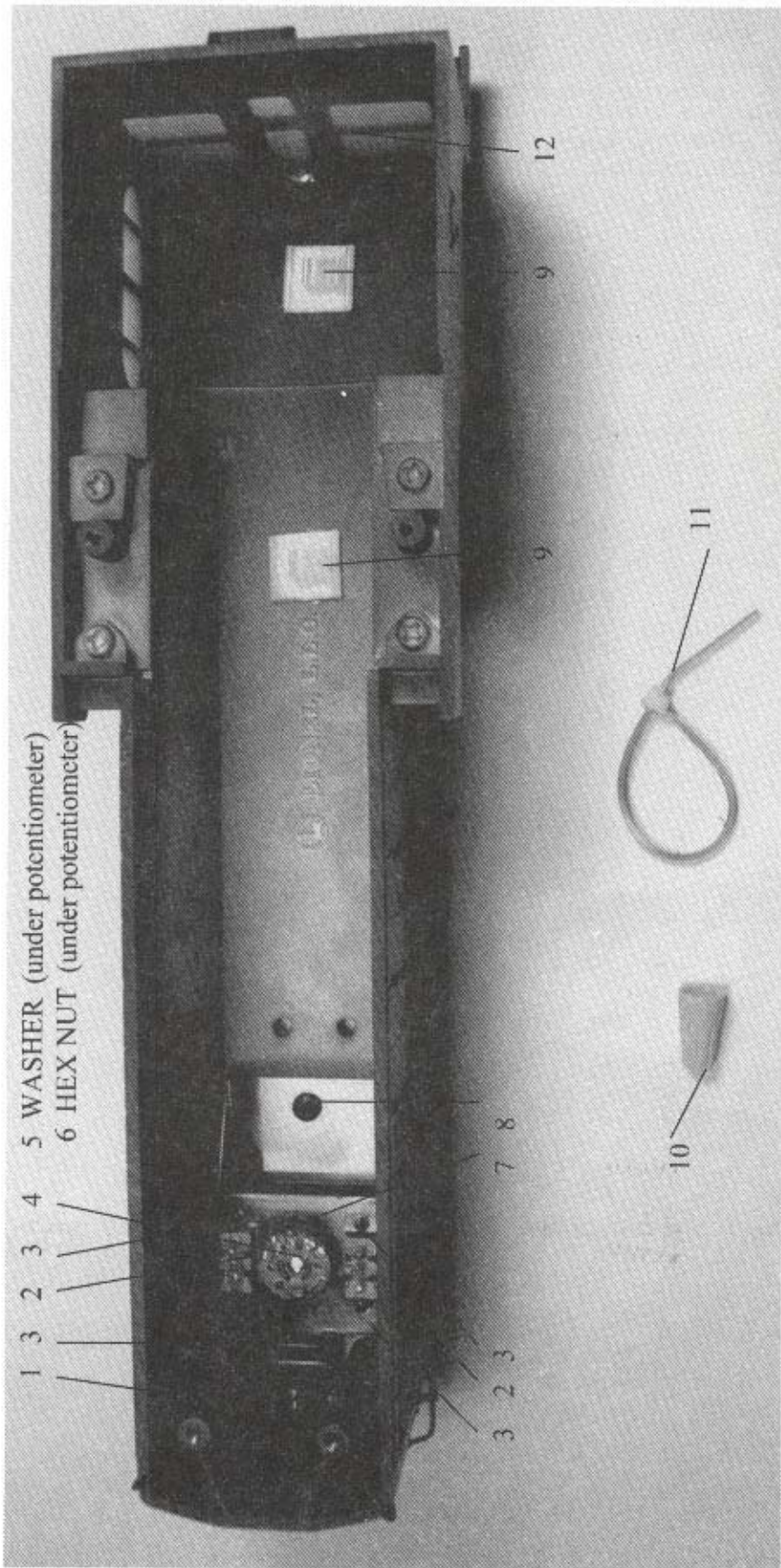


H-12-44 SWITCHER CHASSIS

REF NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	610-8401-030	4	SCREW #4X3/8 (SPEAKER COVER)
2	600-8600-045	1	SCREW #6-32X5/16 (LCRU STANDOFF)
3	610-8042-250	1	STANDOFF (MOUNTS LCRU)
4	610-8959-060	1	TRUCK PIVOT SCREW
5	600-2145-091	1	SPRING (FRONT TRUCK MOUNTING)
6	610-8049-536	1	SPEAKER
7	600-0622-199	1	MOTOR TRUCK PIVOT
8	600-8240-070	1	SCREW #6-32X3/4 (MOUNTS MOTOR TRUCK TO MOTOR)
9	610-8848-100	1	MOTOR COMPLETE
10	600-8306-633	4	SCREW #4-40X5/16 (BODY MOUNT)
	600-8306-633	1	SCREW #4-40X5/16 (MOUNTS LCRU TO FRAME)
11	610-8959-256	1	LCRU/HEATSINK ASSEMBLY
12	610-8848-266 PENNSY 610-8876-266 C&NW 610-8847-266 SANTA FE	1	RAILSOUND/HEATSINK ASSEMBLY
13	610-0736-030	1	SCREW #4X40X5/8 (MOUNTS SOUND BOARD TO FRAME)
14	600-0622-076	2	FRAME END RAIL
15	600-0622-077	6	HANDRAIL SUPPORT
16	600-0622-079	2	SIDE HANDRAIL
17	610-8848-016	1	FRAME/PILOT ASSEMBLY
18	610-8959-062	1	PLAIN SENSOR TRUCK COMPLETE
19	610-8848-101	1	MOTOR TRUCK COMPLETE
20	610-8959-534	1	SPEAKER COVER



H-12-44 SWITCHER CAB INTERIOR COMPONENTS



- 1
- 2
- 3
- 4
- 5 WASHER (under potentiometer)
- 6 HEX NUT (under potentiometer)

- 3
- 2
- 3
- 7
- 8
- 9
- 9
- 12

- 10
- 11

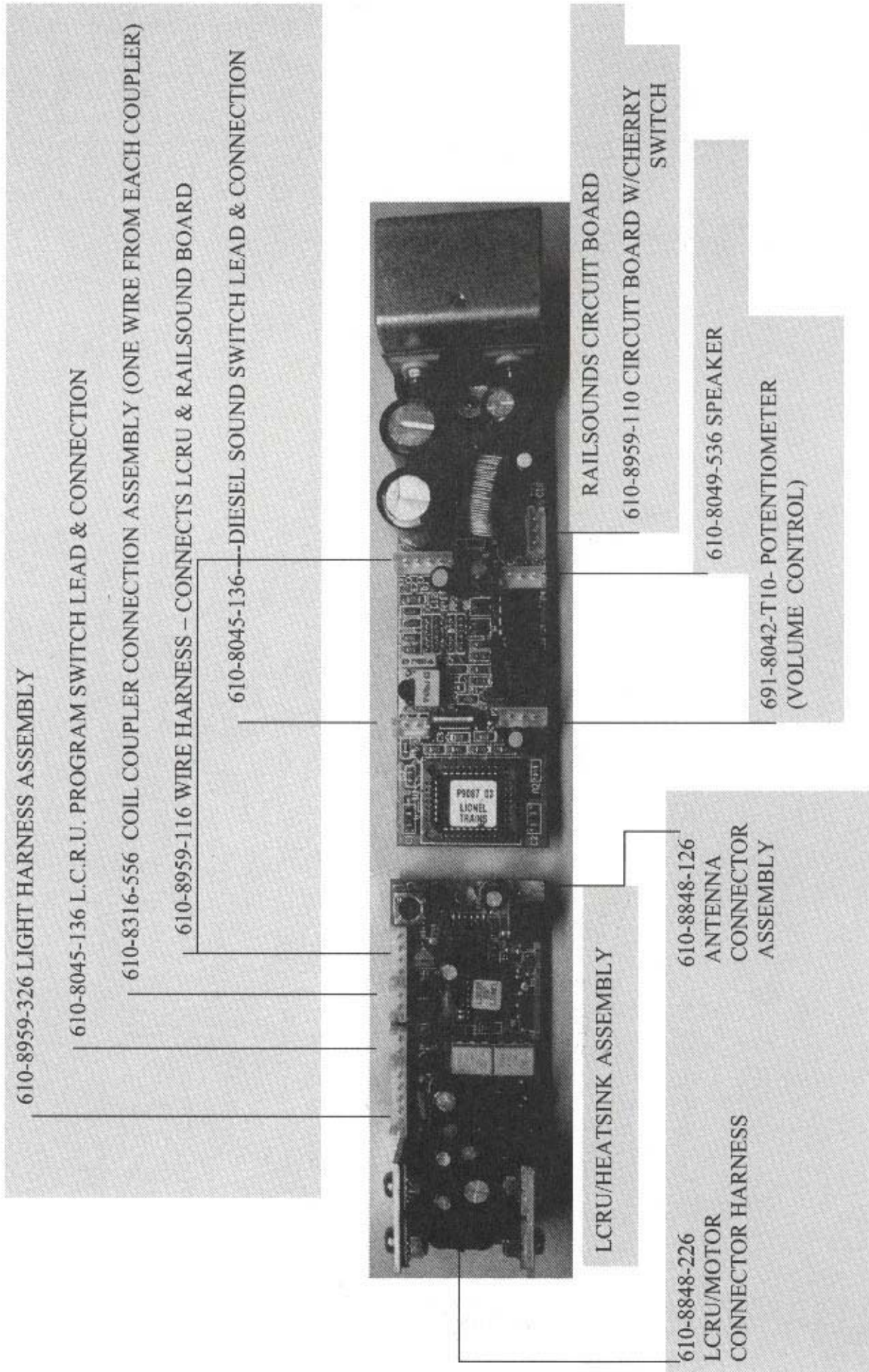


H-12-44 SWITCHER CAB INTERIOR COMPONENTS
 QUANTITY

REF. NO.	PART NUMBER	PER UNIT	DESCRIPTION
1	610-8959-326	1	LIGHT HARNESS ASSEMBLY
2	610-8045-136	2	SWITCH, LEAD AND CONNECTION
3	818-7401-012	4	SCREW #2X1/4
4	691-8042-T10	1	POTENTIOMETER (VOLUME CONTROL 7.0 LEAD)
5	610-8007-170	1	WASHER (POTENTIOMETER)
6	610-8007-180	1	HEX NUT (POTENTIOMETER)
7	610-8848-030	1	POT./SWITCH MOUNTING BRACKET
8	600-8306-633	1	SCREW #4-40X5/16
9	610-6666-022	2	WIRE CLIP
10	610-9001-030	3	WIRE NUT (TAN)
11	610-8301-055	3	CABLE TIE
12	610-8848-010	1	WINDOW SHELL

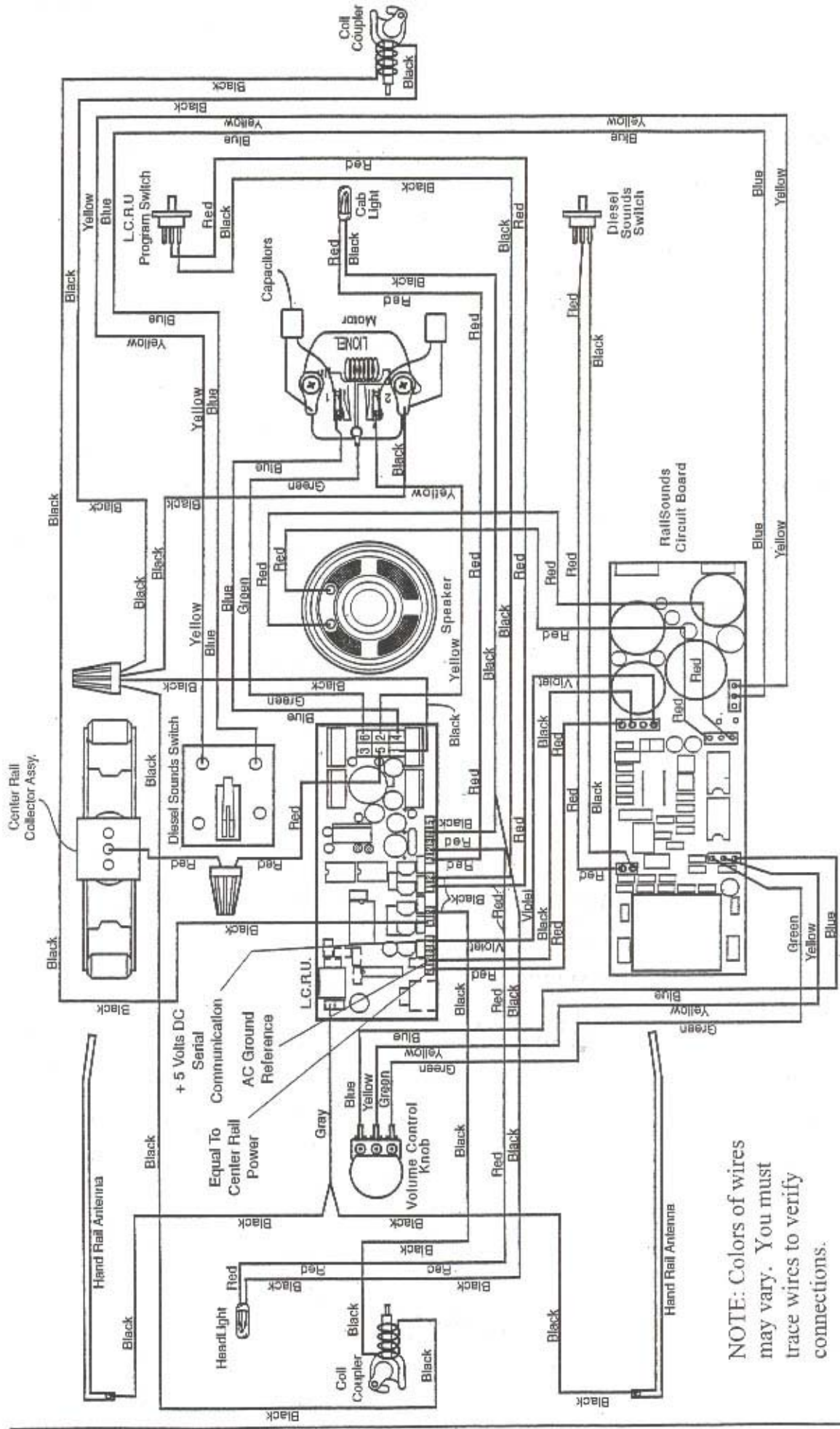


H-12-44 SWITCHER LCRU/RAILSOUND CIRCUIT BOARD CONNECTIONS

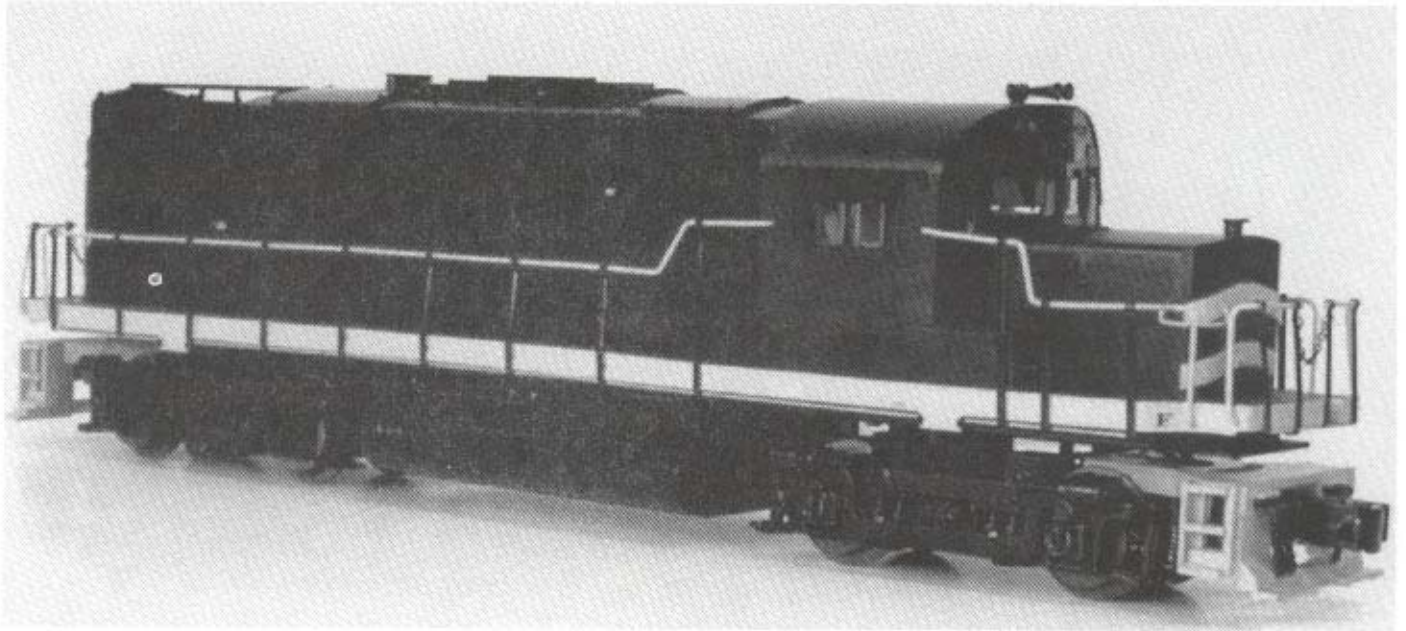


II-12-44 SWITCHER

- 6-18847 (502) SANTA FE H-12-44 SWITCHER
- 6-18848 (9087) PENNSYLVANIA H-12-44 SWITCHER
- 6-18876 (1053) CHICAGO NORTHWESTERN H-12-44 SWITCHER



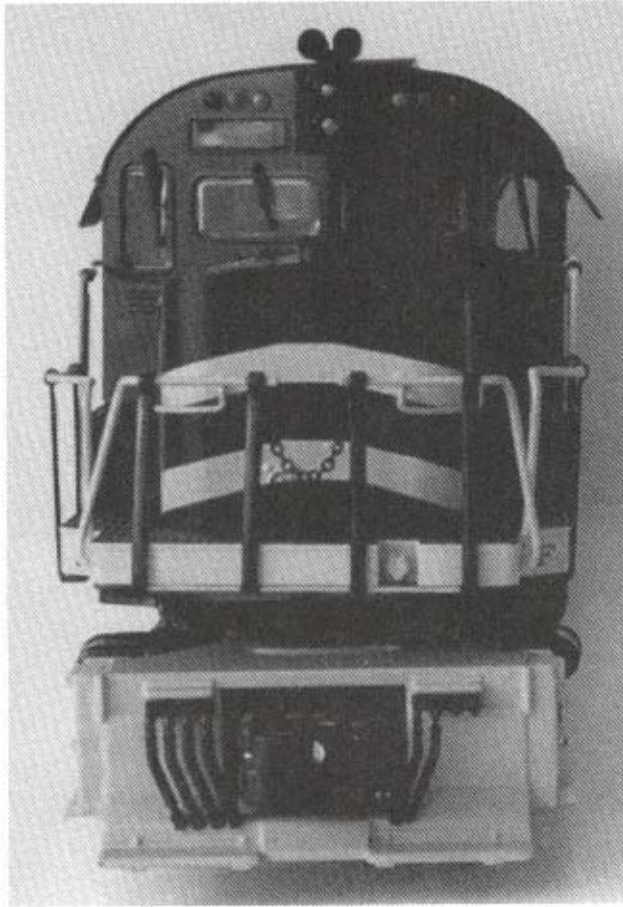
NOTE: Colors of wires may vary. You must trace wires to verify connections.



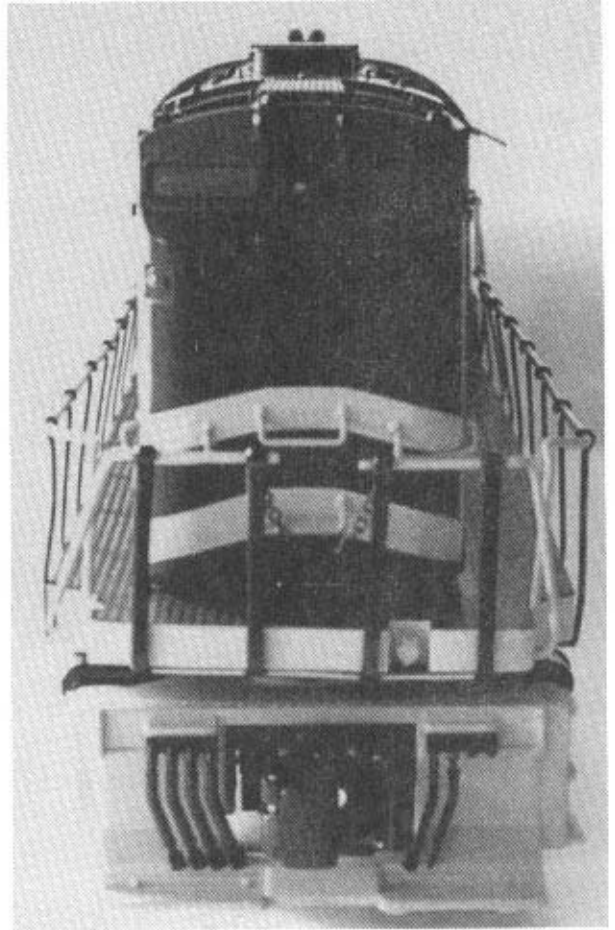
- 6-T8588 DELAWARE & HUDSON – COMMAND #412
- 6-18591 DELAWARE & HUDSON – CONVENTIONAL #411
- 6-18589 LEHIGH VALLEY – COMMAND #409
- 6-18592 LEHIGH VALLEY – CONVENTIONAL #410
- 6-28505 MONON – COMMAND #505
- 6-28506 MONON – CONVENTIONAL #506
- 6-28507 NEW HAVEN – COMMAND #2556
- 6-28508 NEW HAVEN – CONVENTIONAL #2557
- 6-18587 NICKEL PLATE ROAD – COMMAND #577
- 6-18590 NICKEL PLATE ROAD – CONVENTIONAL #578
- 6-28516 J.C. PENNEY LEHIGH AND HUDSON RIVER
RAILWAY – CONVENTIONAL #22
- 6-28515 SERVICE STATION – CONVENTIONAL 1900-2000



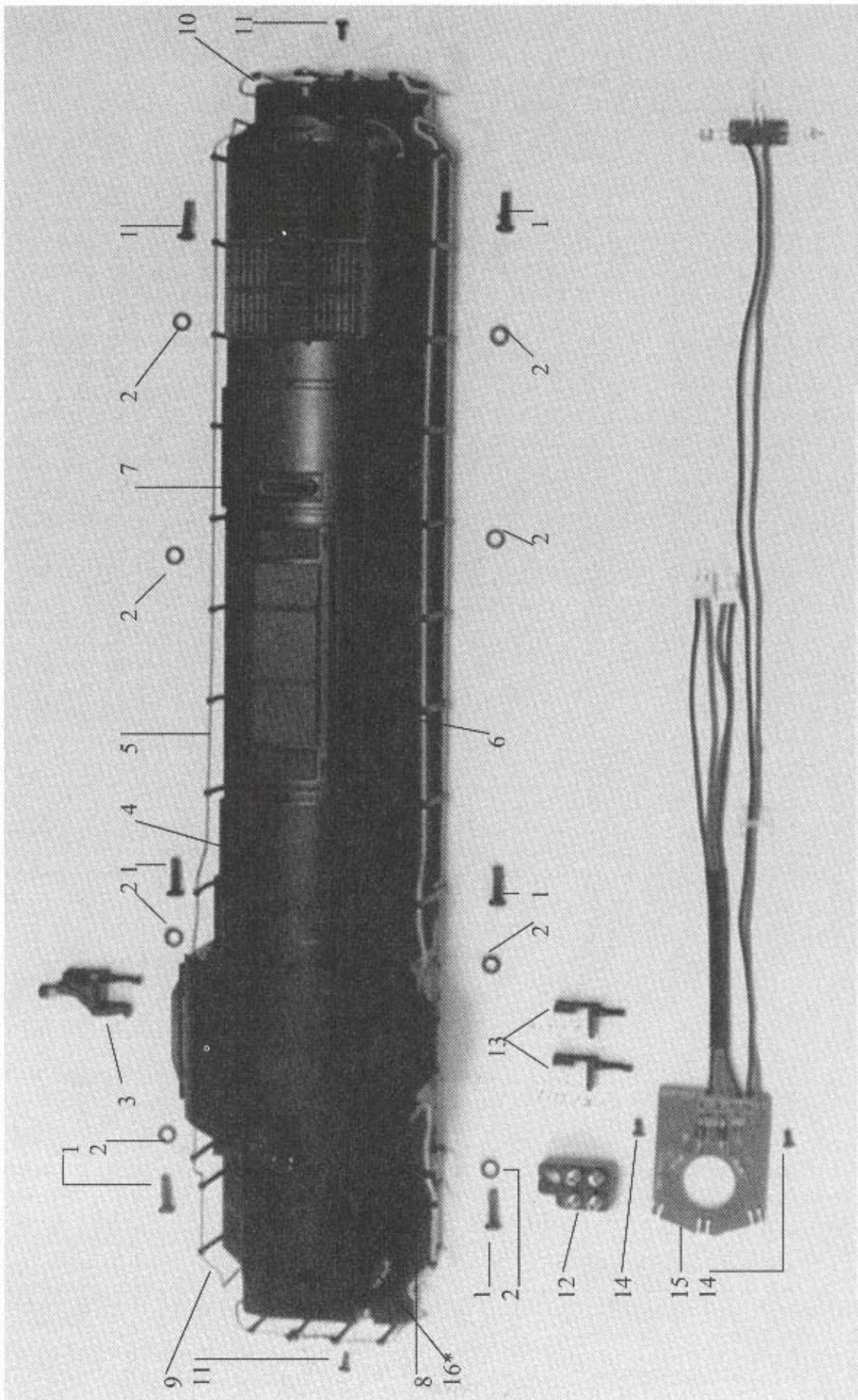
FRONT VIEW



REAR VIEW



C-420 ALCO CAB ASSEMBLY



NOTE: DECO PARTS ARE NOT AVAILABLE FOR 6-28515 SERVICE STATION
 AND 6-28516 J.C. PENNEY LEHIGH & HUDSON.
 * PARTS NOT AVAILABLE

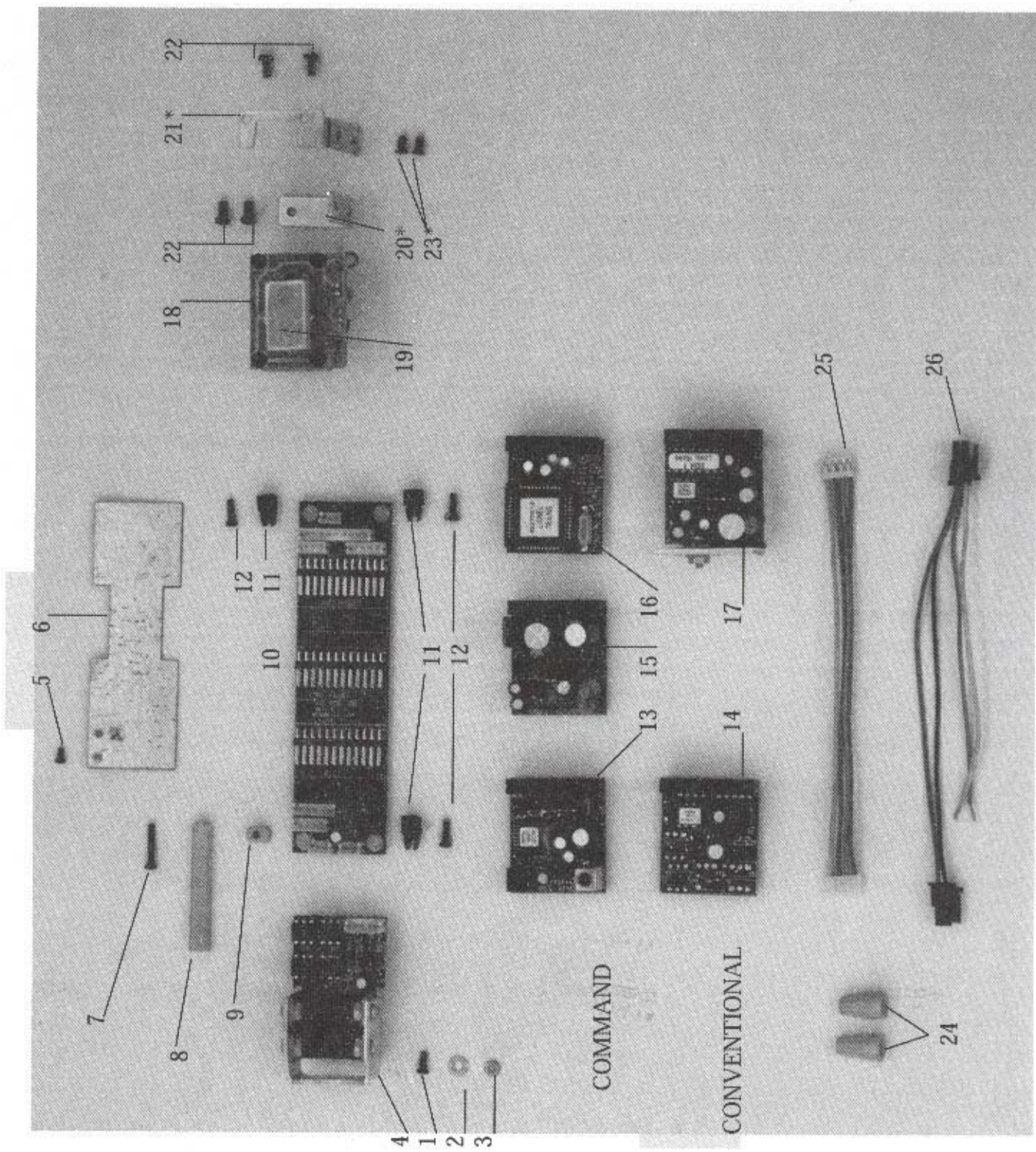


C-420 ALCO CAB ASSEMBLY

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	6SP-8590-042	6	SCREW (MOUNTS WALKWAY TO CAB)
2	6SP-8590-011	8	SPACER FOR CAB
3	6SP-8590-122 6SP-8507-122 6SP-8592-122 6SP-8238-121*	1	ENGINEER WITH SEAT(BLACK) ENGINEER WITH SEAT(BLUE) ENGINEER WITH SEAT (RED) ENGINEER FIGURE ONLY
4	6SP-8588-001	1	DELAWARE & HUDSON (COMMAND)
	6SP-8591-001	1	DELAWARE & HUDSON (CONVENTIONAL)
	6SP-8589-001	1	LEHIGH VALLEY (COMMAND)
	6SP-8592-001	1	LEHIGH VALLEY (CONVENTIONAL)
	6SP-8505-001	1	MONON (COMMAND)
	6SP-8506-001	1	MONON (CONVENTIONAL)
	6SP-8507-001	1	NEW HAVEN (COMMAND)
	6SP-8508-001	1	NEW HAVEN (CONVENTIONAL)
	6SP-8587-001	1	NICKEL PLATE ROAD (COMMAND)
	6SP-8590-001	1	NICKEL PLATE ROAD (CONVENTIONAL)
5	6SP-8691-005	1	HANDRAIL (RIGHT HAND) D&H
	6SP-8592-005	1	HANDRAIL (RIGHT HAND) L.V.
	6SP-8506-004	1	HANDRAIL (RIGHT HAND) N.H. & MONON
	6SP-8590-005	1	HANDRAIL (RIGHT HAND) NPR
6	6SP-8591-006	1	HANDRAIL (LEFT HAND) D&H
	6SP-8592-006	1	HANDRAIL (LEFT HAND) L.V.
	6SP-8506-005	1	HANDRAIL (LEFT HAND) NH & MONON
	6SP-8590-006	1	HANDRAIL (LEFT HAND) NPR
7	6SP-8591-002	1	SMOKE VENT (BLUE) D&H
	6SP-8592-007	1	SMOKE VENT (RED) L.V.
	6SP-8590-002	1	SMOKE VENT (BLACK) MONON, N H & NPR
8	6SP-8591-007	1	WALKWAY DELAWARE & HUDSON
	6SP-8592-007	1	WALKWAY LEHIGH VALLEY
	6SP-8508-002	1	WALKWAY NEW HAVEN
	6SP-8506-006	1	WALKWAY MONON
	6SP-8590-007	1	WALKWAY NICKEL PLATE ROAD
9	6SP-8591-003	1	FRONT RAIL DELAWARE & HUDSON
	6SP-8592-003	1	FRONT RAIL LEHIGH VALLEY
	6SP-8506-002	1	FRONT RAIL MONON & NEW HAVEN
	6SP-8590-003	1	FRONT RAIL NICKEL PLATE ROAD
10	6SP-8591-004	1	REAR RAIL DELAWARE & HUDSON
	6SP-8592-004	1	REAR RAIL LEHIGH VALLEY
	6SP-8506-003	1	REAR RAIL MONON & NEW HUDSON
	6SP-8590-004	1	REAR RAIL NICKEL PLATE ROAD
11	6SP-8590-013	2	SCREW (MOUNTS END RAILS)
12	6SP-8238-113	1	LIGHTING CONNECTION ASSEMBLY
13	6SP-8590-010	2	SEAT (BLACK)
	6SP-8507-010	2	SEAT (BLUE)
	6SP-8592-010	2	SEAT (RED)
14	6SP-8238-013	2	SCREW (MOUNTS LED ASSEMBLY)
15	6SP-8590-012	1	LED ASSEMBLY
16		1	*HORN



C-420 ALCO CIRCUIT BOARD & SMOKE UNIT ASSEMBLY - CONVENTIONAL & COMMAND

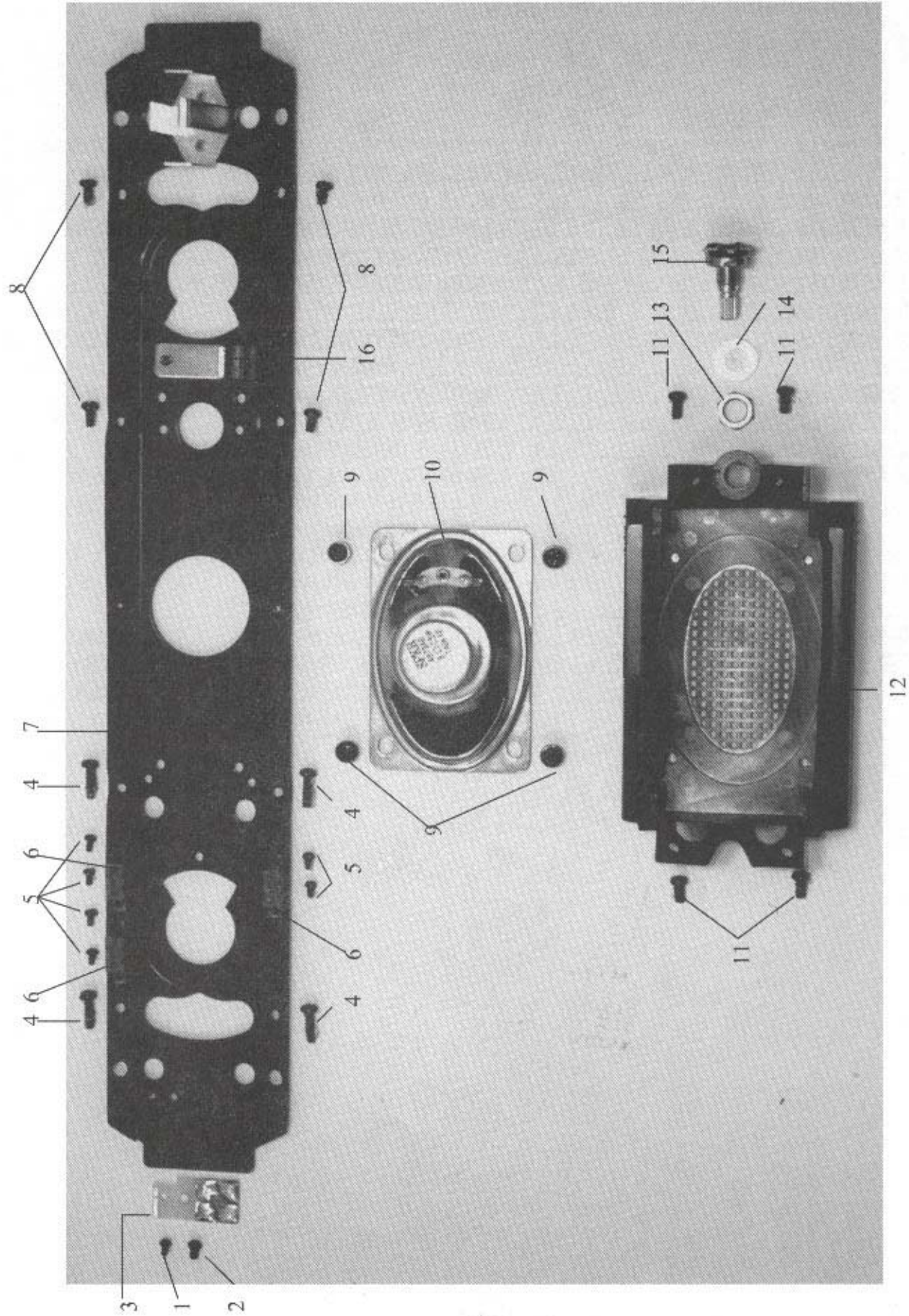


C-420 ALCO CIRCUIT BOARD & SMOKE UNIT ASSEMBLY

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	6SP-8238-193	1	SCREW (MOUNTS DCDR BOARD & HEAT SINK)
2	6SP-8238-195	1	WASHER (MOUNTS DCDR BOARD & HEAT SINK)
3	6SP-8238-195	1	NUT (MOUNTS DCDR BOARD & HEAT SINK)
4	610-8154-135	1	DCDR & HEAT SINK ASSEMBLY
5	6SP-8238-188	1	SCREW (ANTENNA & LEAD ASSEMBLY)
6	6SP-8505-031	1	ANTENNA & LEAD
7	6SP-8590-046	1	SCREW (MOUNTS ANTENNA STANDOFF TO MOTHERBOARD)
8	6SP-8238-190	1	ANTENNA STANDOFF (LONG)
9	6SP-8590-037	1	ANTENNA STANDOFF (SHORT 3/16)
10	691-PCB1-0B1	1	MOTHERBOARD
11	6SP-8590-036	3	STANDOFF-3/16 (MOUNTS MOTHERBOARD)
12	6SP-8590-044	3	SCREW (MOUNTS MOTHERBOARD)
13	691-PCB1-024	1	R2LC COMMAND BOARD
14	691-PCB1-022	1	REVERSING UNIT 104E (CONVENTIONAL)
15	691-PCB1-040	1	RAILSOUNDS POWER SUPPLY (COMMAND)
16	691-PCB1-0AD	1	RAILSOUND C-420 GENERIC DELAWARE & HUDSON, LEHIGH VALLEY AND NICKEL PLATE ROAD
	691-PCB1-OF3	1	MONON - COMMAND
	691-PCB1-OF6	1	NEW HAVEN - COMMAND
17	818-5015-156	1	STANDARD DIESEL SOUND/HEAT SINK ASSEMBLY (CONVENTIONAL) DELAWARE & HUDSON, LEHIGH VALLEY, MONON, NEW HAVEN, SERVICE STATION, JC PENNEY LEHIGH & HUDSON RIVER
18	6SP-8590-028	1	SMOKE UNIT COMPLETE
19	6SP-8590-029	1*	SMOKE UNIT FUNNEL (NOT INCLUDED W/ COMPLETE SMOKE UNIT)
20		1*	SMOKE UNIT MOUNTING BRACKET LOWER (COMPLETE INCLUDED ON FRAME)
21		1	SMOKE UNIT MOUNTING BRACKET (UPPER)
22	6SP-8238-210	4	SCREW (MOUNTS BRACKET TO SMOKE UNIT AND BRACKET TO FRAME)
23		*	SCREW M2.9X4.7 (MOUNTS UPPER BRACKET TO LOWER BRACKET - SMOKE UNIT)
24	610-9001-030	2	WIRE NUT
25	6SP-8590-034	1	WIRE HARNESS ASSEMBLY
26	6SP-8590-035	1	WIRE HARNESS ASSEMBLY



C-420 ALCO FRAME AND SPEAKER ASSEMBLY

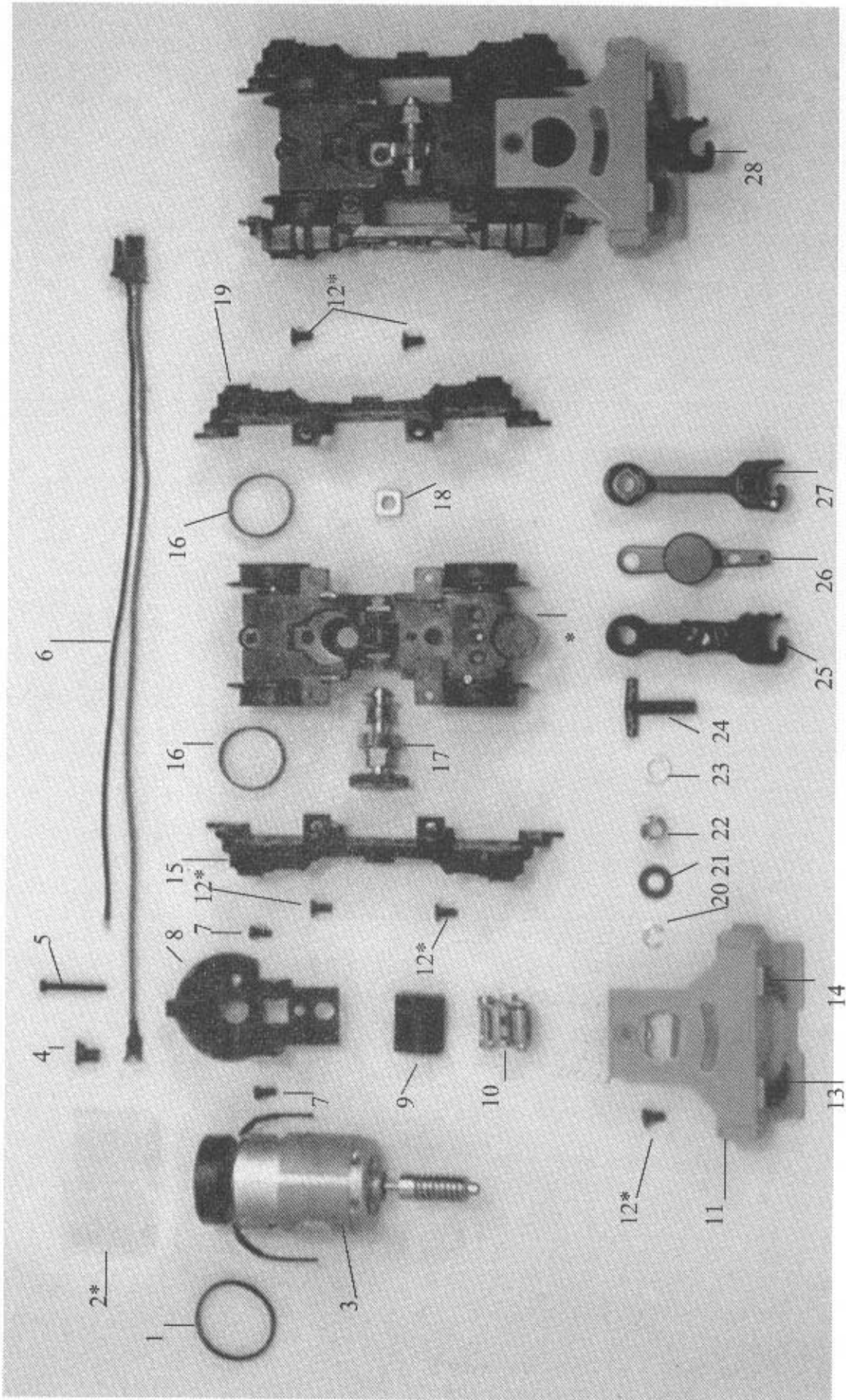


C-420 ALCO FRAME & SPEAKER ASSEMBLY

REF. NO.	PART NUMBER	QUANTITY		DESCRIPTION
		PER UNIT		
1	6SP-8238-211	1		SCREW (SMALL-MOUNTS LAMP CONTACT TO FRAME)
2	6SP-8238-200	1		SCREW (MOUNTS LAMP CONTACT TO FRAME)
3	6SP-8590-031	1		LIGHT PAD BOARD & ANTENNA ASSEMBLY
4	6SP-8590-042	4		SCREW (LONG- MOUNTS CAB TO CHASSIS)
5	6SP-8238-211	6		SCREW- SWITCH MOUNTING
6	625-3664-303	3		SWITCH
7	6SP-8590-014	1		FRAME (COMPLETE W/COMPONENTS SHOWN)
8	6SP-8950-043	4		SCREW (SHORT-MOUNTS CAB TO CHASSIS)
9	6SP-8238-209	4		SCREW (SPEAKER MOUNTING)
10	6SP-8238-212	1		SPEAKER W/LEAD & TERMINALS
11	6SP-8238-210	4		SCREW (MOUNTS FUEL TANK)
12	6SP-8590-015	1		FUEL TANK (BLACK) LEHIGH VALLEY, MONON NEW HAVEN NICKEL PLATE ROAD
	6SP-8591-010	1		FUEL TANK (GREY) DELAWARE & HUDSON
13	610-8007-180	1		HEX NUT (MOUNTS POTENTIOMETER)
14	610-8008-170	1		WASHER (MOUNTS POTENTIOMETER)
15	6SP-8590-032	1		POTENTIOMETER (VOLUME CONTROL)
16		1*		SMOKE UNIT MOUNTING BRACKET (INCLUDED ON COMPLETE FRAME)



C-420 ALCO MOTOR TRUCK ASSEMBLY



S45: 1-29



* PARTS NOT AVAILABLE

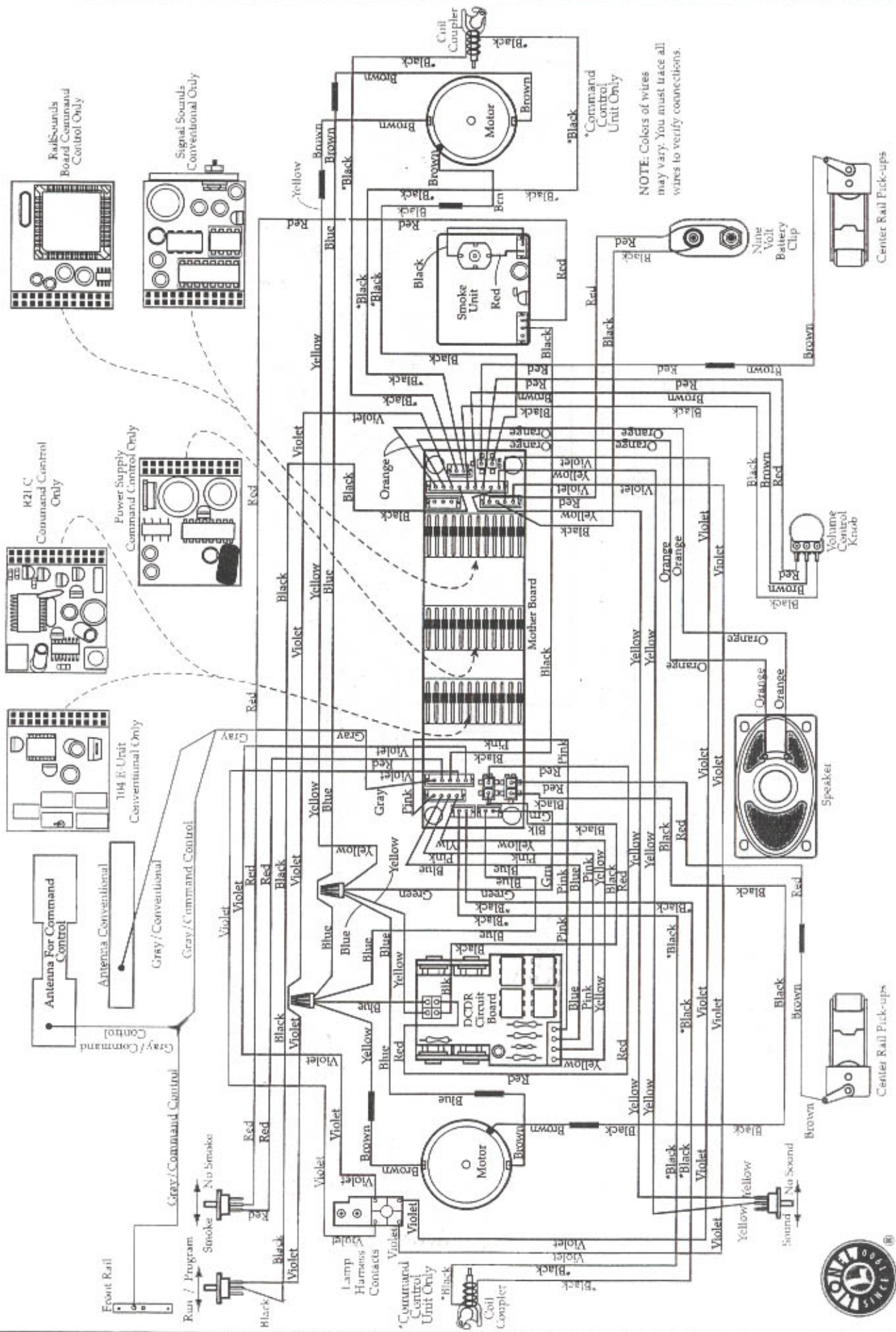
C-420 ALCO MOTOR TRUCK ASSEMBLY

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	600-0222-108	1	TRACTION TIRE (MOTOR SHIELD SUPPORT)
2		1	MOTOR SHIELD (MYLAR) *NOTE NOT AVAILABLE
3	6SP-8590-030	1	MOTOR
4	6SP-8590-022	1	COLLECTOR BUSHING
5	6SP-8590-040	1	SCREW (MOUNTS COLLECTOR ASSEMBLY)
6	6SP-8590-033	1	COLLECTOR WIRE ASSEMBLY
7	6SP-8238-144	2	SCREW (MOUNTS MOTOR HOUSING TO MOTOR)
8	6SP-8590-051	1	MOTOR HOUSING
9	6SP-8590-021	1	COLLECTOR INSULATION
10	6SP-8590-020	1	COLLECTOR ASSEMBLY
11	6SP-8591-011	1	PILOT (GRAY) D&H
	6SP-8590-017	1	PILOT (BLACK) MONON, N.H. *NOTE NICKEL PLATE ROAD AND LEHIGH VALLEY PILOT NOT AVAILABLE
12		5	SCREW 2.9X4.0MM FLAT HEAD PHILLIPS *NOTE NOT AVAILABLE
13	6SP-8590-023	1	HOSE (4) ASSEMBLY FOR PILOT
14	6SP-8590-024	1	HOSE (2) ASSEMBLY FOR PILOT
15	6SP-8591-012	1	TRUCK SIDE (RIGHT HAND) D&H (GRAY)
	6SP-8590-018	1	TRUCK SIDE (RIGHT HAND) L.V. N.H. NPR (BLACK) *NOTE SILVER SIDES NOT AVAILABLE-MONON
16	610-8596-206	2	TRACTION TIRE
17	6SP-8590-025	1	GEAR ASSEMBLY
18	6SP-8238-149	1	WORM SHAFT GEAR BUSHING
19	6SP-8590-019	1	TRUCK SIDE (LEFT HAND) L.V. N.H. NPR (BLACK)
	6SP-8591-013	1	TRUCK SIDE (RIGHT HAND) D&H (GRAY) *NOTE SILVER SIDES NOT AVAILABLE
20	690-671M-022	1	C-CLIP
21	6SP-8238-136	1	FIBER WASHER
22	6SP-8238-134	1	COUPLER CENTERING SPRING
23	6SP-8238-139	1	WASHER
24	6SP-8238-127	1	PIVOT SHAFT
25	610-8855-550	1	COIL COUPLER/TERMINAL ASSEMBLY
26	6SP-8590-027	1	UNCOUPLER ARM ASSEMBLY (CONVENTIONAL)
27	6SP-8590-026	1	COUPLER ARM ASSEMBLY (CONVENTIONAL)
28	6SP-8591-016	1	MOTOR TRUCK COMPLETE (D&H)
	6SP-8592-016	1	MOTOR TRUCK COMPLETE (L.V.)
	6SP-8506-016	1	MOTOR TRUCK COMPLETE (MONON)
	6SP-8508-016	1	MOTOR TRUCK COMPLETE (N.H.)
	6SP-8590-016	1	MOTOR TRUCK COMPLETE (NPR)

*NOTE: MOTOR TRUCK AND WHEEL ASSEMBLY NOT AVAILABLE

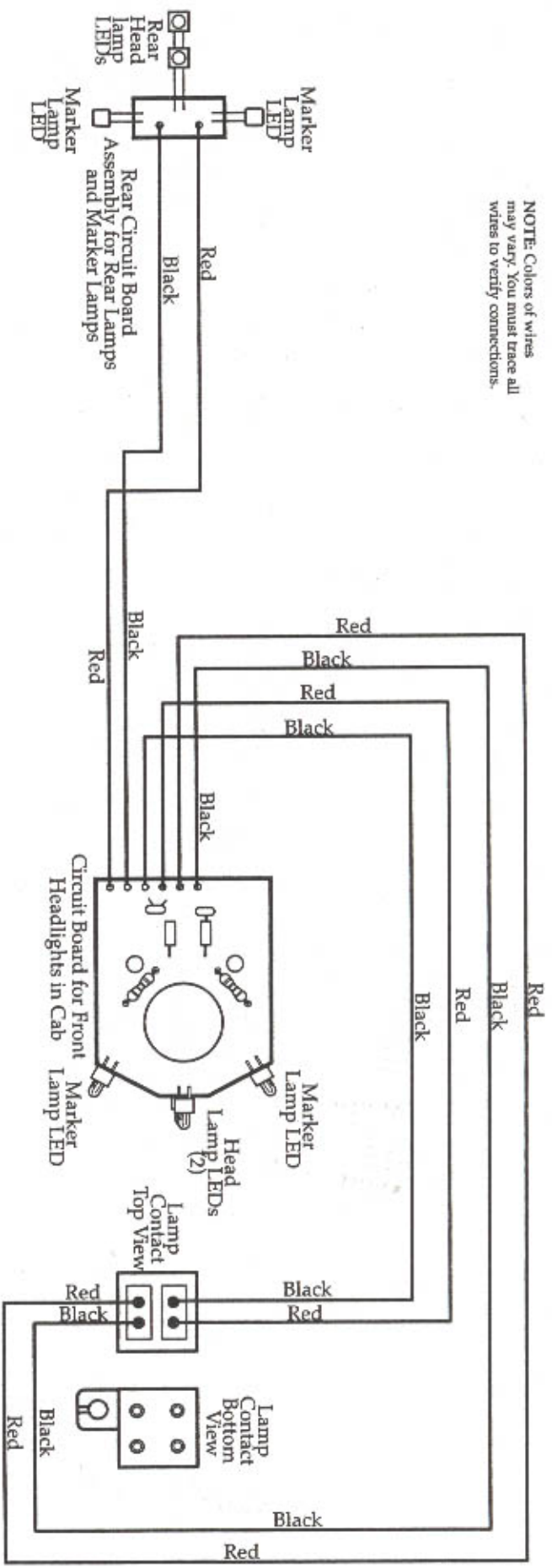


C-420 DIESEL LOCOMOTIVE CONVENTIONAL AND COMMAND CONTROL (NON-ODYSSEY) PICTORIAL WIRING DIAGRAM

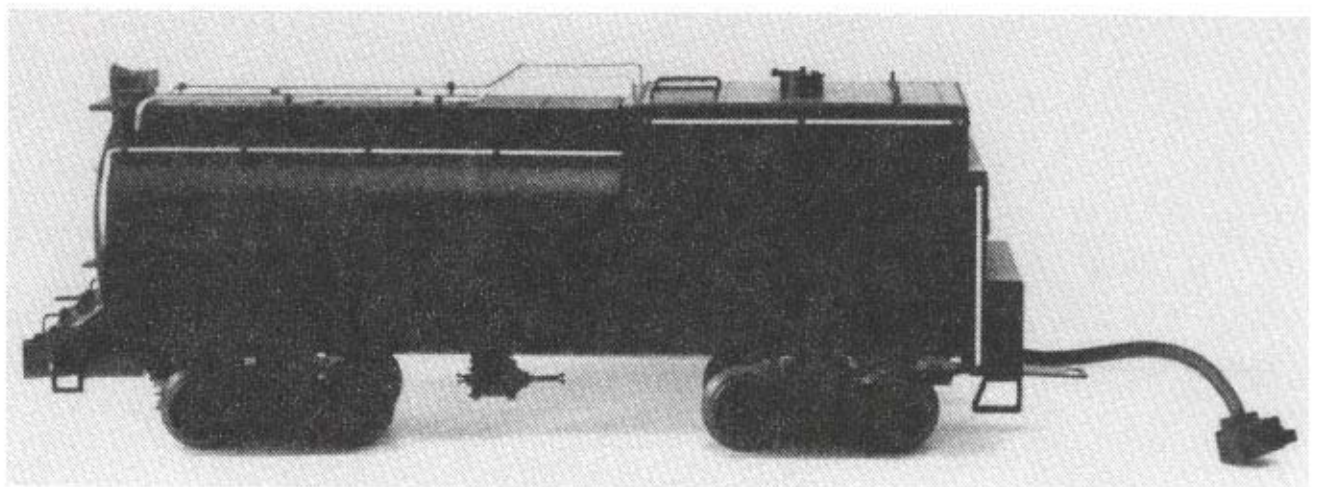
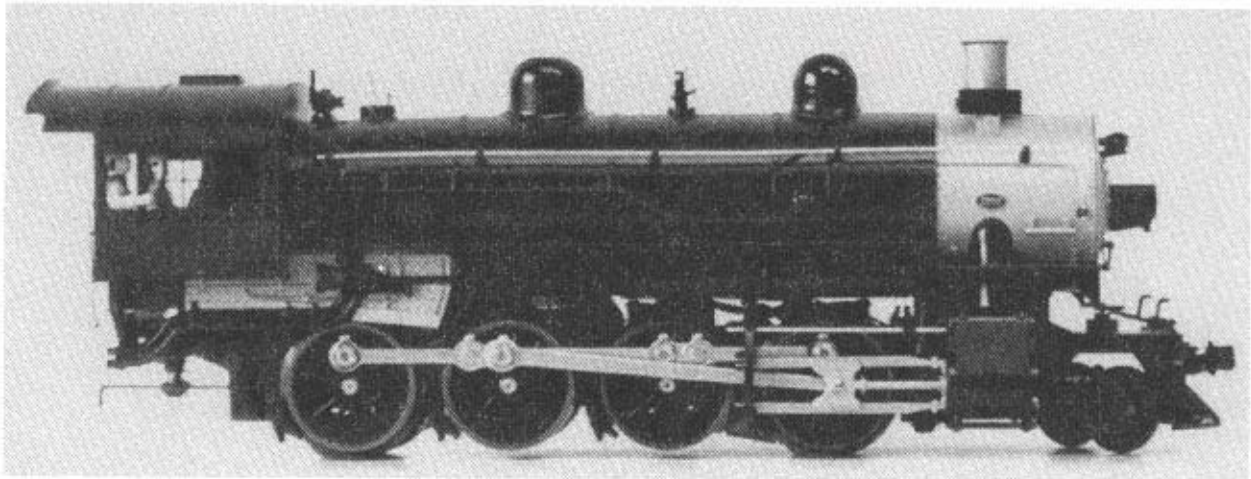


C-420 DIESEL LOCOMOTIVES CONVENTIONAL AND COMMAND CONTROL (NON-ODYSSEY) HEADLIGHT AND MARKER LAMPS PICTORIAL WIRING DIAGRAM

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

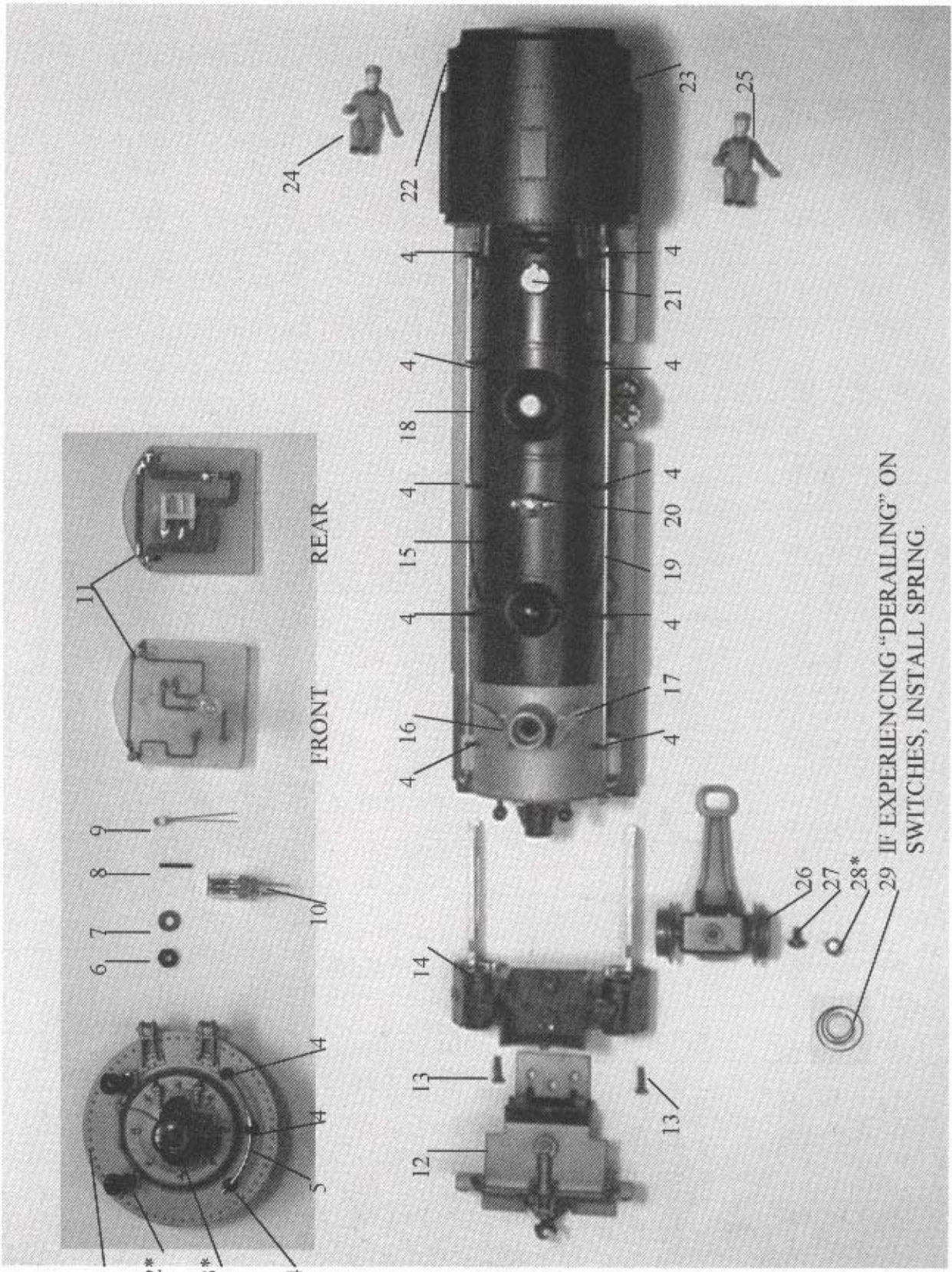


HARRIMAN CONSOLIDATION 2-8-0



6-28036 SOUTHERN PACIFIC – COMMAND “2685”
6-28037 SOUTHERN PACIFIC – CONVENTIONAL “2686”
6-28038 UNION PACIFIC – COMMAND “324”
6-28039 UNION PACIFIC – CONVENTIONAL “326”

HARRIMAN CONSOLIDATION 2-8-0 CAB ASSEMBLY



HARRIMAN CONSOLIDATION 2-8-0 CAB ASSEMBLY

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	6SP-8036-015	1	BOILER FRONT ASSEMBLY "2685" (SOUTHERN PACIFIC-COMMAND)
	6SP-8037-015	1	BOILER FRONT ASSEMBLY "2686" (SOUTHERN PACIFIC -CONVENTIONAL)
	6SP-8038-015	1	BOILER FRONT ASSEMBLY "324" UNION PACIFIC-COMMAND)
	6SP-8039-015	1	BOILER FRONT ASSEMBLY "326" (UNION PACIFIC-CONVENTIONAL
2		2	*LED HOUSING (INCLUDED IN BOILER FRONT COMPLETE)
3		1	*HEADLIGHT LENS (INCLUDED IN BOILER FRONT COMPLETE)
4	6SP-8036-080	3	STANCHION
5	6SP-8036-028	1	BOILER FRONT HANDRAIL
6	6SP-8036-119	2	MARKER LIGHT MOUNTING NUT
7	6SP-8036-118	2	MARKER LIGHT INSULATOR
8	6SP-8036-121	2	MARKER LIGHT LED INSULATOR
9	6SP-8036-120	2	MARKER LIGHT LED
10	610-8049-300	1	LAMP (14 VOLT)
11	6SP-8036-117	1	MARKER LIGHT CIRCUIT BOARD
12	6SP-8036-305	1	PILOT
13	6SP-8036-703	2	SCREW M2.8X8.0 (MOUNTS PILOT)
14	6SP-8036-025	1	STEAMCHEST ASSEMBLY
15	6SP-8036-007	1	SOUTHERN PACIFIC "2685" CAB
	6SP-8037-007	1	SOUTHERN PACIFIC "2686" CAB
	6SP-8038-007	1	UNION PACIFIC "324" CAB
	6SP-8039-007	1	UNION PACIFIC "326" CAB
16	6SP-8036-042	1	NUMBER BOARD "2685" WITH HOUSING
	6SP-8037-042	1	NUMBER BOARD "2686" WITH HOUSING
	6SP-8038-042	1	NUMBER BOARD "324" WITH HOUSING
	6SP-8039-042	1	NUMBER BOARD "326" WITH HOUSING
	6SP-8036-041	1	PLAQUE (ONLY) "2685"
	6SP-8037-041	1	PLAQUE (ONLY) "2686"
	6SP-8038-041	1	PLAQUE (ONLY) "324"
	6SP-8039-041	1	PLAQUE (ONLY) "326"
17	6SP-8036-043	1	NUMBER BOARD "2685" WITH HOUSING
	6SP-8037-043	1	NUMBER BOARD "2686" WITH HOUSING
	6SP-8038-043	1	NUMBER BOARD "324" WITH HOUSING
	6SP-8039-043	1	NUMBER BOARD "326" WITH HOUSING
18	6SP-8036-016	1	CAB HANDRAIL WITH STANCHIONS (RH)
19	6SP-8036-017	1	CAB HANDRAIL WITH STANCHIONS (LH)
20	6SP-8036-019	1	BELL ASSEMBLY
21	6SP-8036-018	1	POP VALVE

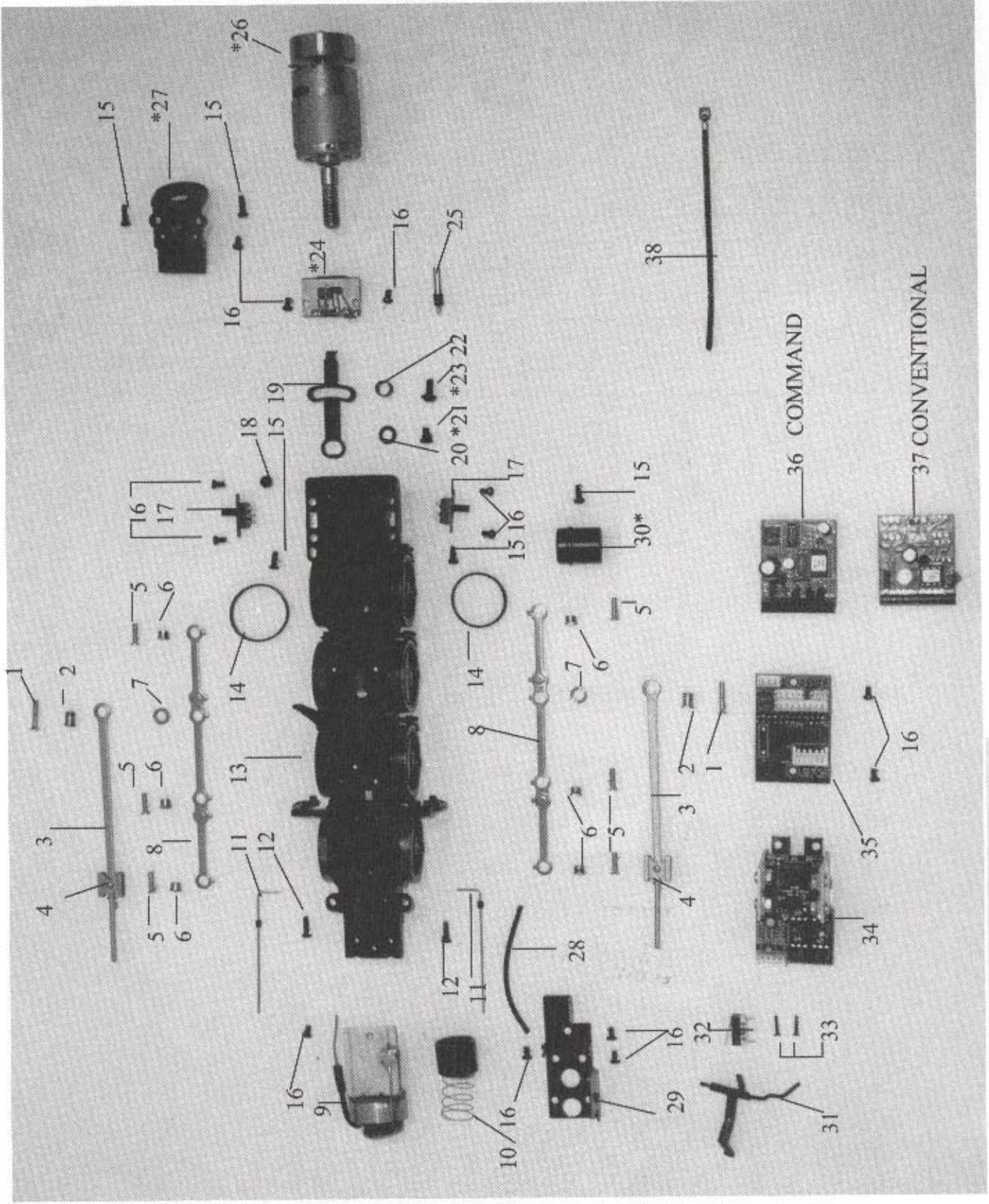


HARRIMAN CONSOLIDATION 2-8-0 CAB ASSEMBLY

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
22	6SP-8036-026	1	HANDRAIL ASSEMBLY (RH)
23	6SP-8036-027	1	HANDRAIL ASSEMBLY (LH)
24	610-8953-095	1	ENGINEER FIGURE (BLUE) NO. 1
25	620-8036-095	1	ENGINEER FIGURE (GREEN) NO. 2
26	6SP-8036-050	1	PILOT TRUCK
27	6SP-8036-700	1	SCREW M3.0X5.0
28		1	*SPRING
29	6SP-8036-051	1	PILOT TRUCK SPRING NOTE: IF EXPERIENCING "SHORTING" ON SWITCH—ADD PILOT TRUCK SPRING



HARRIMAN CONSOLIDATION 2-8-0 CHASSIS ASSEMBLY



S45: 3-5



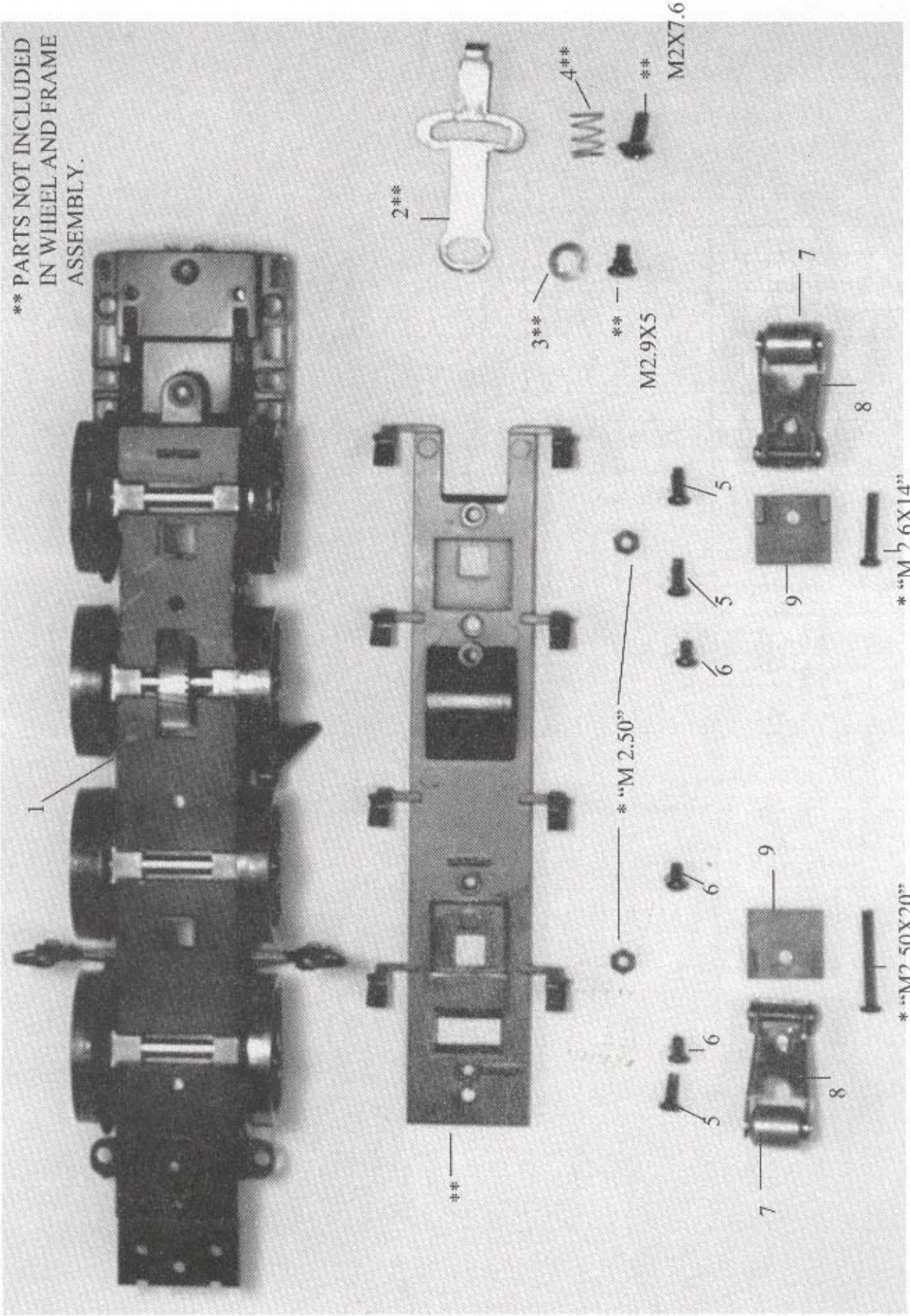
*PARTS NOT AVAILABLE

HARRIMAN CONSOLIDATION 2-8-0 CHASSIS ASSEMBLY

REF. NO.	PART NUMBER	QUANTITY		DESCRIPTION
		PER UNIT		
1	6SP-8036-312	2		ECCENTRIC CRANK SCREW
2	6SP-8036-316	2		ECCENTRIC BUSHING
3	6SP-8036-315	2		CROSSHEAD MAIN ROD ASSEMBLY (LEFT & RIGHT)
4	6SP-8036-313	2		CROSSHEAD RIVET
5	6SP-8036-319	6		SIDE ROD SCREW
6	6SP-8036-317	6		SIDE ROD BUSHING
7	6SP-8036-314	2		SIDE ROD SPACER
8	6SP-8036-320	2		SIDE ROD (LEFT & RIGHT)
9	610-8094-200	1		SMOKE UNIT
10	600-8306-213	1		SMOKE UNIT PISTON ASSEMBLY
11	6SP-8036-318	2		VALVE ROD ASSEMBLY
12	6SP-8036-703	2		SCREW 2.8X8.0
13	6SP-8036-601	1		WHEEL AND FRAME ASSEMBLY
14	6SP-8060-065	2		TRACTION TIRE
15	6SP-8036-702	5		SCREW M2.8X6.0
16	6SP-8036-701	12		SCREW M2.8X4.0
17	625-3664-303	2		MINIATURE SWITCH
18	620-8086-602	1		FRAME PLUG
19	6SP-8036-087	1		DRAWBAR
20	690-671M-023	1		WASHER
21		1		*SCREW M2.9X5
22	6SP-8036-066	1		DRAWBAR SPRING
23		1		*SCREW M2.X7.6
24		1		*FIREBOX GLOW CIRCUIT BOARD
25	610-8082-019	1		LAMP
26		1		*MOTOR
27		1		*MOTOR MOUNT
28	680-8009-136	1		SHRINK TUBE 3/32"
29	6SP-8036-201	1		SMOKE UNIT BRACKET
30		1		*AIR TANK (UNION PACIFIC ONLY)
31	6SP-8036-302	1		SMOKE LEVER
32	610-0401-162	1		CHERRY SWITCH
33	6SP-8082-303	2		SCREW (CHERRY SWITCH)
34	620-2965-031	1		DCCR W/HEAT SINK
	610-8689-131	1		HEAT SINK ONLY
35	691-PCB1-10F	1		MOTHER BOARD (ENGINE)
36	691-R2LC-C08	1		RADIO RECEIVER BOARD (COMMAND)
37	610-8252-022	1		REVERSING UNIT 104E (CONVENTIONAL)
38	610-8301-055	1		CABLE TIE (CLEAR)



HARRIMAN CONSOLIDATION 2-8-0 WHEEL AND FRAME



** PARTS NOT INCLUDED
IN WHEEL AND FRAME
ASSEMBLY.

* "M 2.6X14"

* "M2.50X20"

*PARTS NOT AVAILABLE

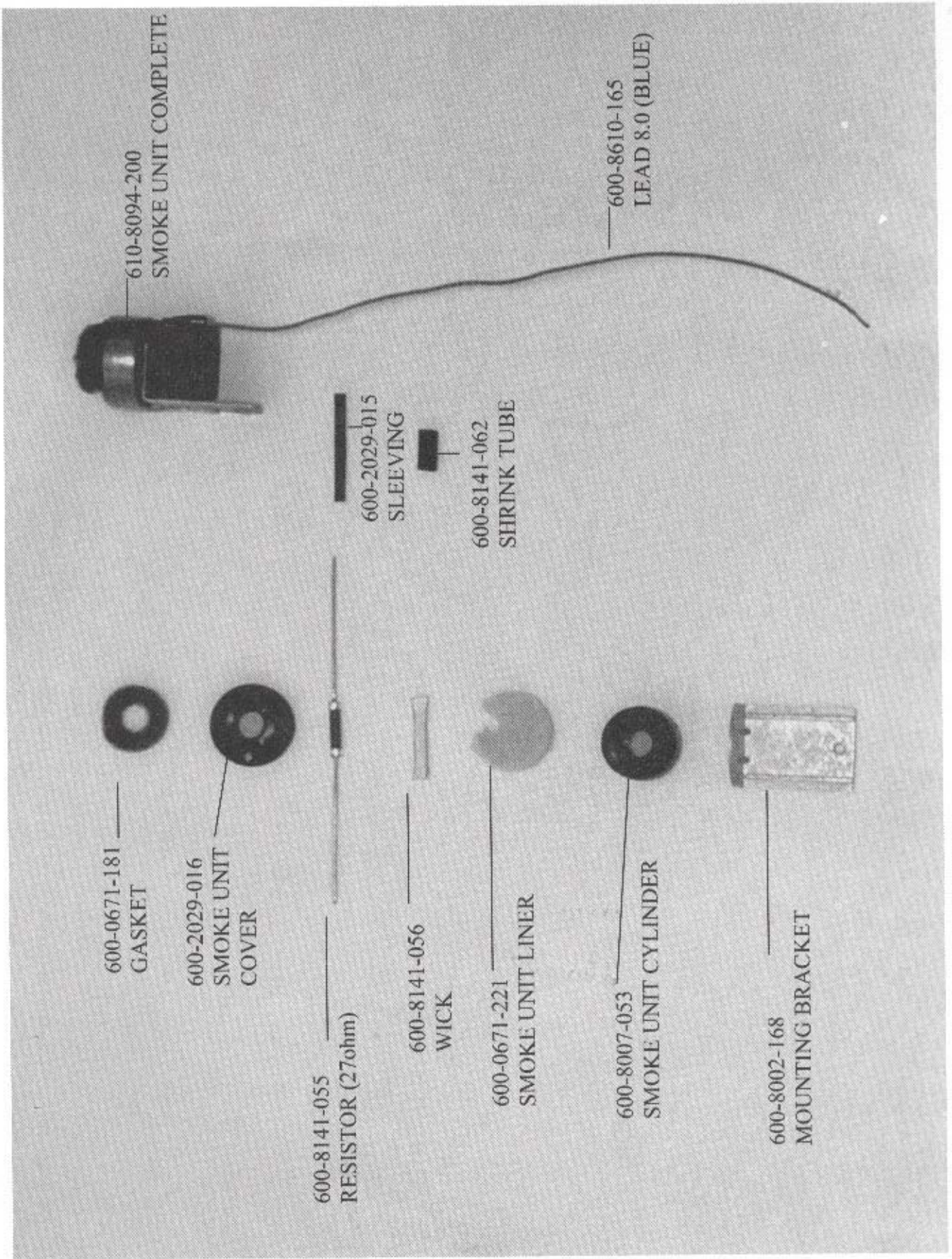


HARRIMAN CONSOLIDATION 2-8-0 WHEEL AND FRAME

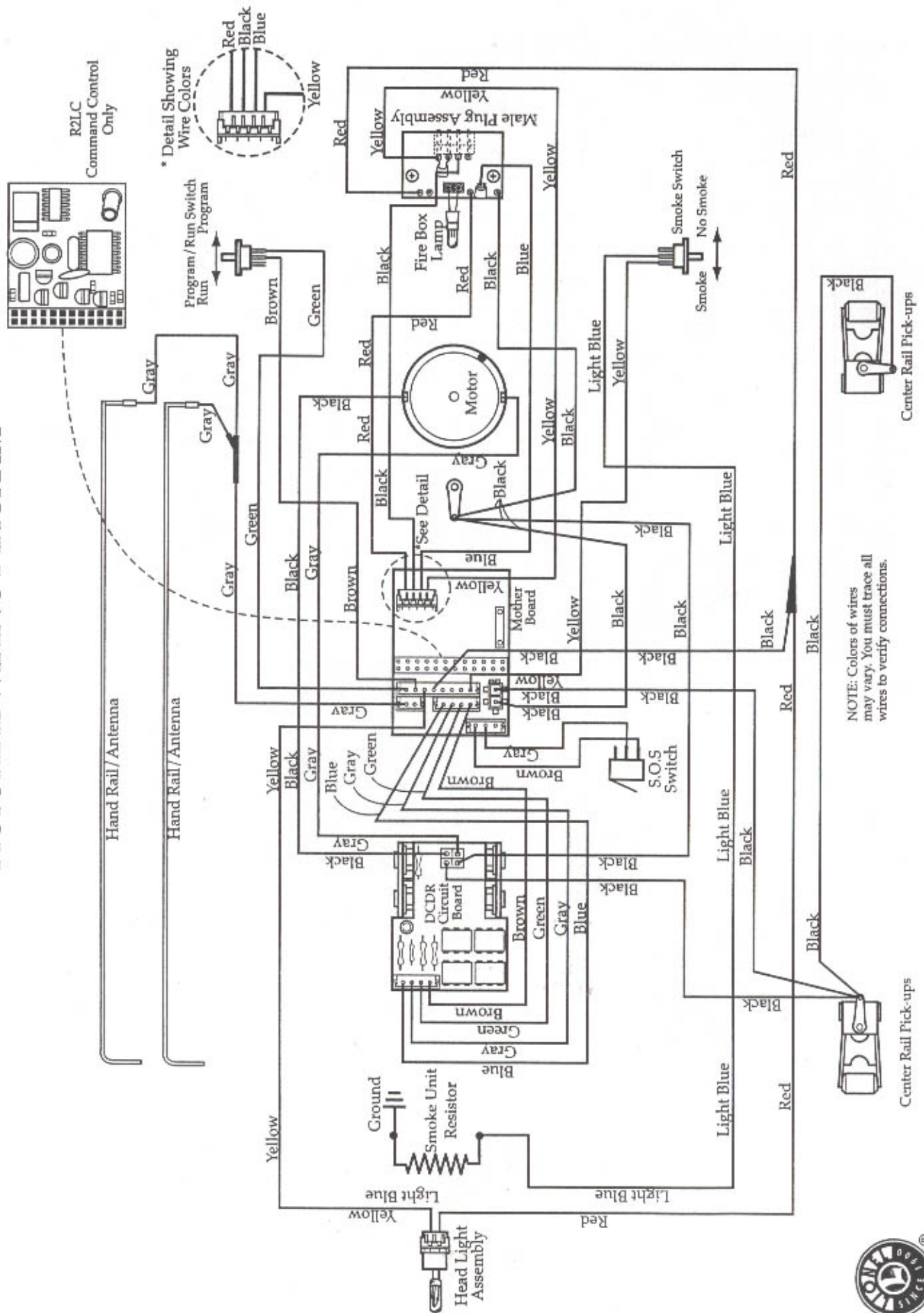
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	6SP-8036-601	1	WHEEL AND FRAME ASSEMBLY
2	6SP-8036-087	1	DRAWBAR
3	690-671M-023	1	WASHER
4	6SP-8036-066	1	SPRING
5	6SP-8036-702	3	SCREW M2.8X8.0
6	6SP-8036-701	3	SCREW M2.8X4.0
7	600-2035-140	2	COLLECTOR ROLLER
8	6SP-8036-150	2	COLLECTOR ASSEMBLY
9	6SP-8036-335	2	COLLECTOR INSULATOR



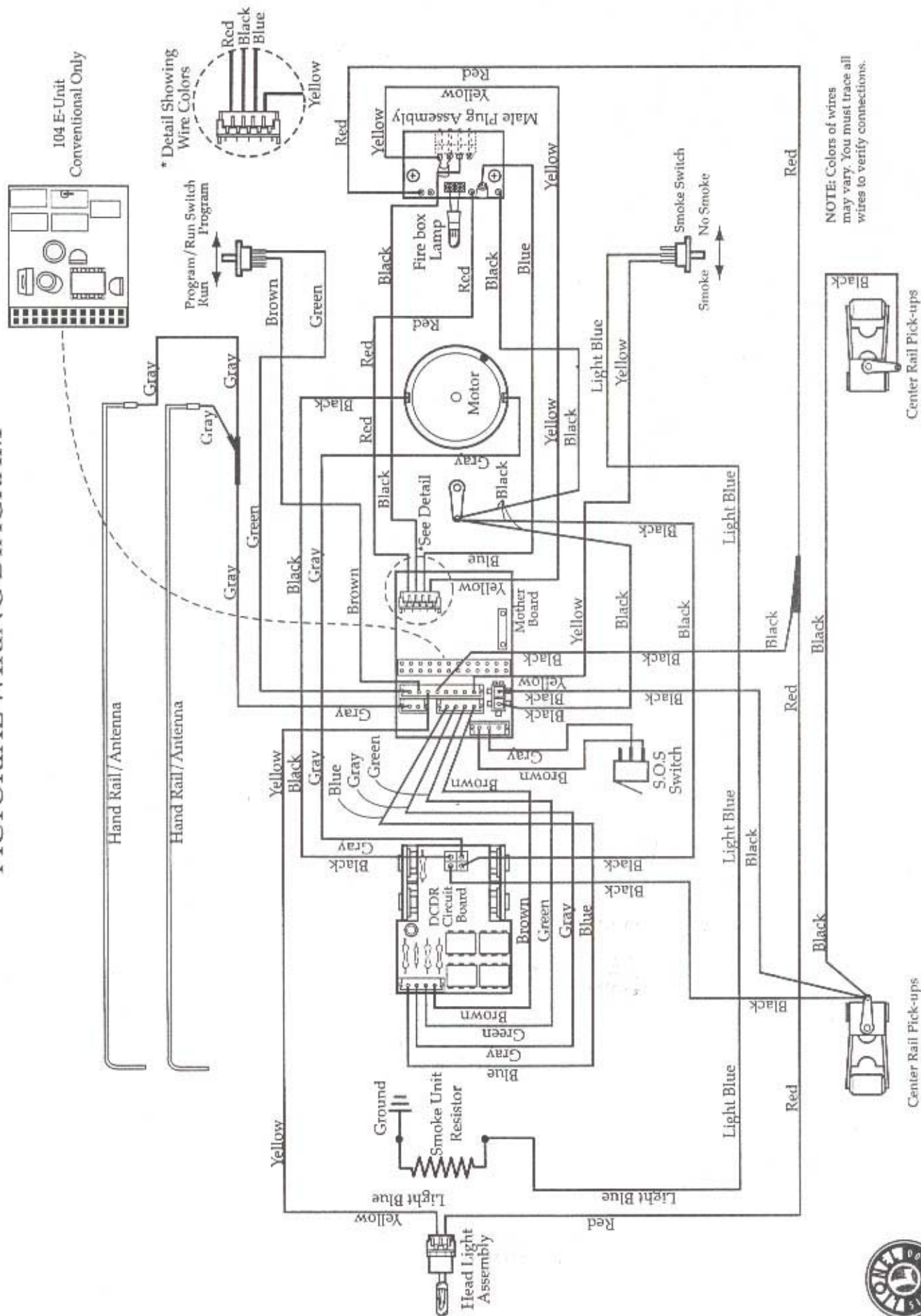
610-8094-200 SMOKE UNIT ASSEMBLY



2-8-0 CONSOLIDATION STEAM ENGINE COMMAND CONTROL (NON-ODYSSEY) PICTORIAL WIRING DIAGRAM



2-8-0 CONSOLIDATION STEAM ENGINE CONVENTIONAL (NON-ODYSSEY) PICTORIAL WIRING DIAGRAM



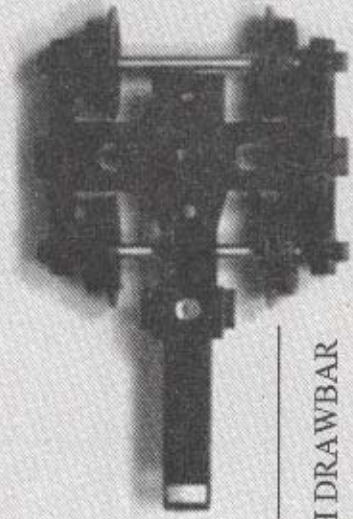
HARRIMAN CONSOLIDATION 2-8-0 TENDER

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	6SP-8036-T14	1	TENDER FRAME
2	6SP-8036-701	12	SCREW 2.8X4.0
3	6SP-8036-702	4	SCREW 2.8X6.0
4	6SP-8036-700	2	SCREW 3.0X5.0
5	610-9846-012	1	HOUSING 2 PIN MOLEX
6	691-PCB1-OFE	1	RAILSOUND 4 (SANTA FE COMMAND)
	691-PCB1-OFD	1	RAILSOUND 4 (UNION PACIFIC COMMAND)
7	691-PCB1-10C	1	MOTHERBOARD (RAILSOUND)
8	691-PCB1-04D	1	RAILSOUND POWER SUPPLY (COMMAND)
9	610-8082-156	1	STANDARD SOUNDS STEAM/HEATSINK ASSEMBLY (CONVENTIONAL)
10	610-9001-030	1	WIRE NUT
11	610-8056-536	1	SPEAKER
12	6SP-8036-T36	1	VOLUME CONTROL POTENTIOMETER
13	6SP-8036-T37	1	VOLUME CONTROL POTENTIOMETER WASHER
14	6SP-8036-T38	1	VOLUME CONTROL POTENTIOMETER NUT
15	625-3664-303	1	MINIATURE SWITCH
16	610-8049-300	1	LAMP (14 VOLT) ONLY
17	6SP-8036-T01	1	SOUTHERN PACIFIC TENDER BODY "2685"
	6SP-8037-T07	1	SOUTHERN PACIFIC TENDER BODY "2686"
	6SP-8038-T07	1	UNION PACIFIC TENDER BODY "324"
	6SP-8039-T07	1	UNION PACIFIC TENDER BODY "326"
18	6SP-8036-T11	2	OIL HATCH MAGNET
19	6SP-8036-T10	1	OIL HATCH ASSEMBLY
20	6SP-8036-T18	18	TENDER STANCHION (NEED 2 SETS)

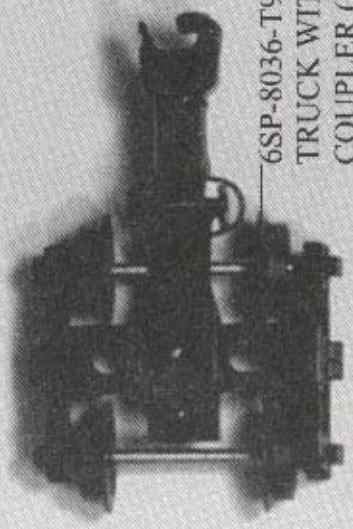


6SP-8036-T60 ANGULAR WASHER

NOTE: INSTALL ONE ON EACH TENDER TRUCK IF ROLLER PICKUP IS CATCHING ON 90 DEGREE CROSSOVERS OR SWITCHES. (SEE SERVICE NOTE)



6SP-8036-T80
TRUCK WITH DRAWBAR
(FRONT)



6SP-8036-T90
TRUCK WITH COIL
COUPLER (REAR)



6SP-8036-T56
COLLECTOR INSULATOR



6SP-8036-T57
COLLECTOR ASSEMBLY



6SP-8036-T58
COLLECTOR SPRING

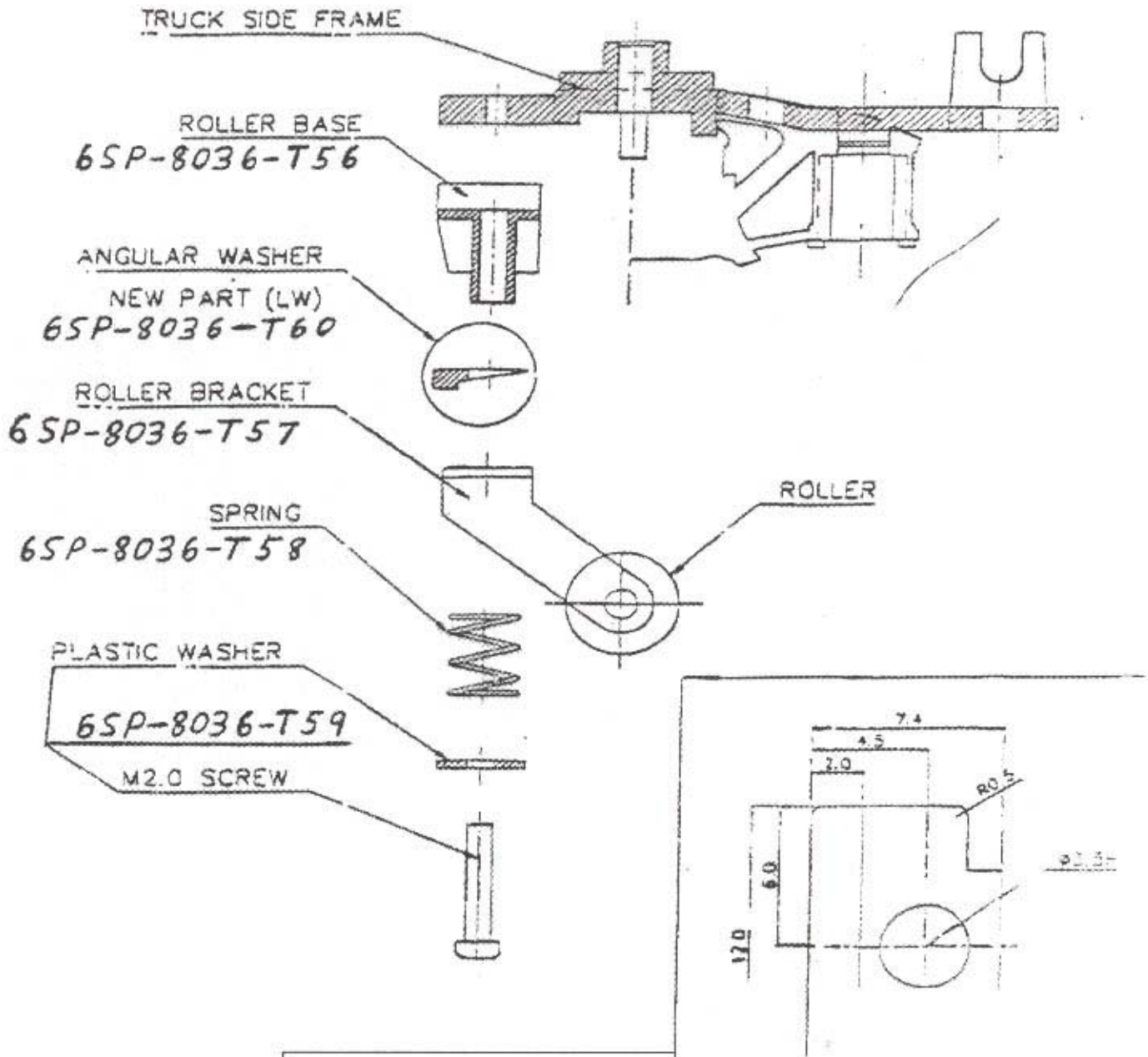


6SP-8036-T59
COLLECTOR SCREW
W/WASHER



SERVICE NOTE

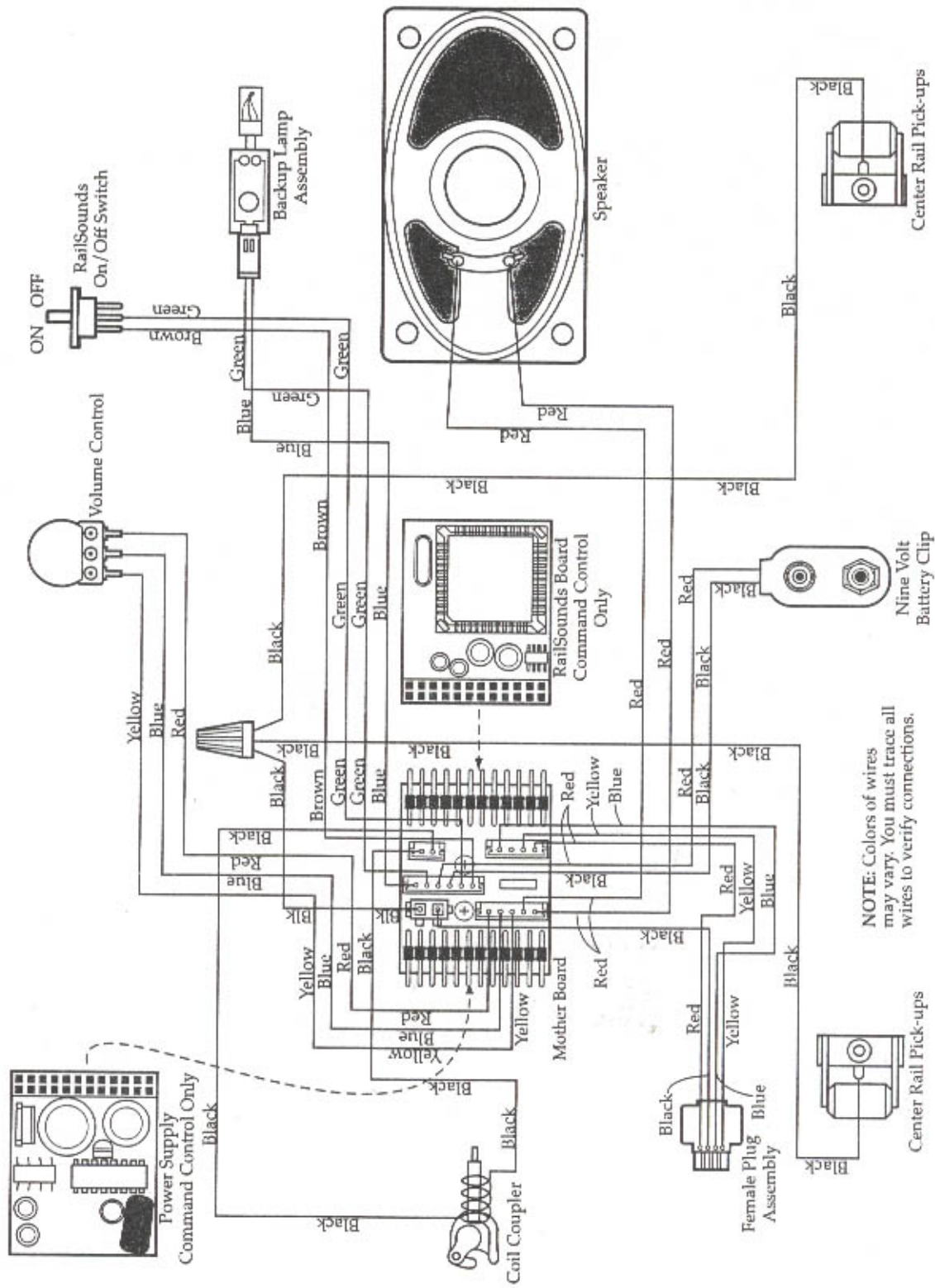
TENDER ROLLER ASSEMBLING ORDER



6SP-8036-T60
ANGULAR WASHER
NEW PART (LW)
S:4/16-T60



2-8-0 CONSOLIDATION STEAM TENDER COMMAND CONTROL (NON-ODYSSEY) WITH RAILSOUNDS PICTORIAL WIRING DIAGRAM

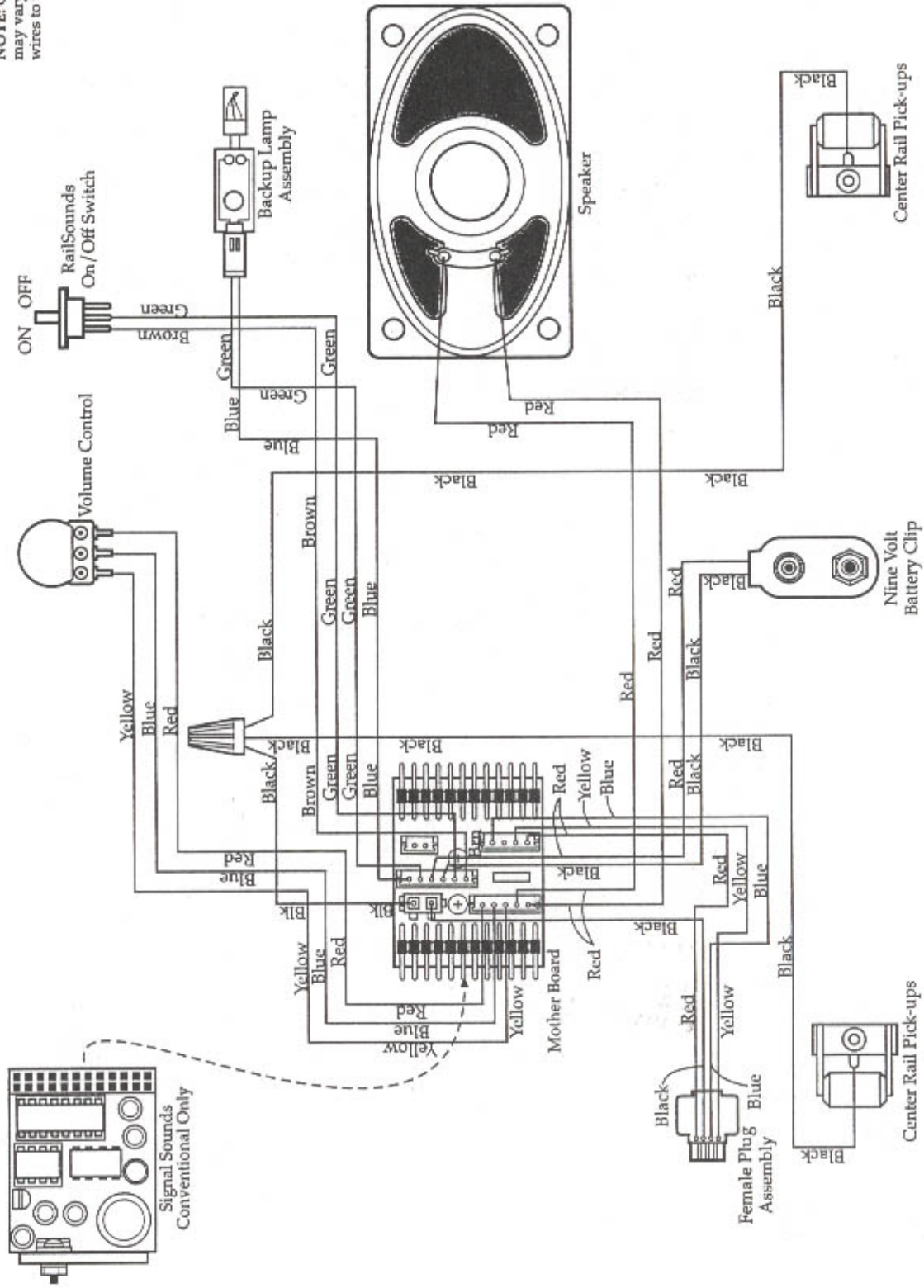


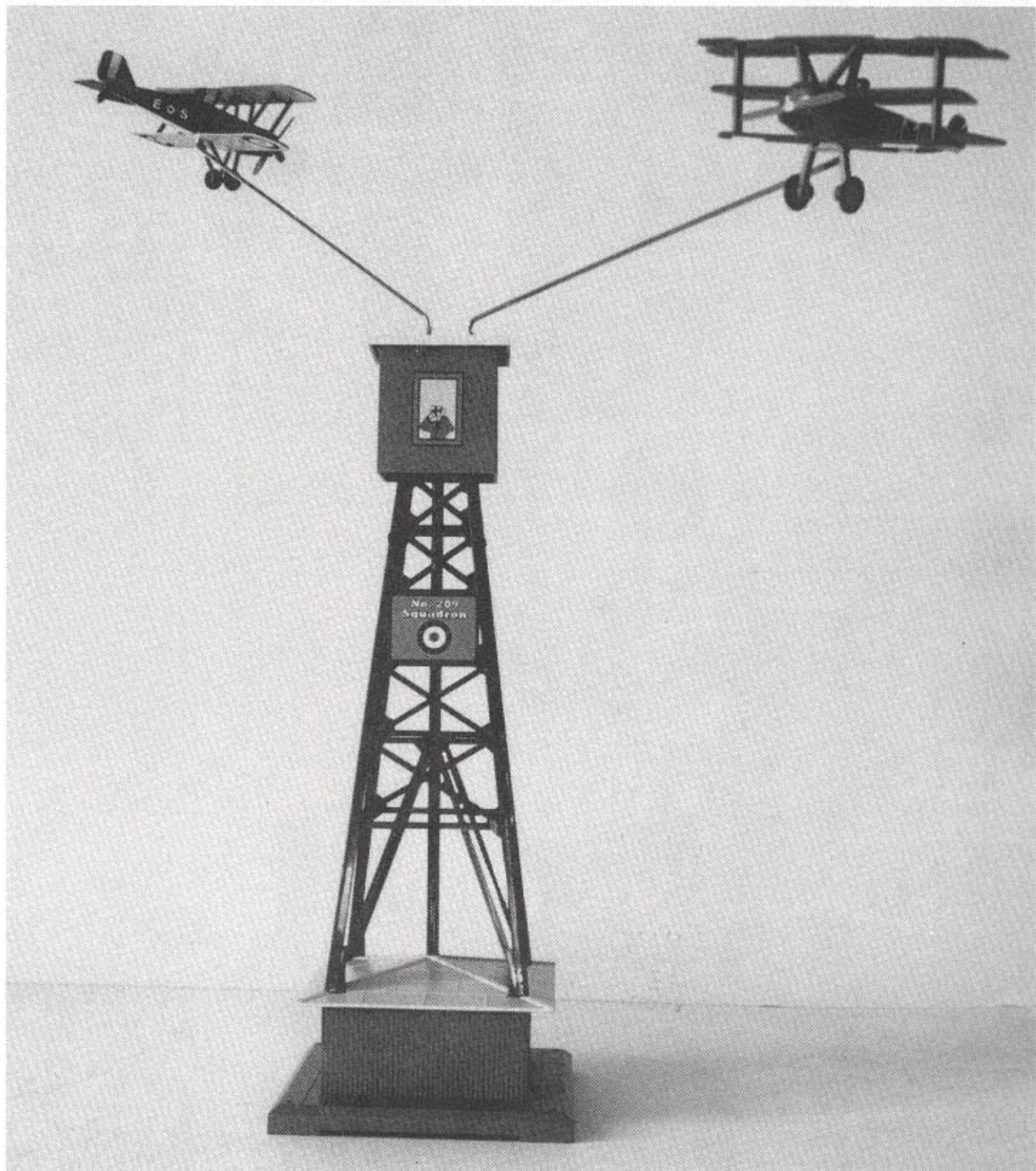
NOTE: Colors of wires may vary. You must trace all wires to verify connections.



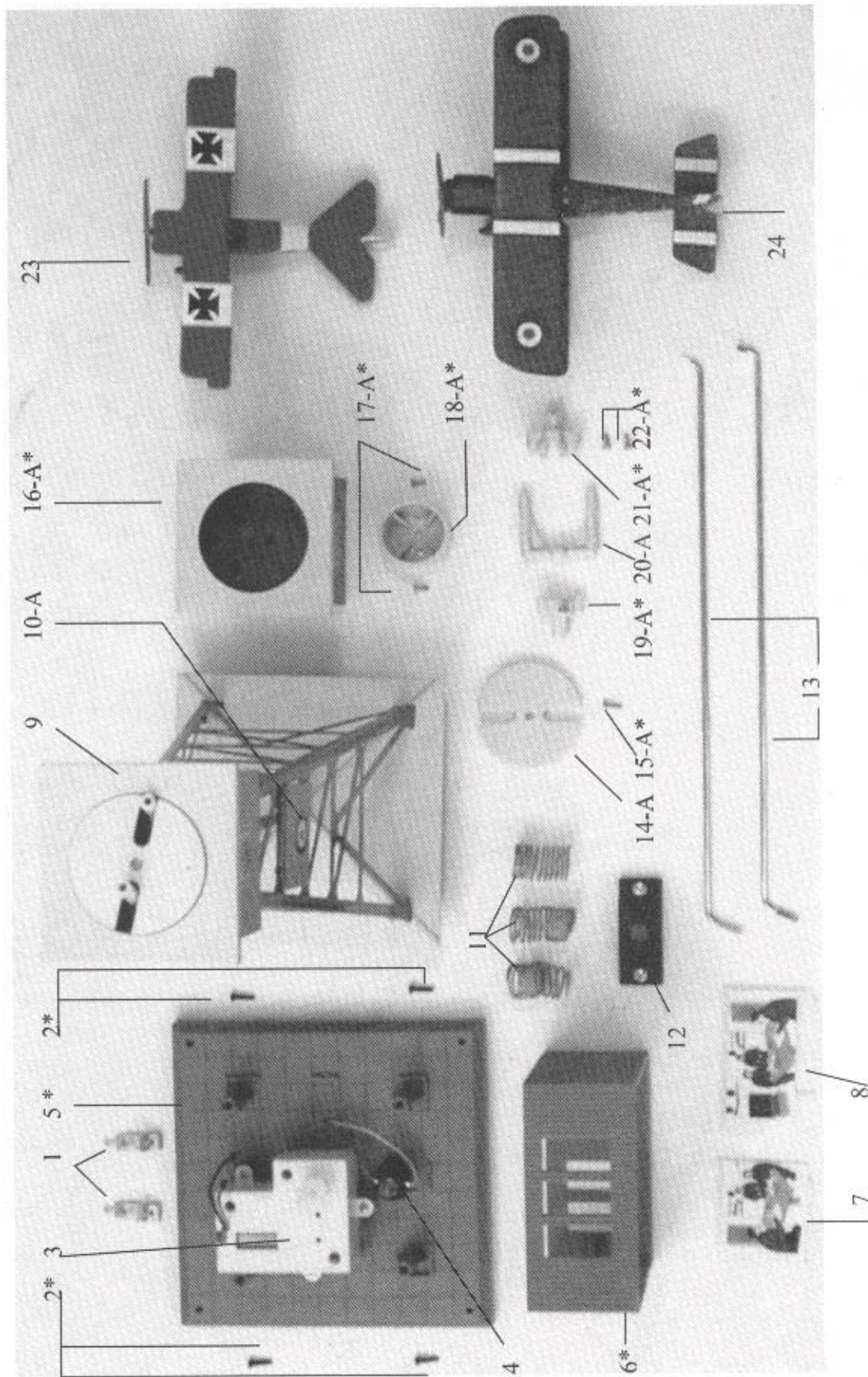
2-8-0 CONSOLIDATION TENDER CONVENTIONAL (NON-ODYSSEY) PICTORIAL WIRING DIAGRAM

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





6-14101 RED BARON PYLON



*PARTS NOT AVAILABLE

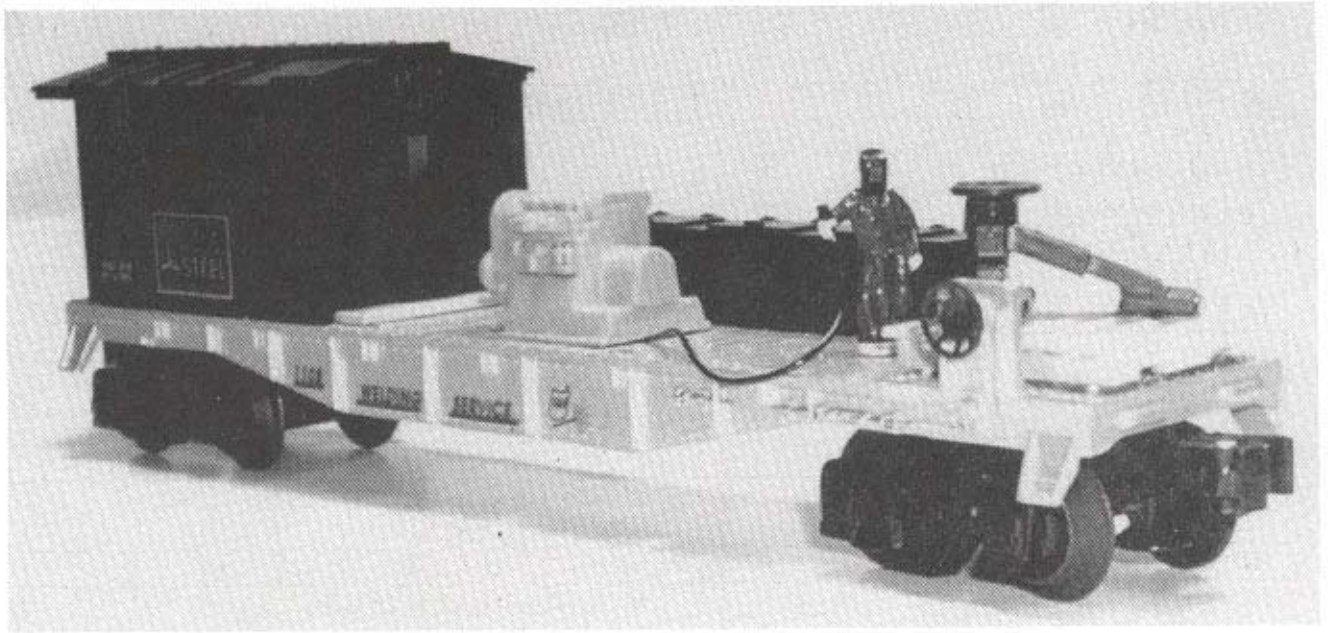


6-14101 RED BARON PYLON

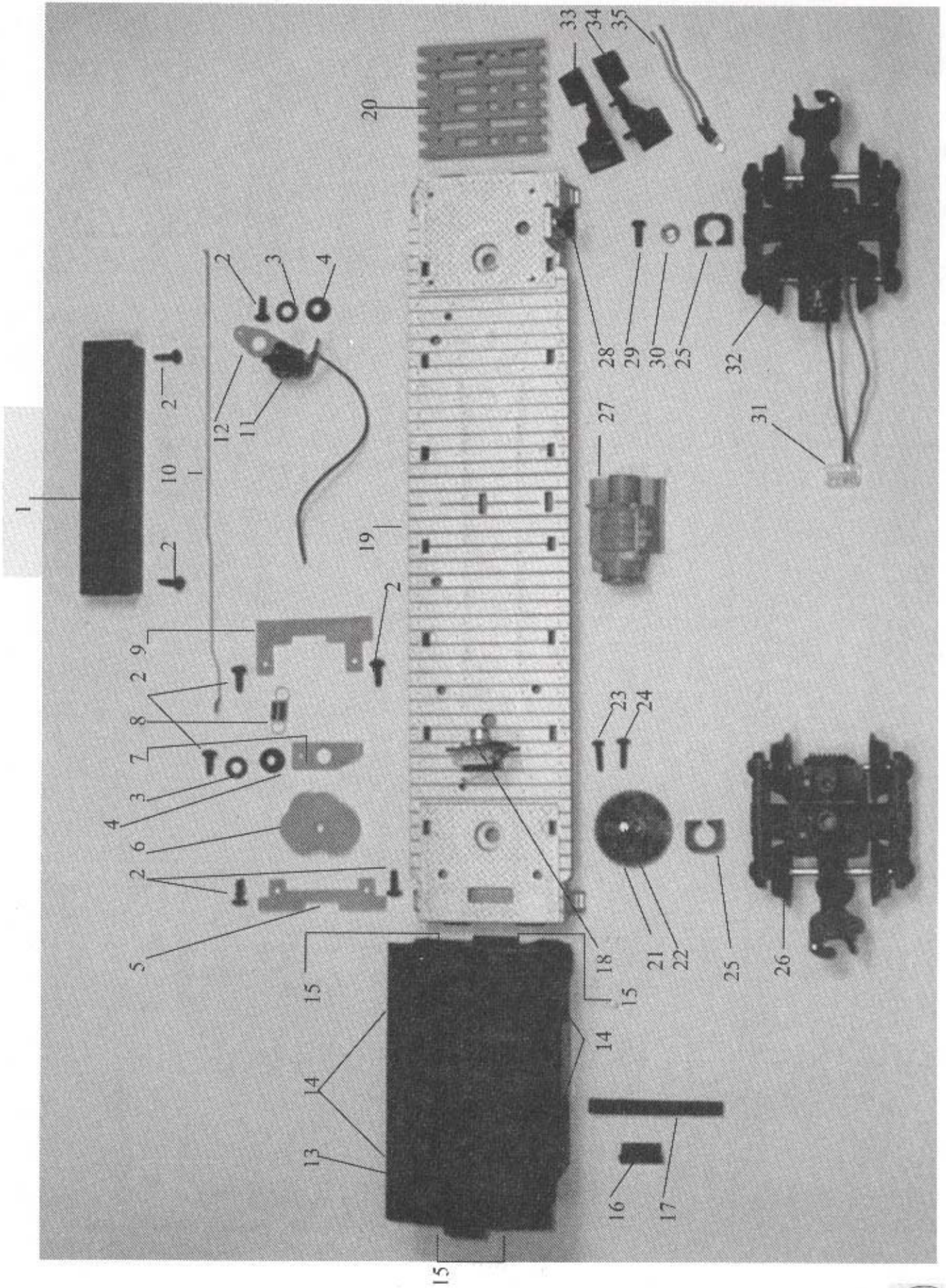
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	600-0256-030	2	TERMINAL CLIP
2		4	SCREW M9.75 (UNAVAILABLE)
3	610-4101-200	1	GEAR BOX ASSEMBLY (INCLUDES MOTOR)
4	610-4101-311	1	LAMP (18 VOLT)
5		1	BASE (UNAVAILABLE)
6		1	BOTTOM HOUSING (UNAVAILABLE)
7	610-4101-021	1	WINDOW INSERT, 2
8	610-4101-022	1	WINDOW INSERT, 3
9	610-4101-500	1	TOWER ASSEMBLY---INCLUDES ALL PARTS WITH THE LETTER "A"
10	610-4101-023	1	GERMAN SIGN
	610-4101-024	1	AMERICAN SIGN
11	600-0081-032	3	HOOK UP WIRE
12	600-0190-001	1	CONTROL SWITCH
13	610-4101-015	2	MOUNTING ROD
14	610-4101-017	1	MOUNTING ARM RETAINER
15		1	SCREW M7.55 (UNAVAILABLE)
16		1	TOP HOUSING (UNAVAILABLE) INCLUDED IN TOWER ASSEMBLY
17		2	SCREW M5.75 (UNAVAILABLE)
18		1	MOUNTING ARM CUP (UNAVAILABLE)
19		1	MOUNTING ARM COUPLING (UNAVAILABLE)
20	610-4101-016	1	MOUNTING ARM
21		1	MOUNTING ARM COUPLING (UNAVAILABLE)
22		2	SCREW M5.60 (UNAVAILABLE)
23	610-4101-020	1	RED AIRPLANE
24	610-4101-010	1	GREEN AIRPLANE



6-26707 "1180" ARC WELDING CAR



6-26707 "1108" ARC WELDING CAR



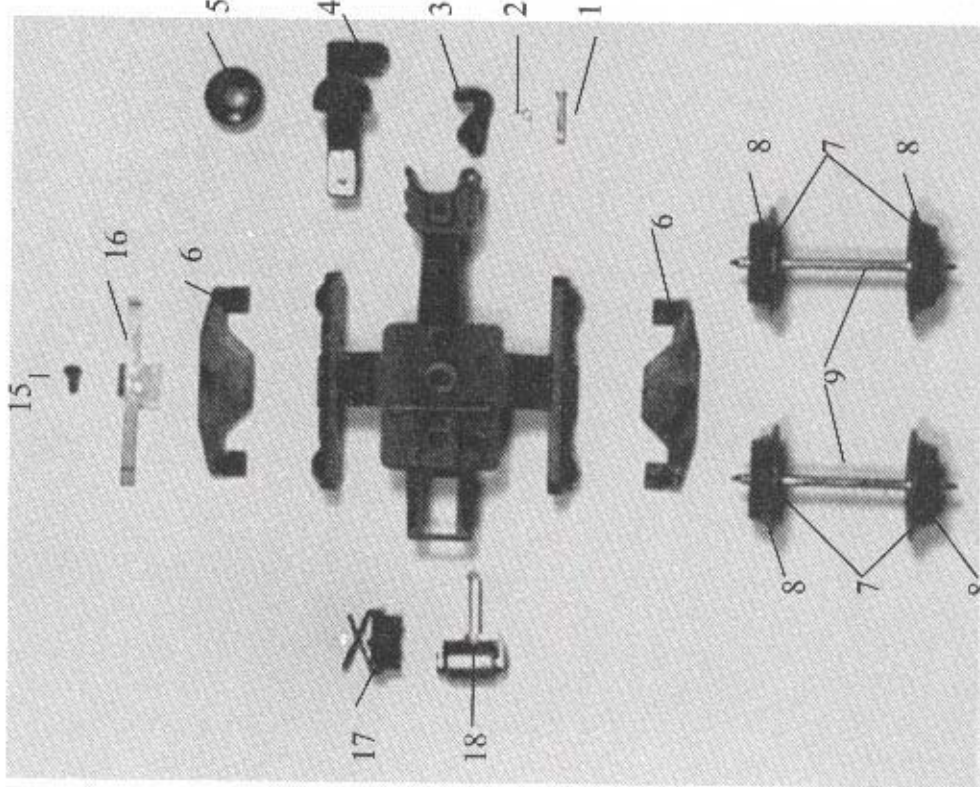
6-26707 "1108" OPERATING WELDING FLAT CAR

REF. NO.	PART NUMBER	QUANTITY		DESCRIPTION
		PER	UNIT	
1	620-6707-074	1		WORK CABOOSE TOOL BOX (BLACK)
2	690-8205-T50	8		SCREW #4X5/16
3	600-2332-109	2		FIBER WASHER
4	600-9775-350	2		SPACER
5	620-6707-055	1		CAB RETAINER CLIP (REAR)
6	620-6707-025	1		CAM
7	620-6707-035	1		CAM LEVER
8	620-6707-116	1		SPRING
9	620-6707-065	1		CAB RETAINER CLIP (FRONT)
10	620-6707-010	1		CONNECTING ROD
11	620-6707-050	1		WELDING FIGURE
12	620-6707-045	1		WELDING FIGURE LEVER
13	620-6707-017	1		CAB
14	620-6707-021	2		WINDOW STRIP (SIDE)
15	620-6707-022	2		WINDOW STRIP (END)
16	610-9737-035	1		CLIP
17	610-6776-055	1		FOAM STRIP
18	691-PCB1-100	1		PCB WELDING LIGHT
19	620-6707-007	1		FLATCAR BODY (TAMPA)
20	620-6707-026	1		SKID (BEIGE)
21	620-6961-075	1		DRIVE SPUR GEAR
22	610-6686-032	1		SHAFT
23	610-8133-050	1		SCREW #3X3/8
24	640-8251-033	1		SCREW #2 56X3/8
25	610-9738-055	2		WASHER
26	620-6961-060	1		MODULAR TRUCK ASSEMBLY W/WORM
27	620-6707-085	1		GENERATOR MOTOR (YELLOW)
28	610-9284-060	1		BRAKE WHEEL/SHAFT ASSEMBLY
29	600-8040-172	1		SCREW #4X5/16
30	690-00SE-053	1		EYELET 5/32 X 3/32
31	610-8221-040	1		HOUSING 4 CIRCUIT
32	610-9251-050	1		MODULAR TRUCK ASSEMBLY
33	620-6707-036	1		BRACKET (RIGHT HAND)
34	620-6707-046	1		BRACKET (LEFT HAND)
35	620-6707-016	1		LED/LEAD ASSEMBLY

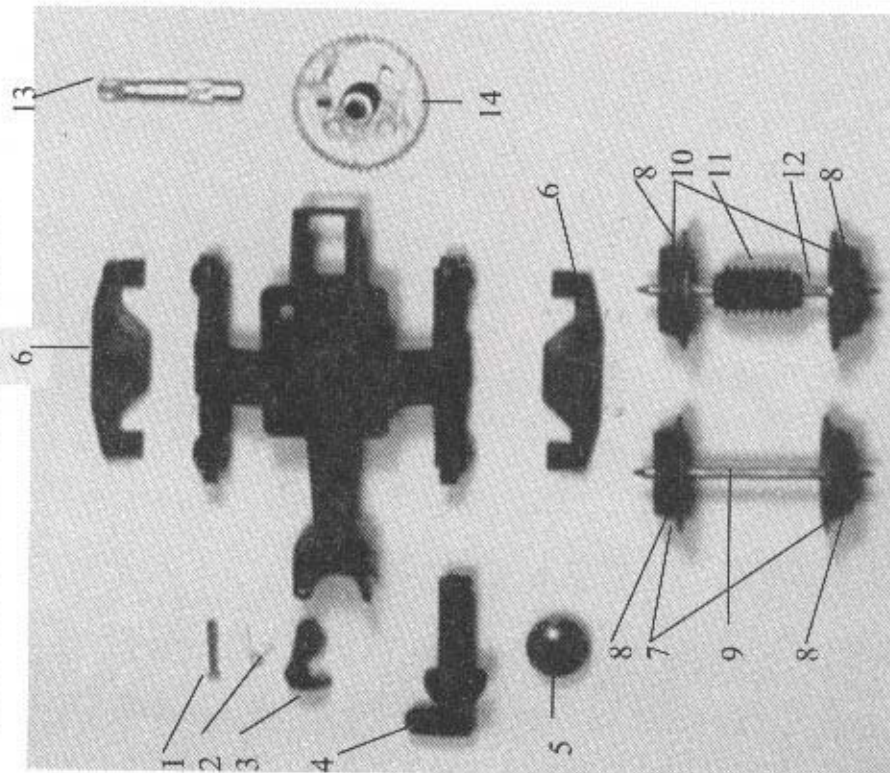


6-26707 "1180" ARC WELDING CAR

610-9251-050



620-6961-060



- D. PICK-UP ASSEMBLY (ORANGE WIRE)
- C. AXLE CONTACT STRIP (BLACK WIRE)
- B. LED / LEAD ASSEMBLY (BLUE WIRE)
- A. LED / LEAD ASSEMBLY (YELLOW WIRE)



HOUSING
4
CIRCUIT



6-26707 "1108" ARC WELDING CAR

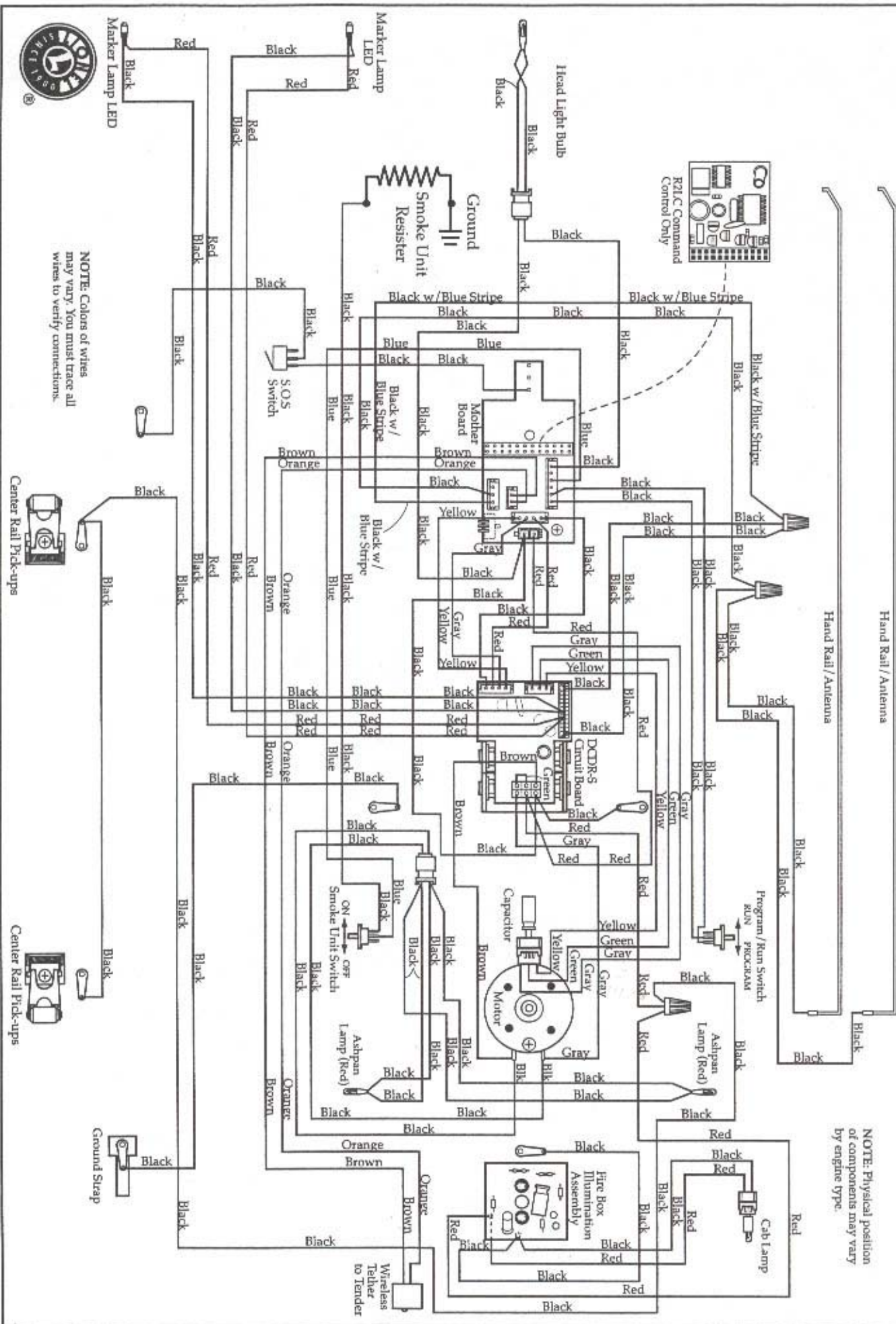
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	690-00TC-023	1	RIVET
2	600-0480-016	1	KNUCKLE SPRING
3	600-0480-008	1	KNUCKLE
4	610-9050-057	1	UNCOUPLER PLUNGER
5	610-9150-058	1	UNCOUPLER ARMATURE
6	610-9251-115	2	BEARING STRIP
7	600-9050-054	* 2	WHEEL & AXLE ASSEMBLY
8	600-9150-080	4	WHEEL
9	600-9050-053	1	AXLE (PLAIN)
10	610-6686-054	* 1	WHEEL & AXLE ASSEMBLY W/WORM
11	610-6686-045	1	WORM (MOLD)
12	610-6686-053	1	AXLE (SWAGED)
13	610-6686-032	1	SHAFT
14	620-6961-075	1	DRIVE SPUR GEAR
15	600-8002-123	1	SCREW #2X3/16
16	600-9050-156	1	AXLE CONTACT
17	600-9536-054	1	COLLECTOR BUSHING
18	600-9536-057	1	PICK-UP ASSEMBLY

***THE 620-6961-060 TRUCK REQUIRES ONE EACH**

NOTE: TRUCK FRAME IS NOT AVAILABLE



TYPICAL 2-10-4 STEAM LOCOMOTIVE WITH COMMAND CONTROL, RAIL SOUNDS AND ODYSSEY SYSTEM PICTORIAL WIRING DIAGRAM

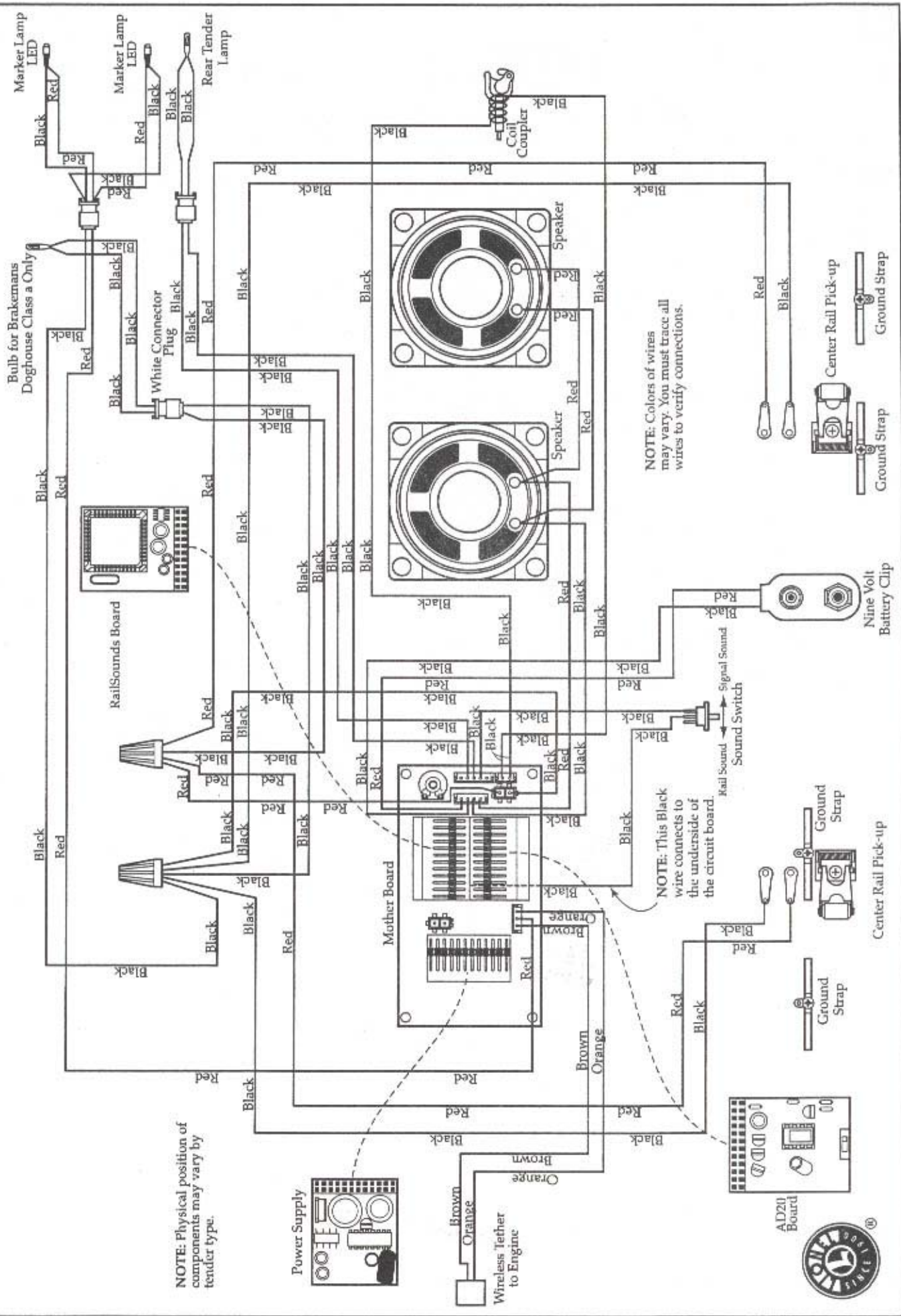


NOTE: Colors of wires may vary. You must trace all wires to verify connections.

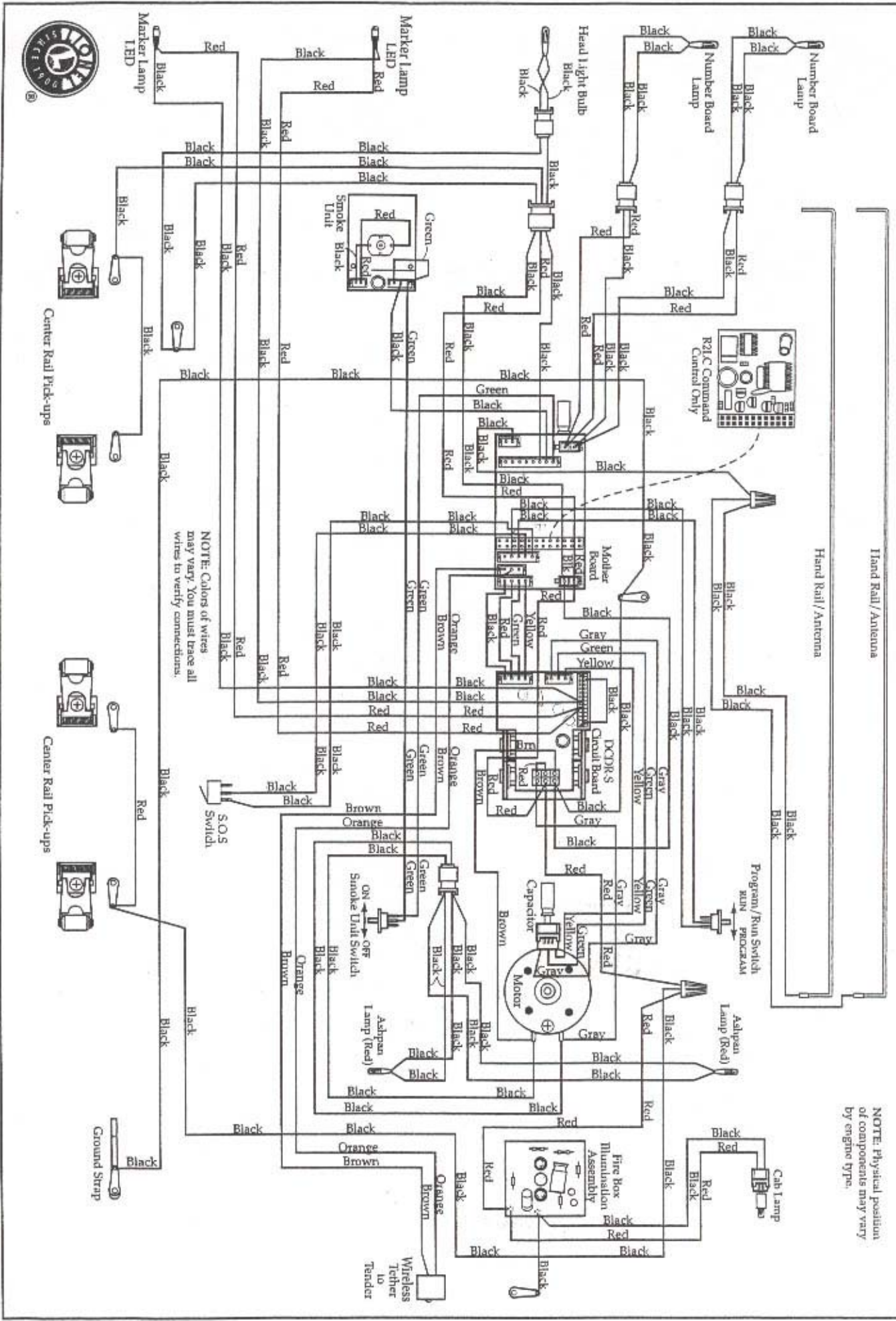
NOTE: Physical position of components may vary by engine type.



TENDER FOR TYPICAL 2-10-4 STEAM LOCOMOTIVE WITH ODYSSEY AND RAILSOUNDS PICTORIAL WIRING DIAGRAM



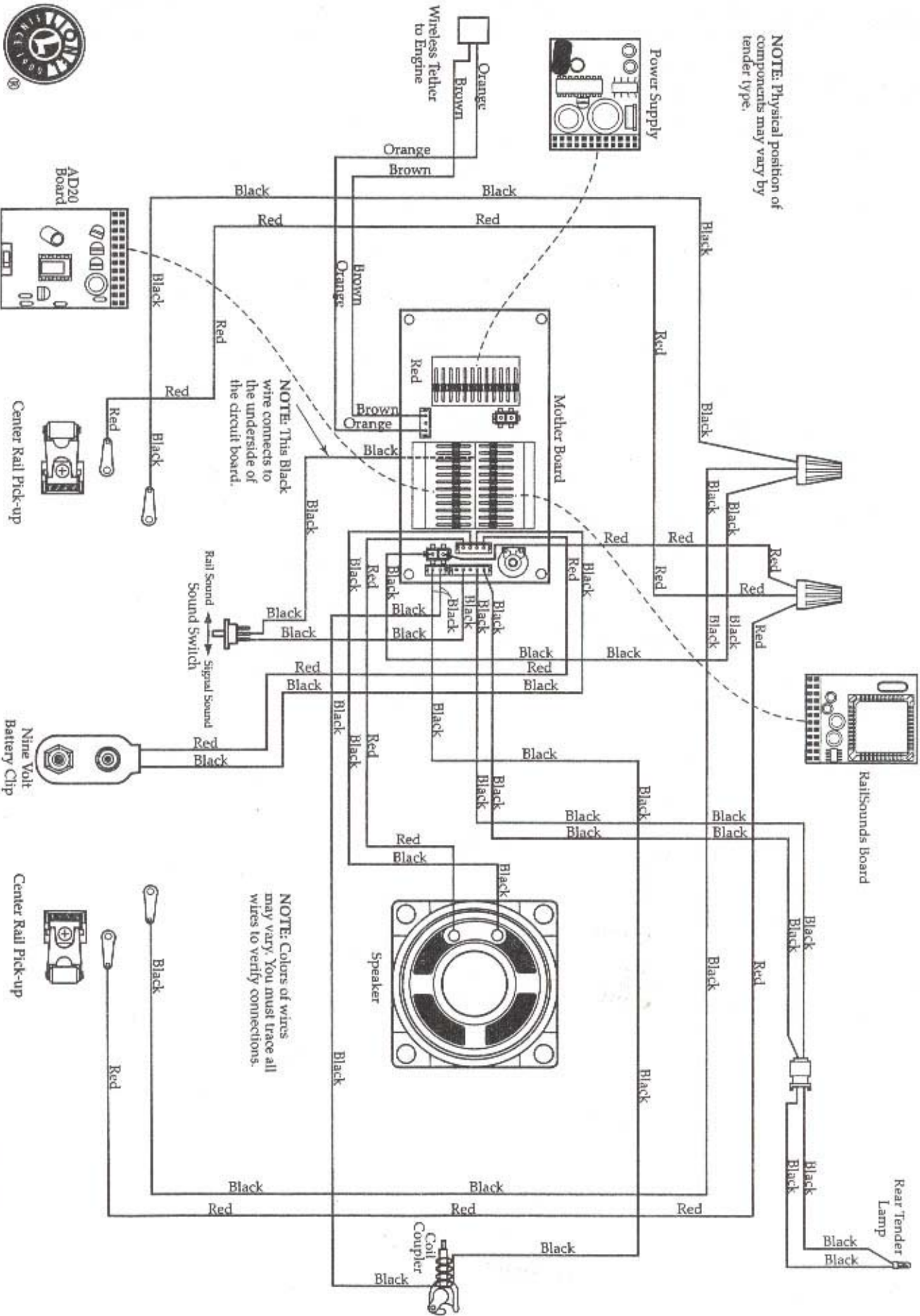
TYPICAL 2-6-6-2 ARTICULATED STEAM LOCOMOTIVE WITH COMMAND CONTROL AND ODYSSEY SYSTEM PICTORIAL WIRING DIAGRAM



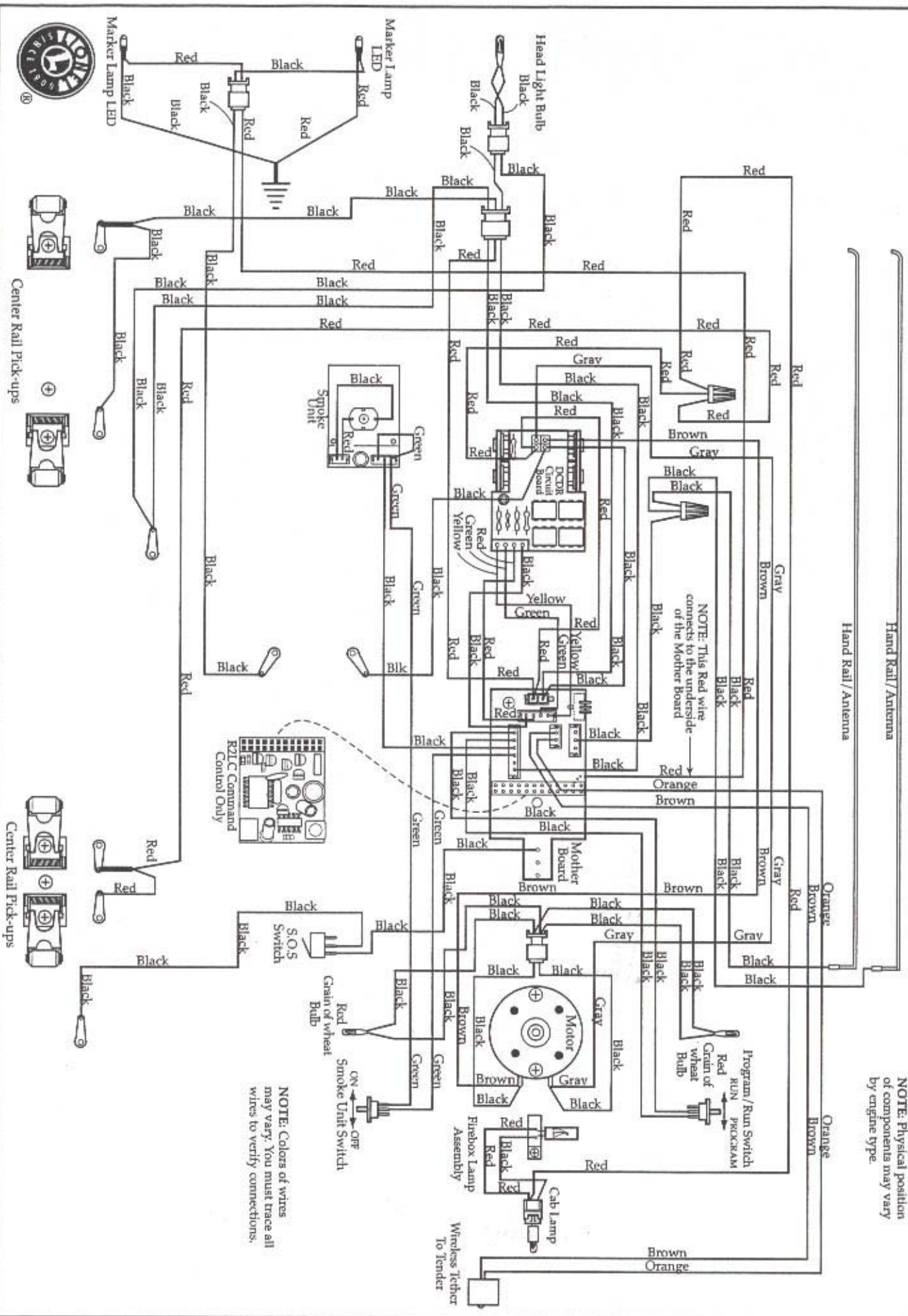
NOTE: Colors of wires may vary. You must trace all wires to verify connections.

TENDER FOR TYPICAL 2-6-6-2 ARTICULATED STEAM LOCOMOTIVE WITH ODYSSEY AND RAILSOUNDS PICTORIAL WIRING DIAGRAM

NOTE: Physical position of components may vary by tender type.



TYPICAL 2-6-6-4 ARTICULATED STEAM LOCOMOTIVE WITH COMMAND CONTROL (NON-ODYSSEY) PICTORIAL WIRING DIAGRAM

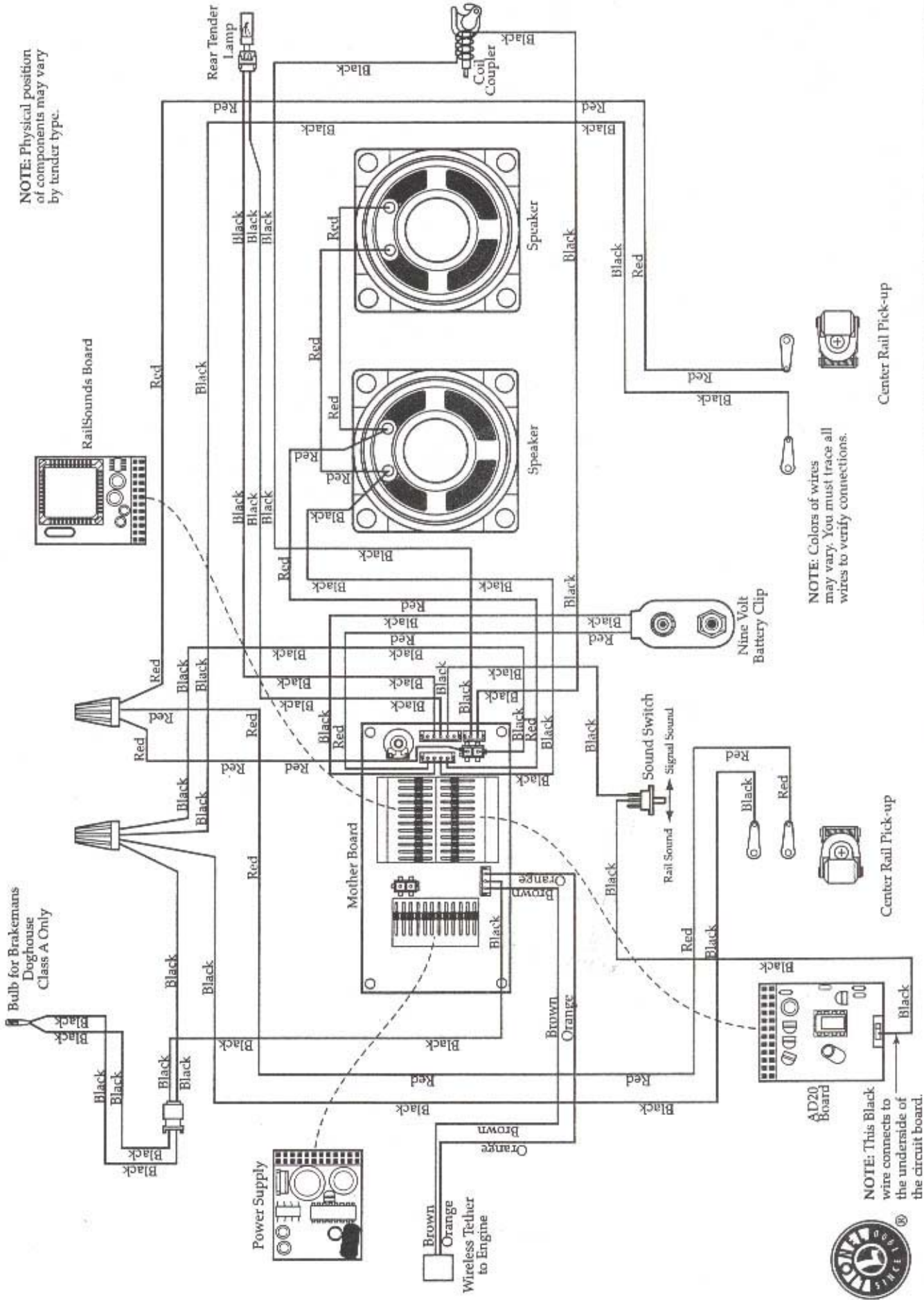


NOTE: Physical position of components may vary by engine type.

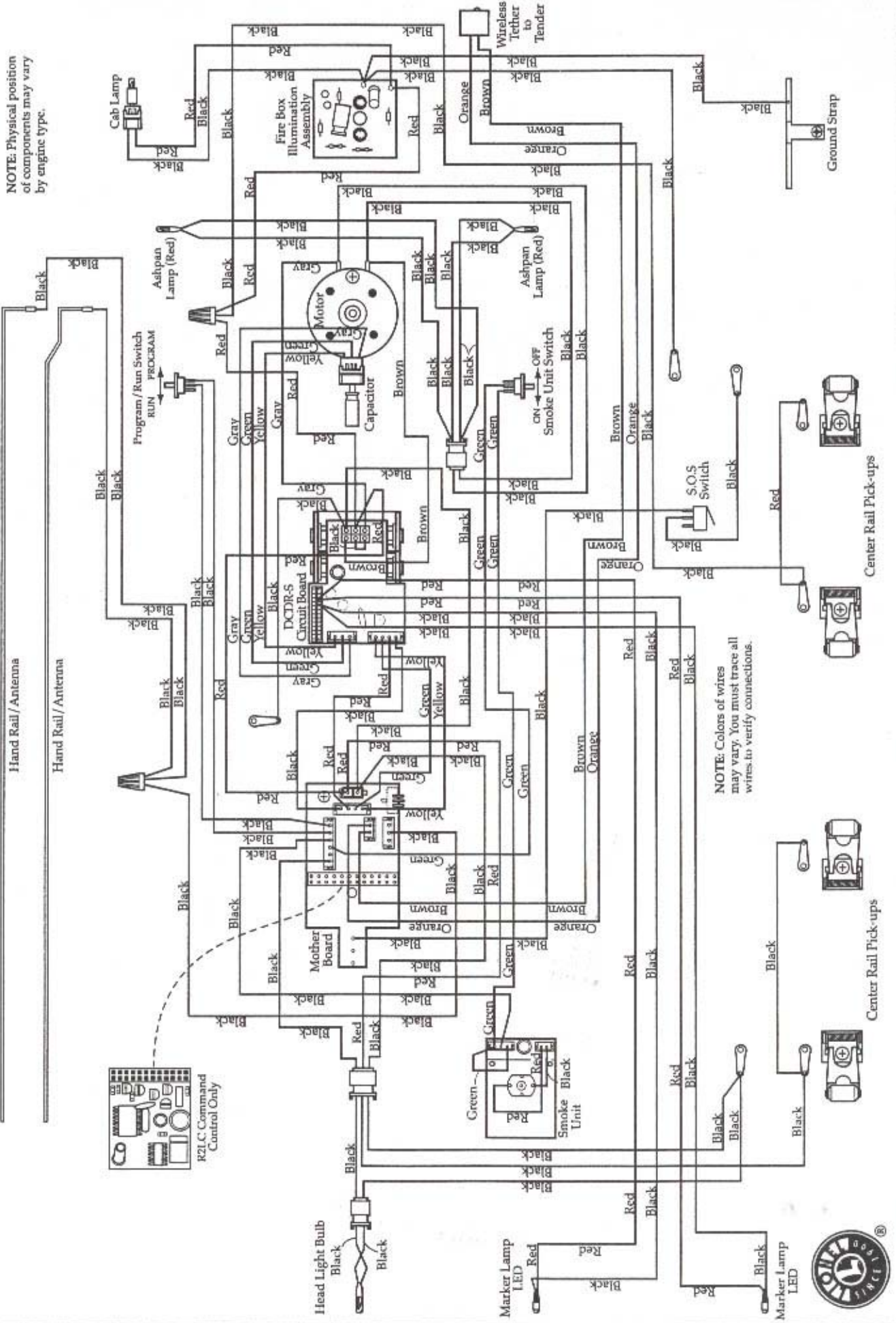
NOTE: Colors of wires may vary. You must trace all wires to verify connections.



TENDER FOR TYPICAL 2-6-6-4 ARTICULATED STEAM LOCOMOTIVE (NON-ODYSSEY) WITH RAILSOUNDS PICTORIAL WIRING DIAGRAM



TYPICAL 2-8-8-4 ARTICULATED STEAM LOCOMOTIVE WITH COMMAND CONTROL AND ODYSSEY SYSTEM PICTORIAL WIRING DIAGRAM

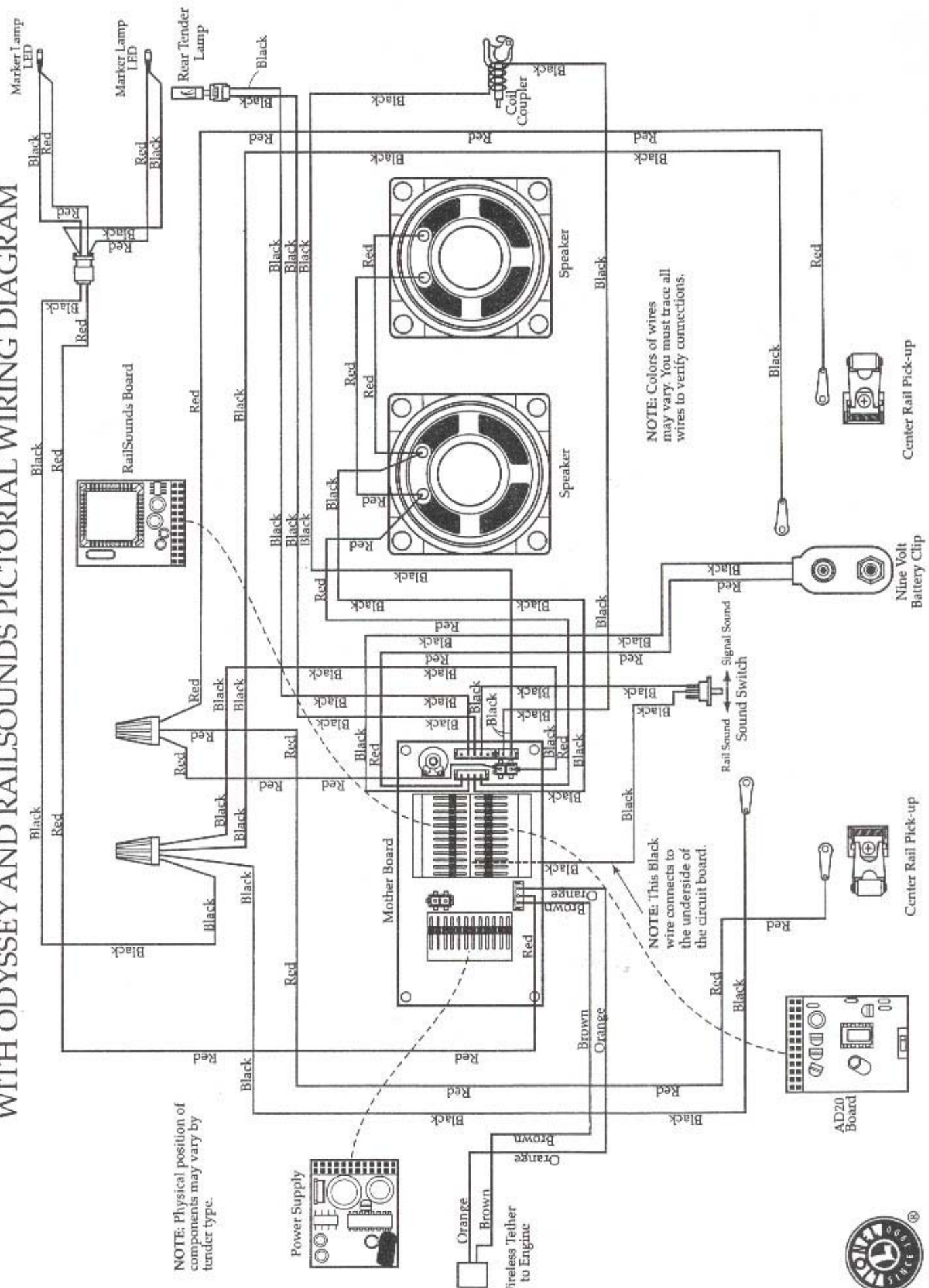


NOTE: Physical position of components may vary by engine type.

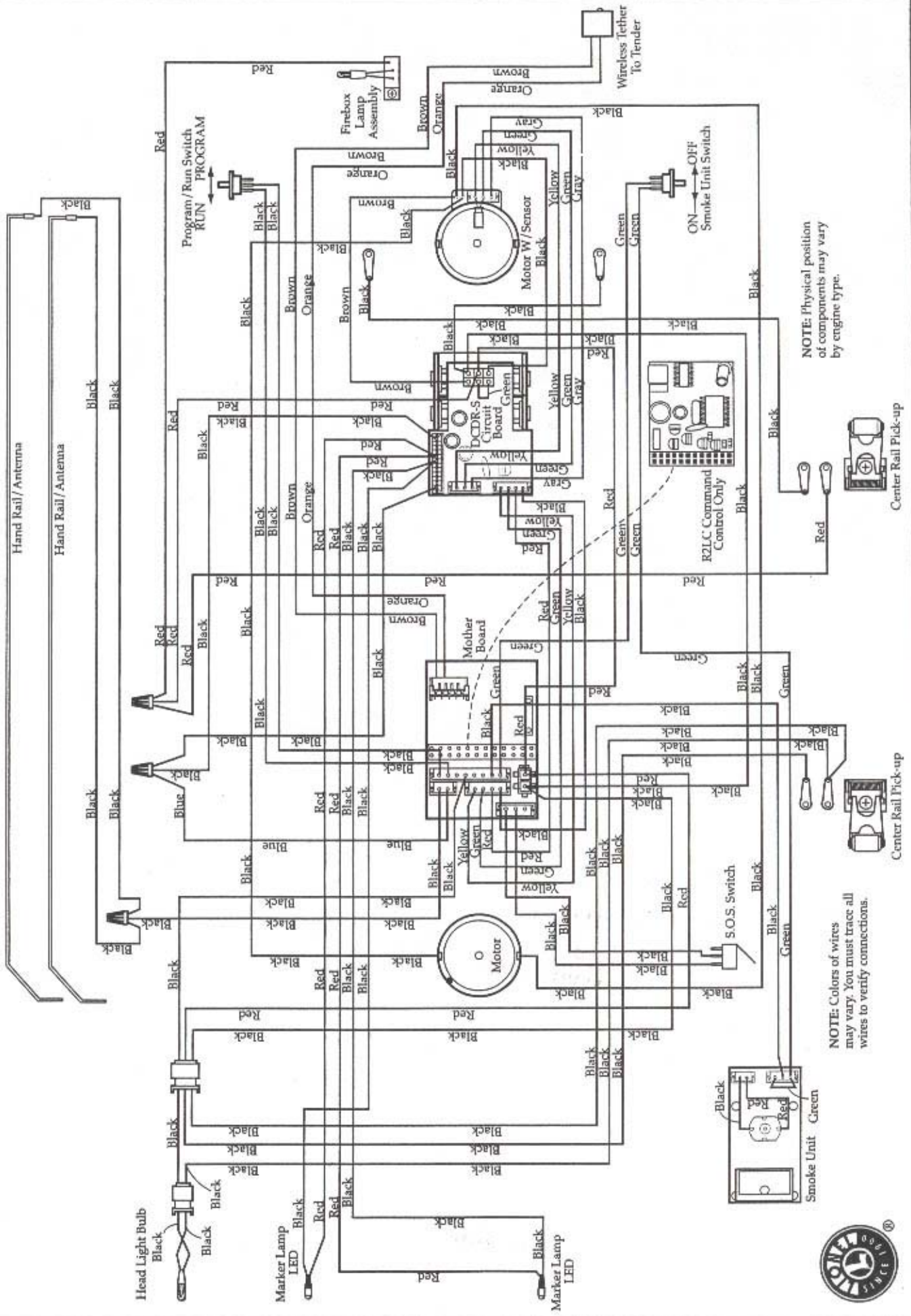
NOTE: Colors of wires may vary. You must trace all wires to verify connections.



TENDER FOR TYPICAL 2-8-8-4 ARTICULATED STEAM LOCOMOTIVE WITH ODYSSEY AND RAILSOUNDS PICTORIAL WIRING DIAGRAM



TYPICAL 4-6-6-4 LIONMASTER STEAM ENGINE WITH COMMAND CONTROL, RAILSOUNDS AND ODYSSEY SYSTEM PICTORIAL WIRING DIAGRAM

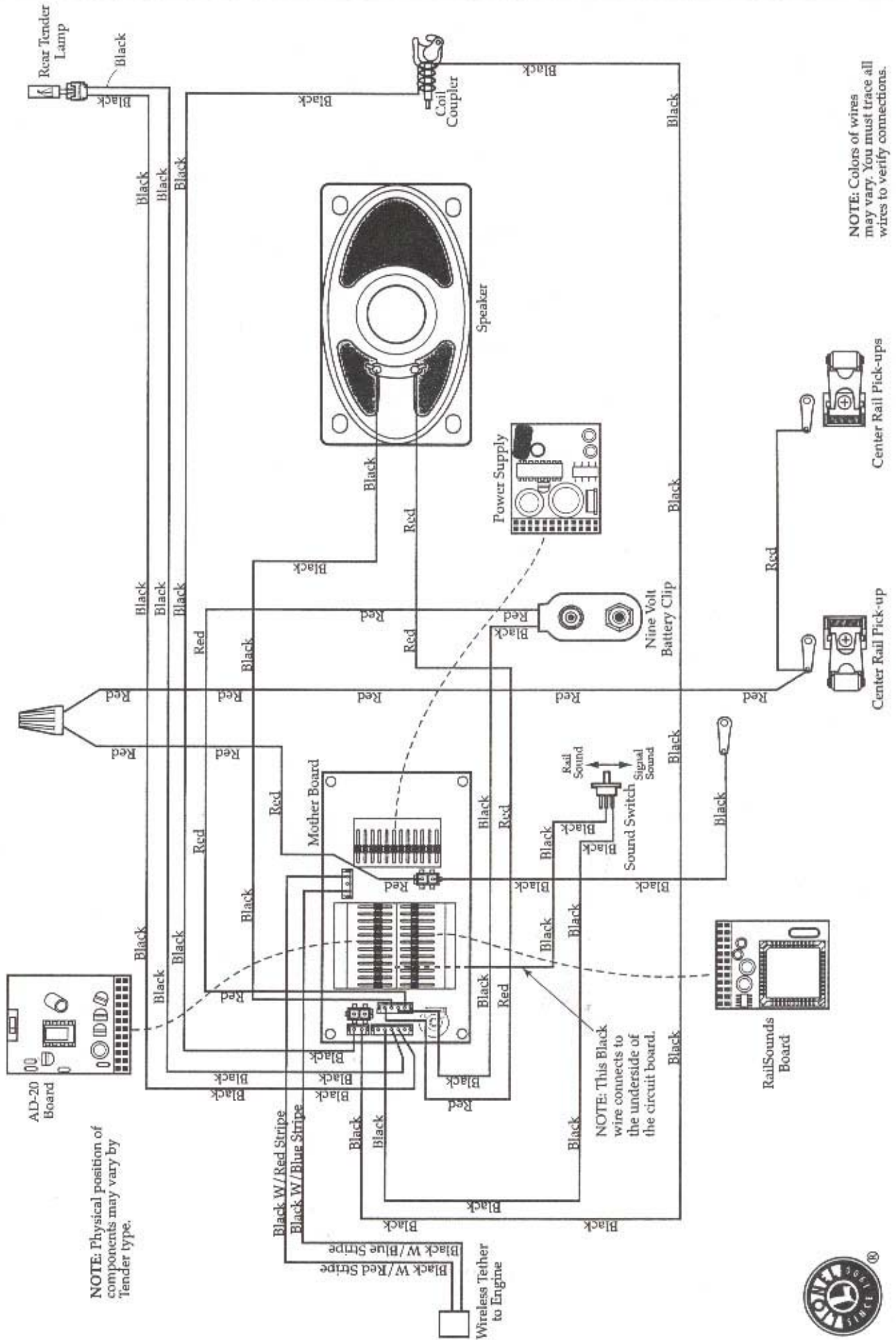


NOTE: Physical position of components may vary by engine type.

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

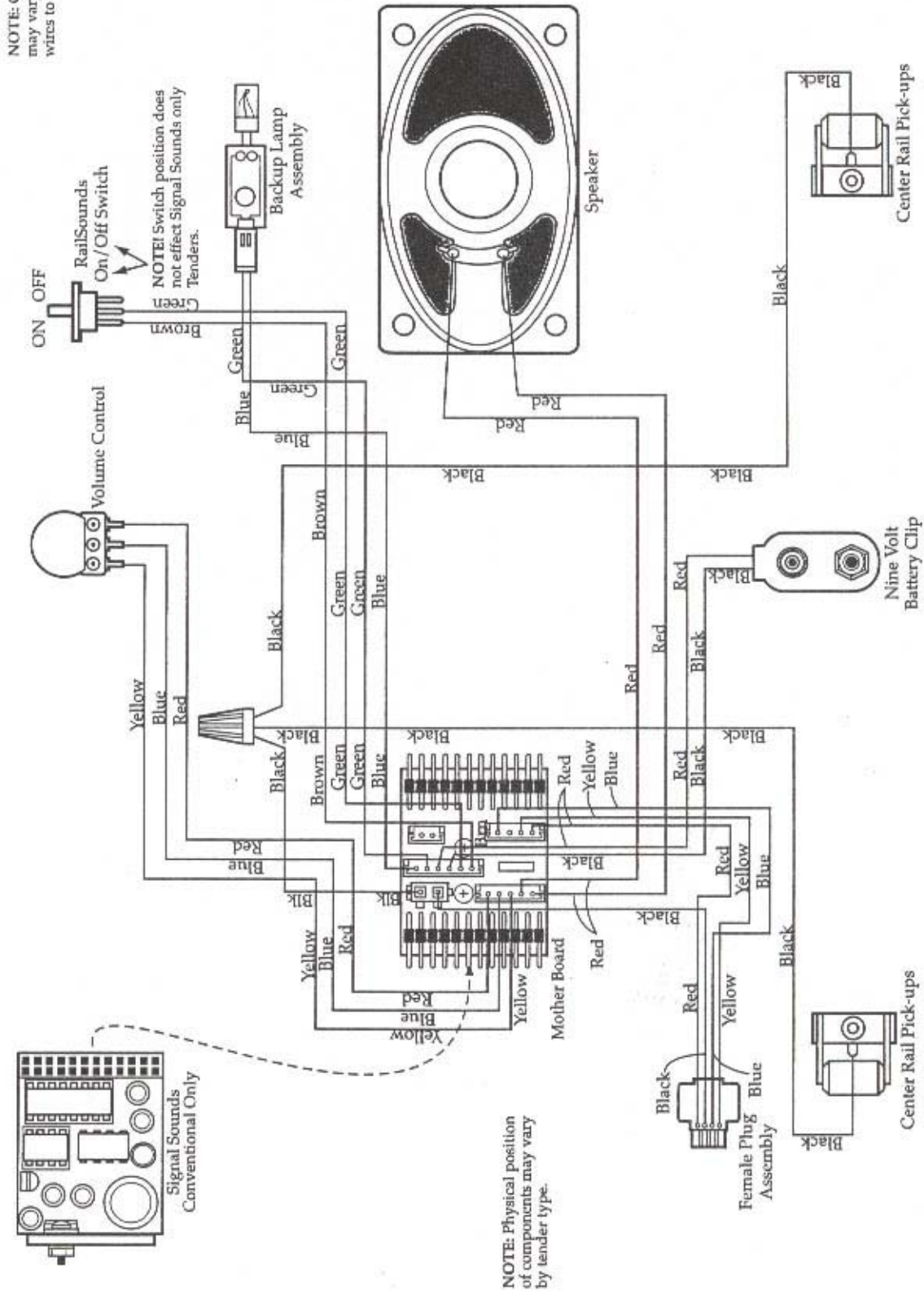


TENDER FOR TYPICAL 4-6-6-4 LIONMASTER STEAM LOCOMOTIVE WITH RAILSOUNDS PICTORIAL WIRING DIAGRAM



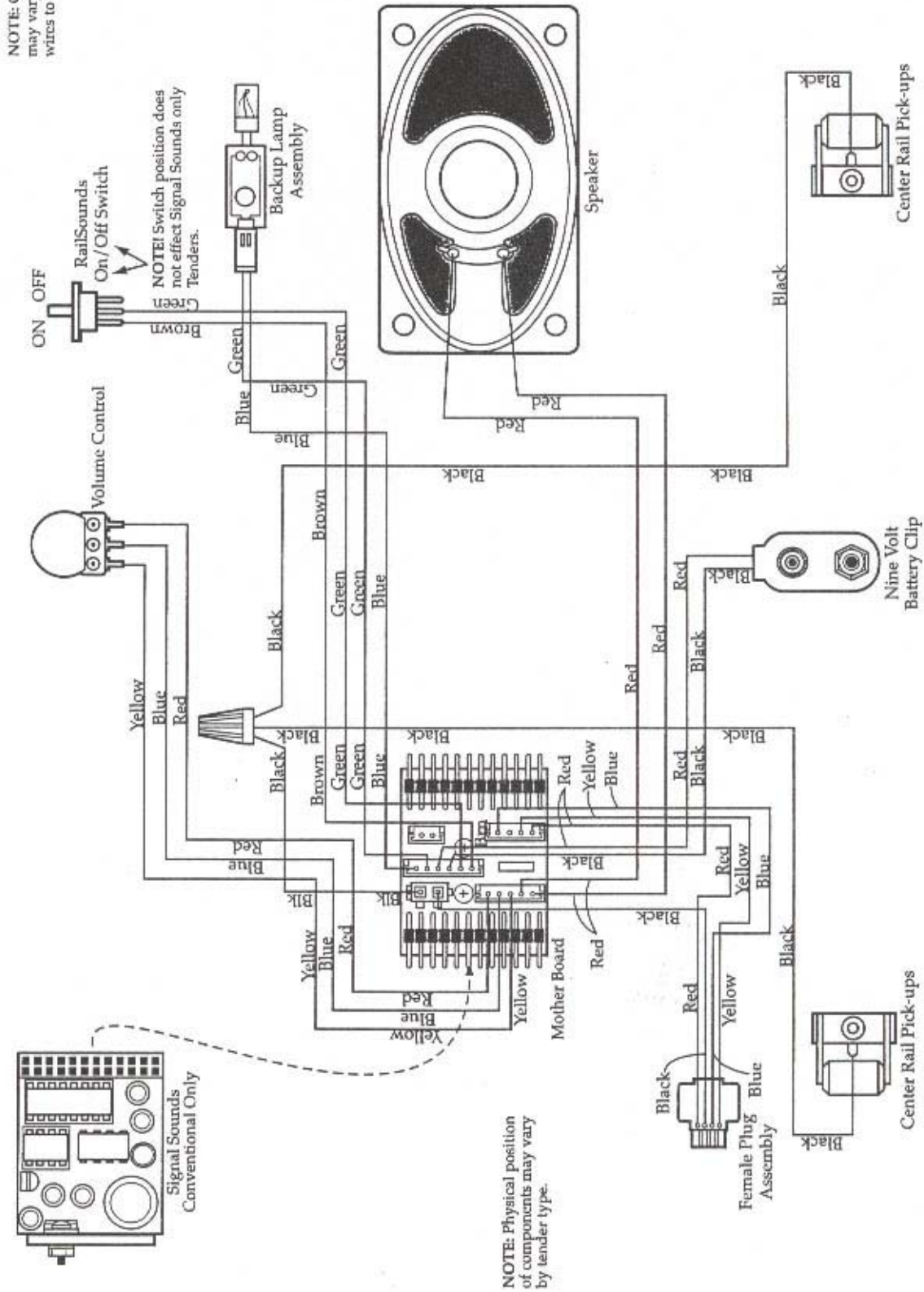
TYPICAL TENDER CONVENTIONAL (NON-ODYSSEY) WITH SIGNAL SOUNDS WITH SIGNAL SOUNDS PICTORIAL WIRING DIAGRAM

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



TYPICAL TENDER CONVENTIONAL (NON-ODYSSEY) WITH SIGNAL SOUNDS WITH SIGNAL SOUNDS PICTORIAL WIRING DIAGRAM

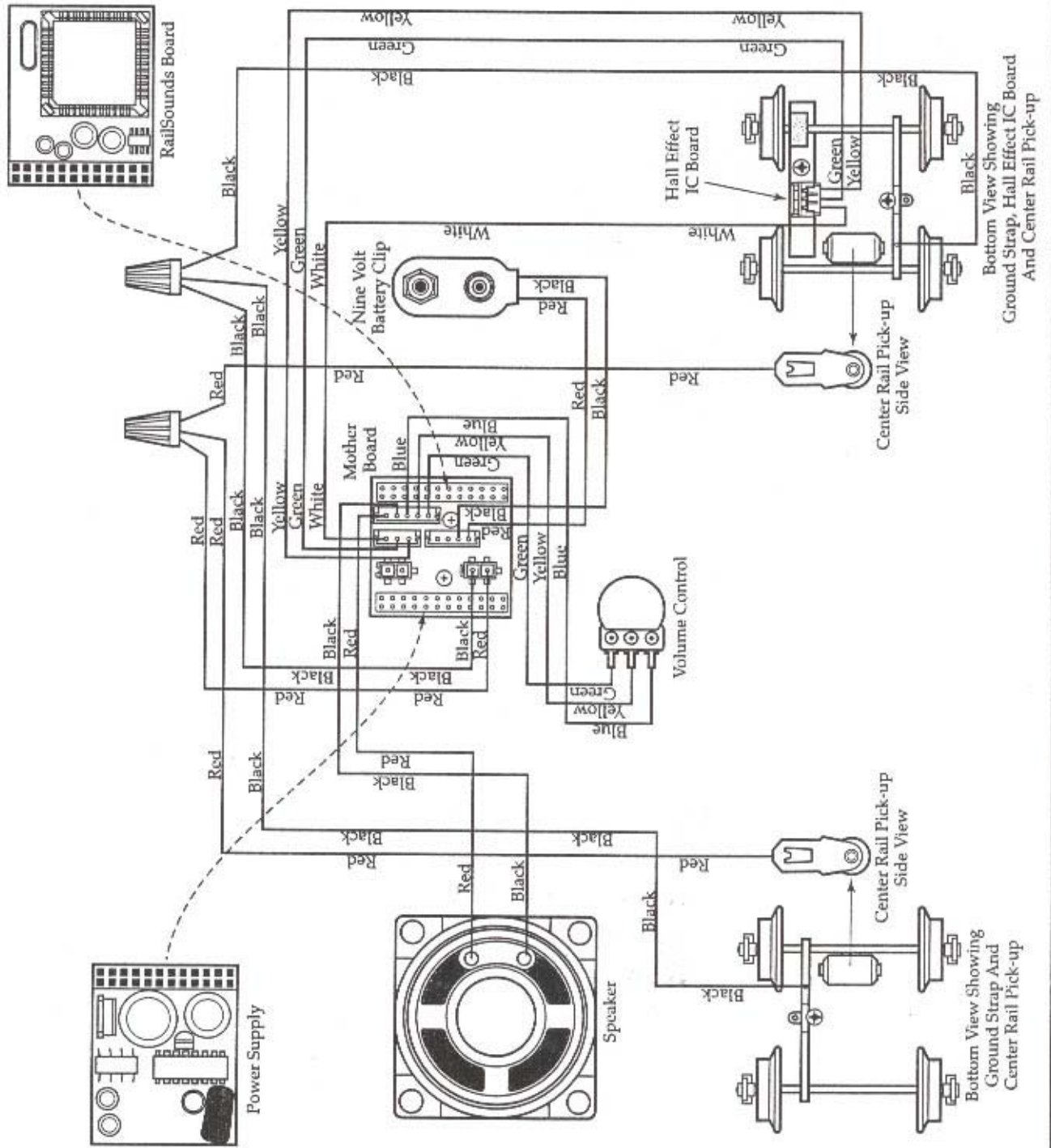
NOTE: Colors of wires may vary. You must trace all wires to verify connections.



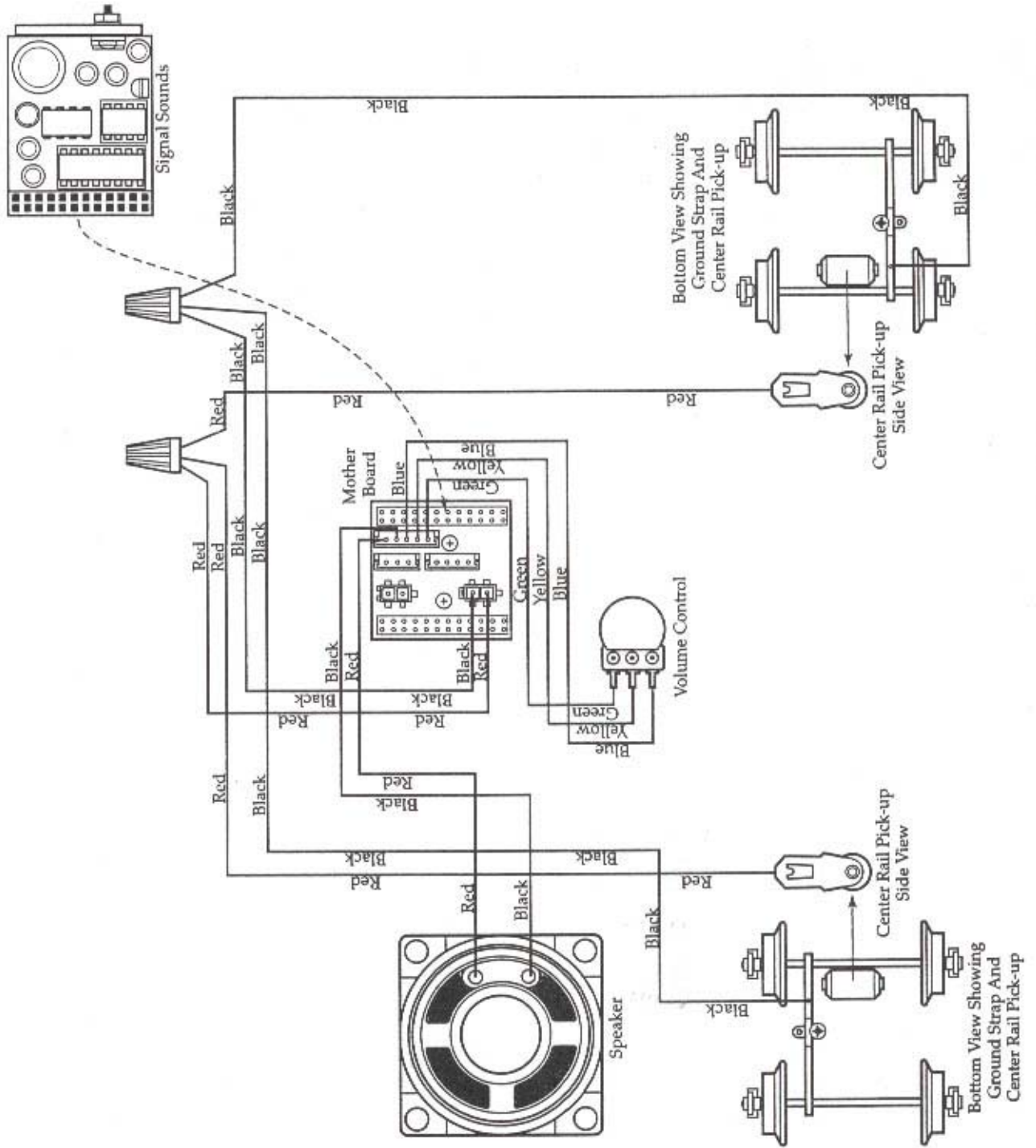
NOTE: Physical position of components may vary by tender type.



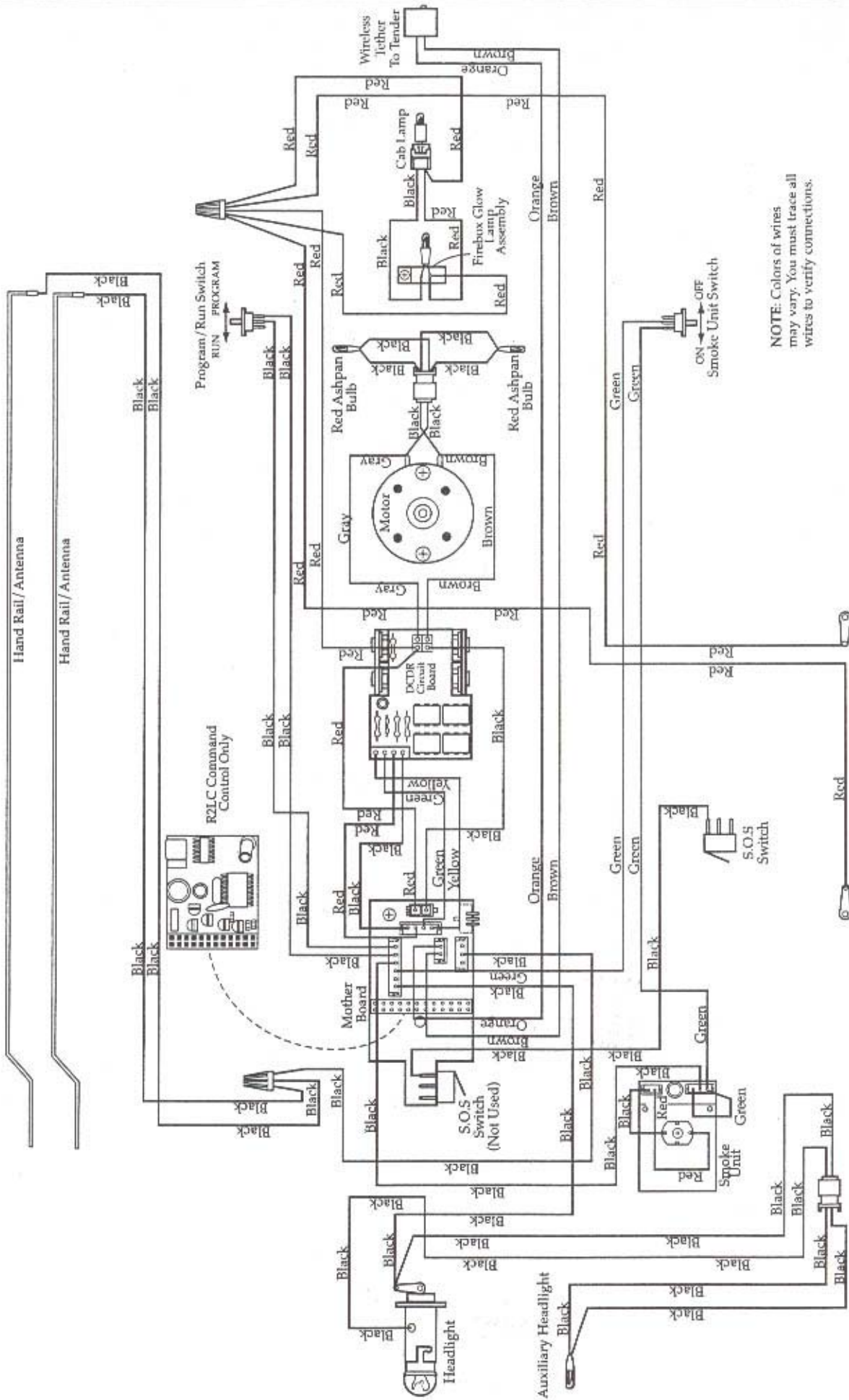
HUDSON JR TENDER W/ CONVENTIONAL RAILSOUNDS PICTORIAL WIRING DIAGRAM



HUDSON JR TENDER W/SIGNAL SOUNDS PICTORIAL WIRING DIAGRAM



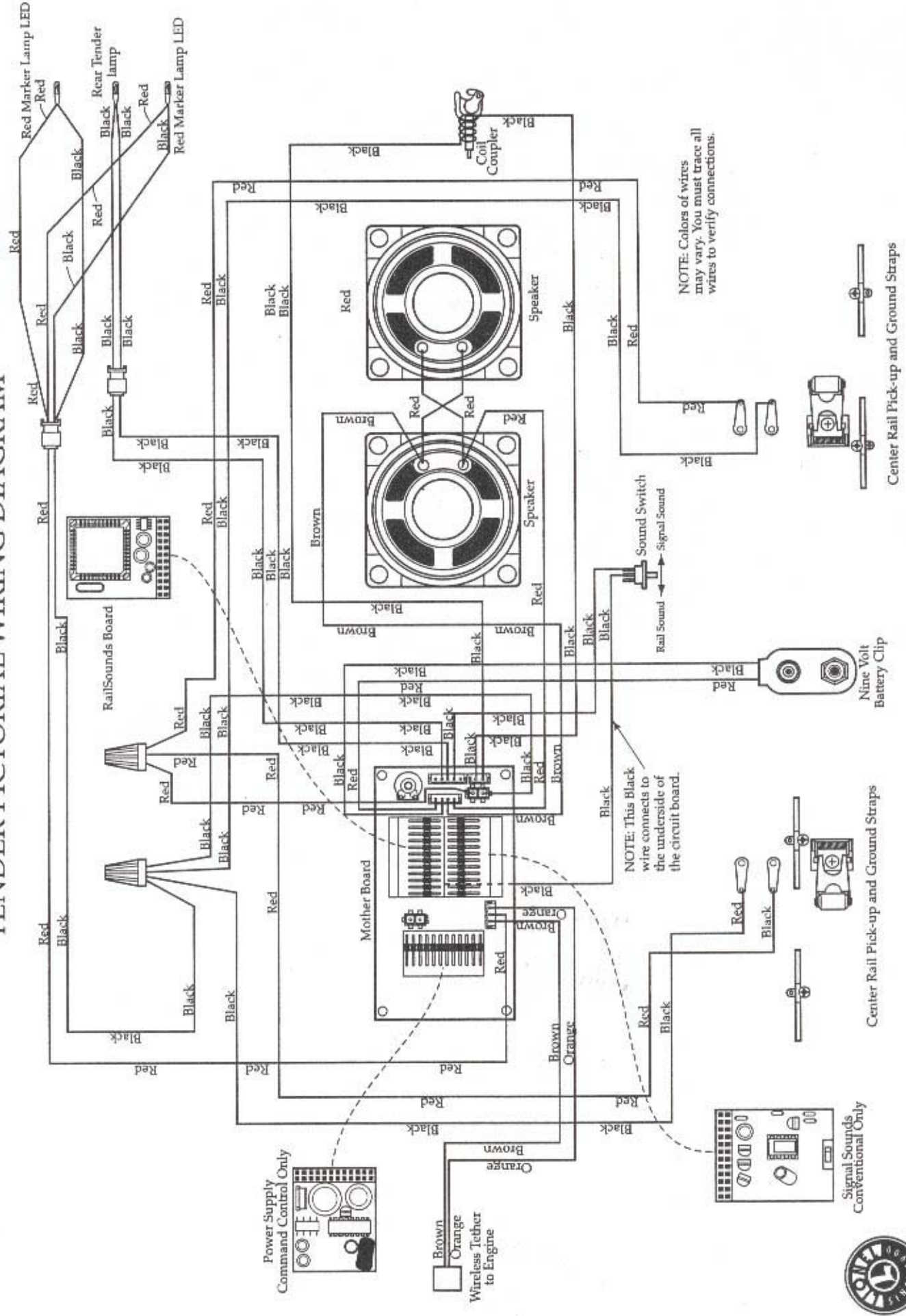
620-8063-001 PENNSYLVANIA T1 4-4-4 3 RAIL STEAM LOCOMOTIVE PICTORIAL WIRING DIAGRAM



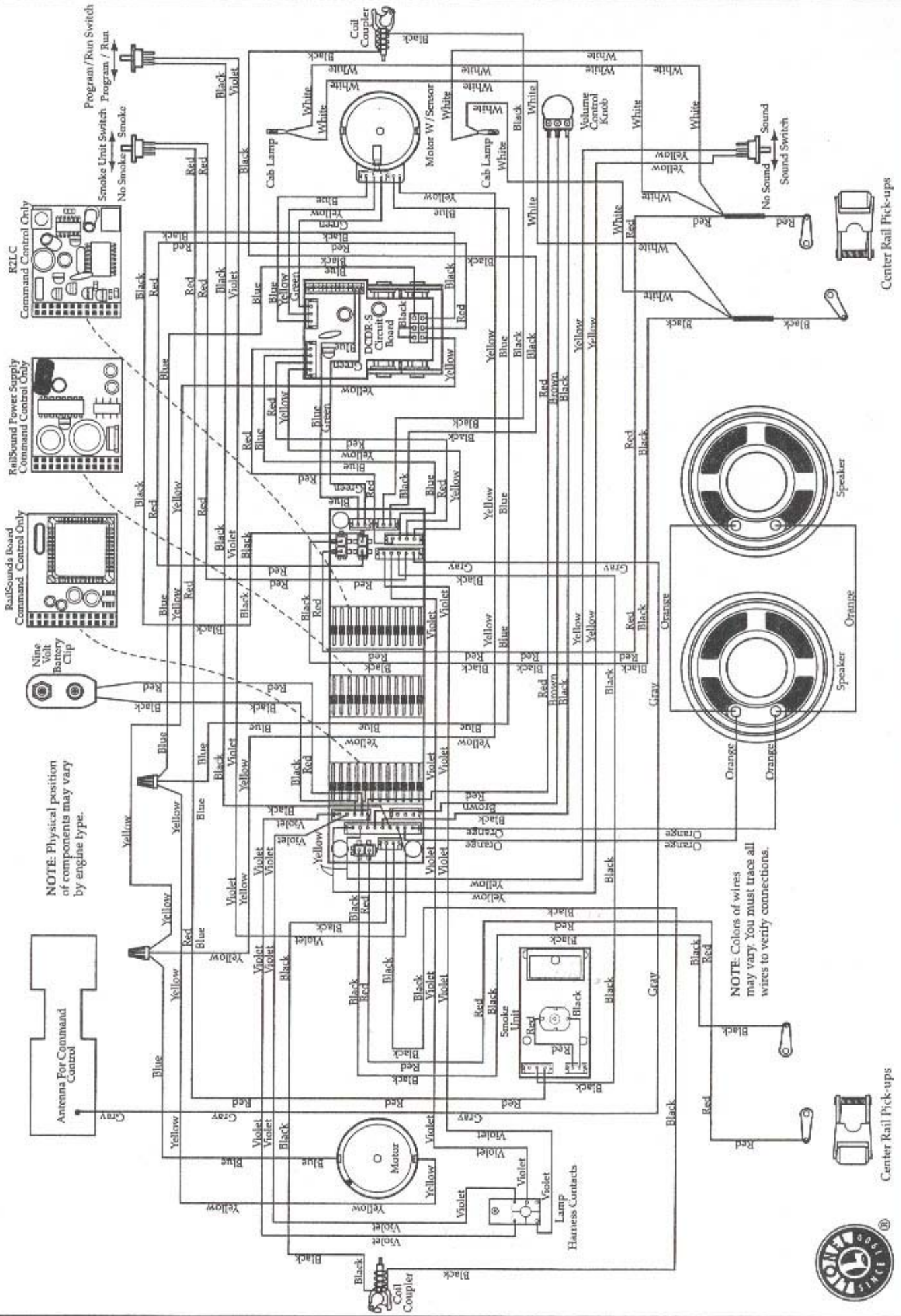
NOTE: Colors of wires may vary. You must trace all wires to verify connections.



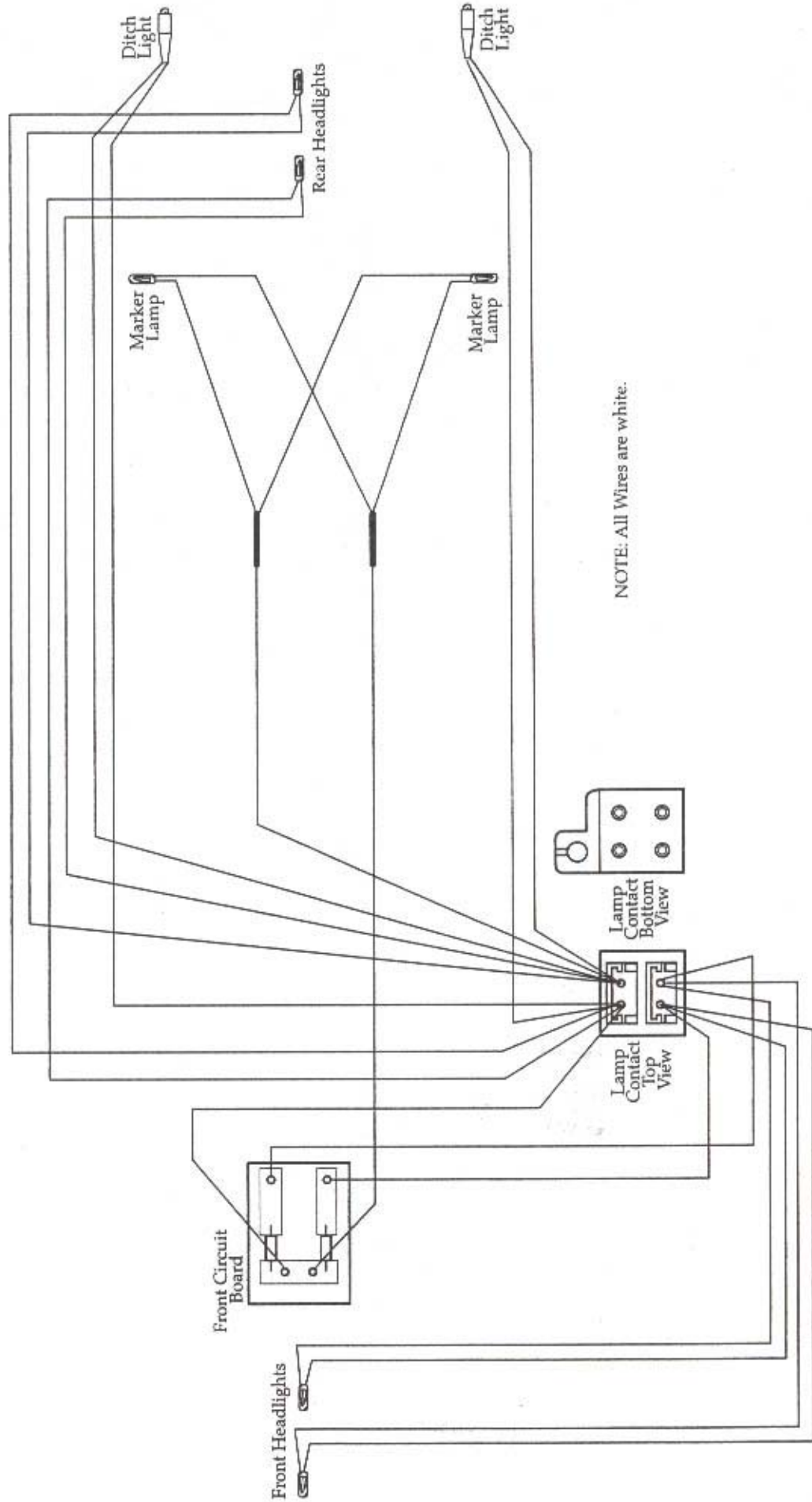
692-8063-T01 PENNSYLVANIA T1-4-4-4-3 RAIL STEAM LOCOMOTIVE-TENDER PICTORIAL WIRING DIAGRAM



DASH 9-44 CW DIESEL WITH COMMAND CONTROL, RAILSOUNDS AND ODYSSEY SYSTEM PICTORIAL WIRING DIAGRAM



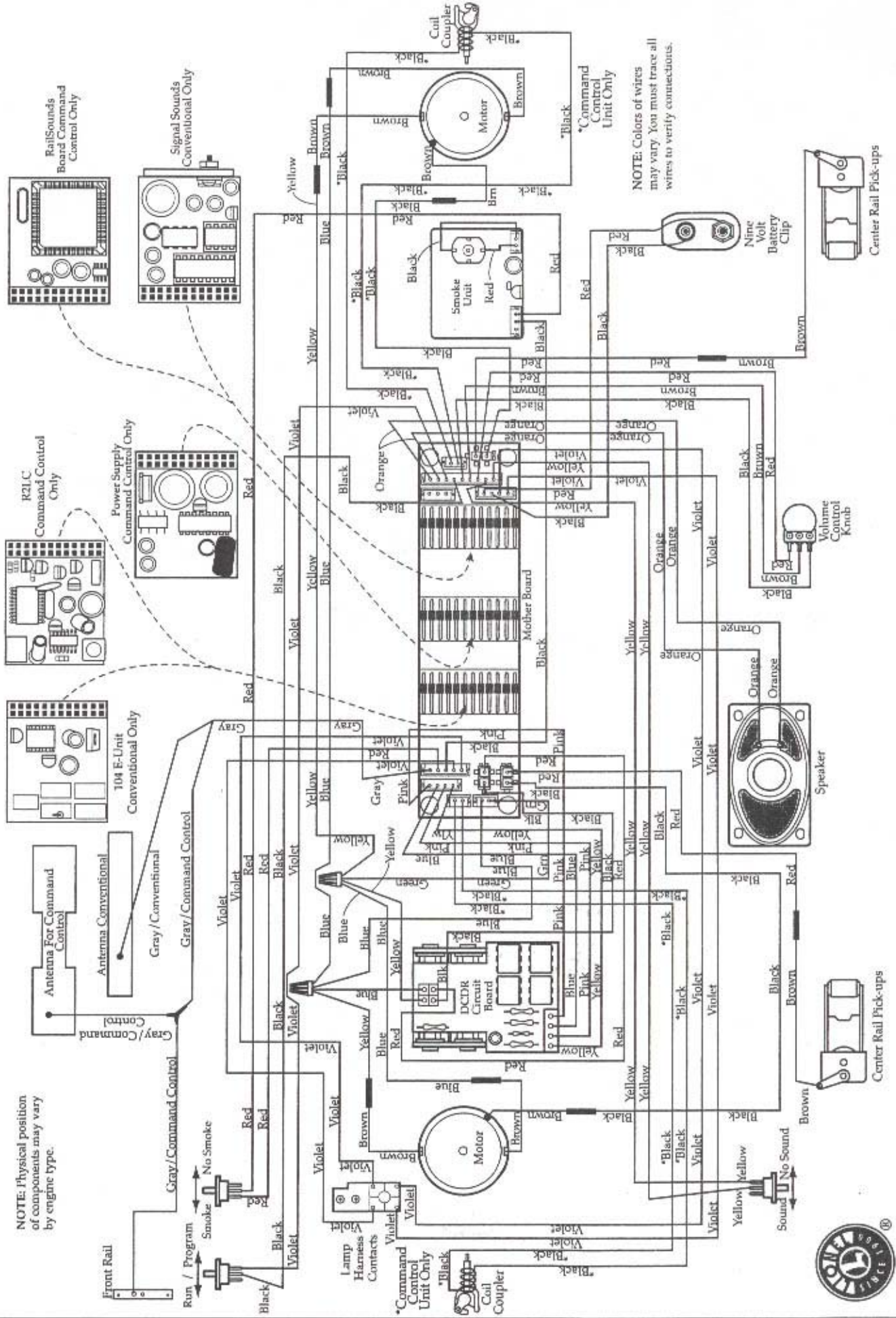
DASH 9-44 CW DIESEL WITH COMMAND CONTROL, RAILSOUNDS AND ODYSSEY SYSTEM FRONT AND REAR HEADLIGHTS, MARKER LAMPS AND DITCH LIGHTS PICTORIAL WIRING DIAGRAM



NOTE: All Wires are white.



TYPICAL DIESEL LOCOMOTIVE CONVENTIONAL AND COMMAND CONTROL (NON-ODYSSEY) PICTORIAL WIRING DIAGRAM



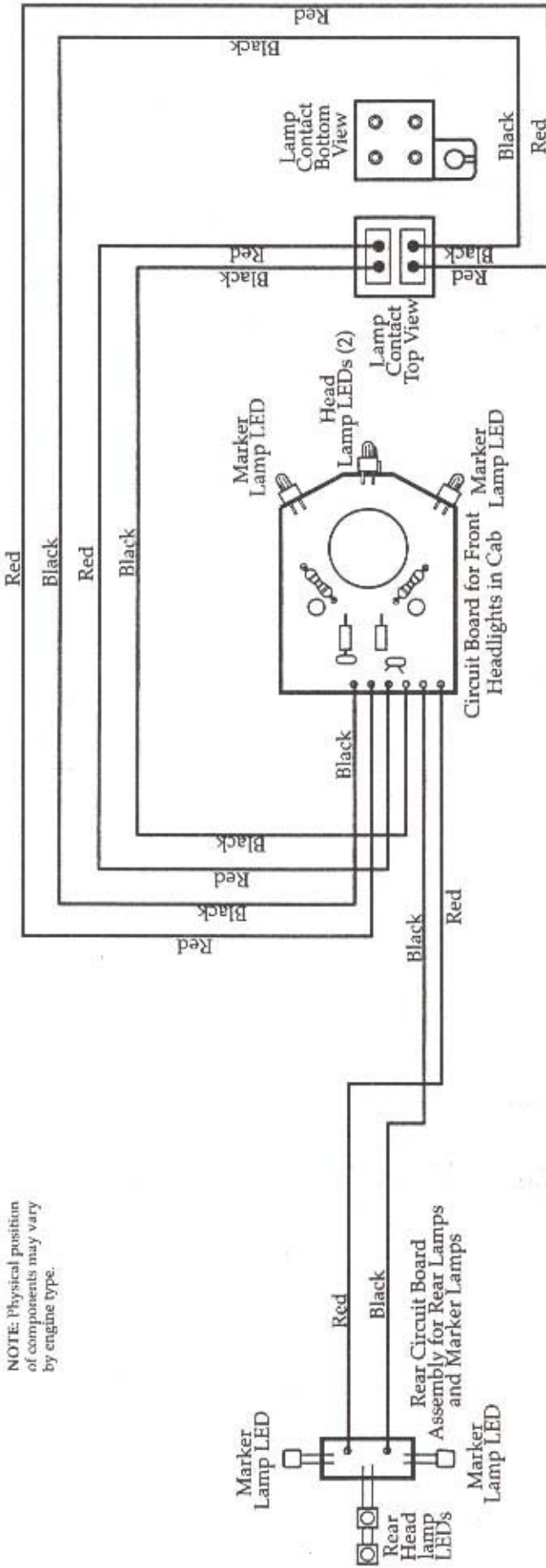
NOTE: Physical position of components may vary by engine type.

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



TYPICAL DIESEL LOCOMOTIVES CONVENTIONAL AND COMMAND CONTROL (NON-ODYSSEY) HEADLIGHT AND MARKER LAMPS PICTORIAL WIRING DIAGRAM

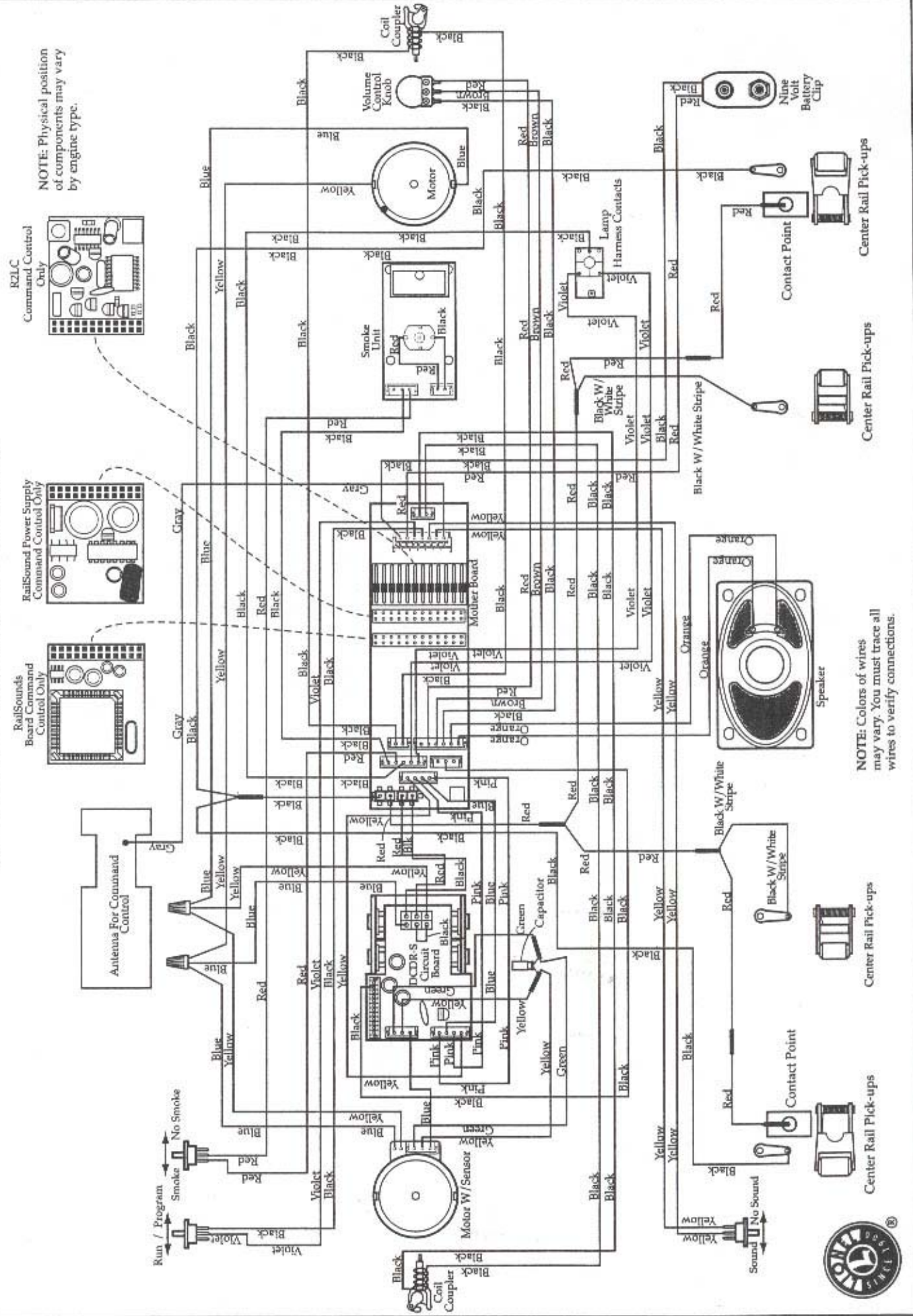
NOTE: Physical position of components may vary by engine type.



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



TYPICAL DIESEL WITH COMMAND CONTROL, RAILSOUNDS, AND ODYSSEY SYSTEM PICTORIAL WIRING DIAGRAM

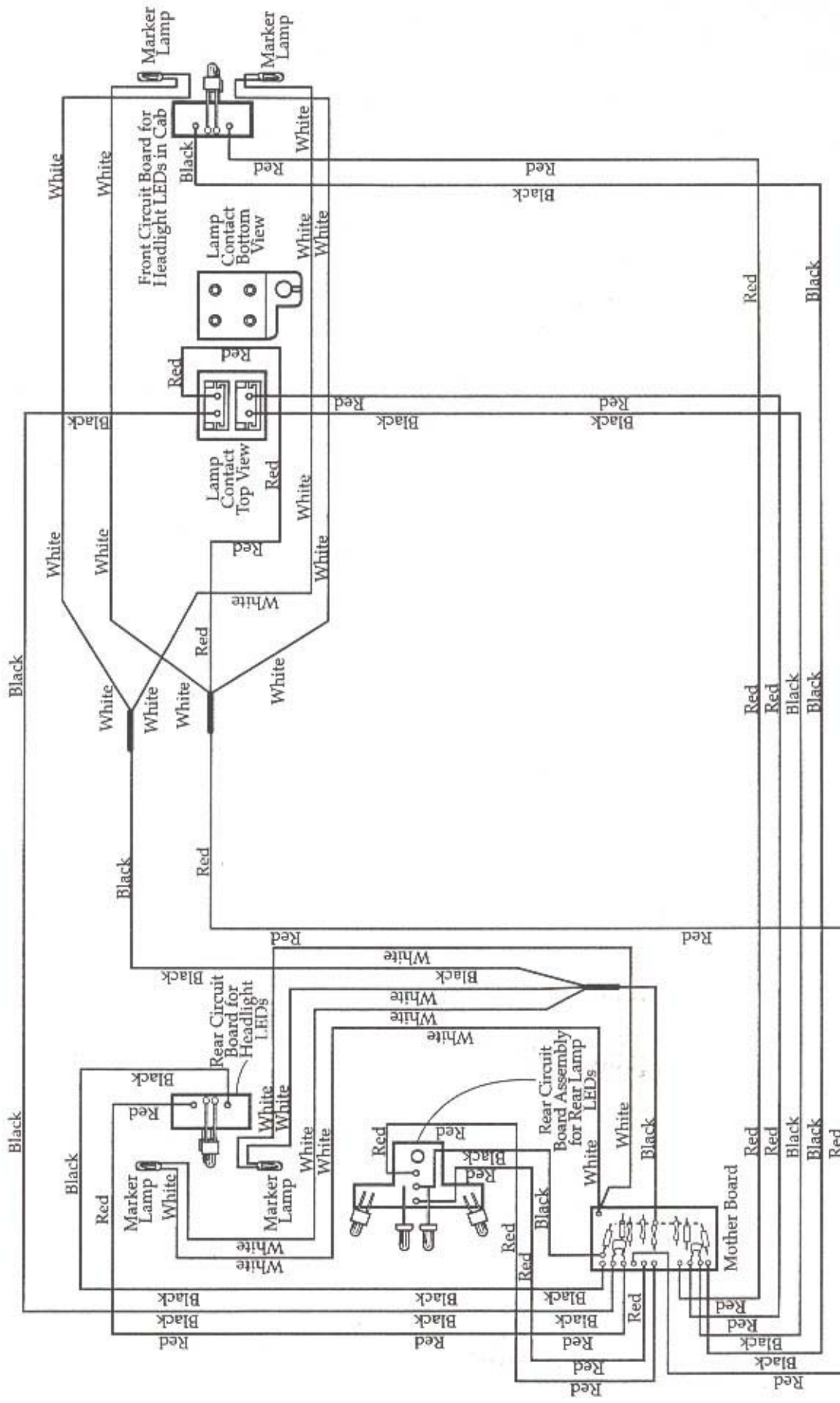


NOTE: Physical position of components may vary by engine type.

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



TYPICAL DIESEL WITH COMMAND CONTROL, RAILSOUNDS AND ODYSSEY SYSTEM FRONT AND REAR HEADLIGHTS AND MARKER LAMPS PICTORIAL WIRING DIAGRAM

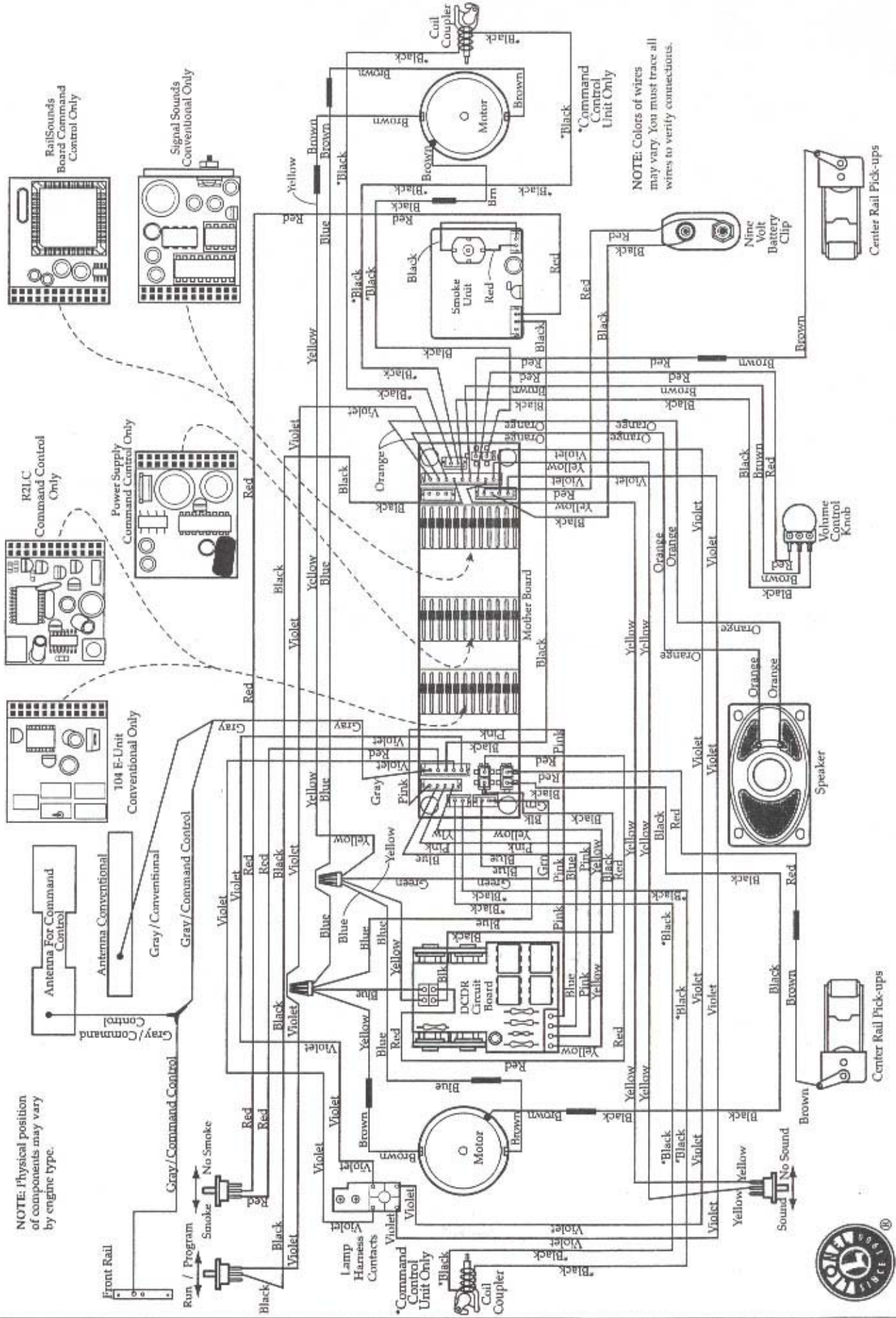


NOTE: Colors of wires may vary. You must trace all wires to verify connections.

NOTE: Physical position of components may vary by engine type.



TYPICAL DIESEL LOCOMOTIVE CONVENTIONAL AND COMMAND CONTROL (NON-ODYSSEY) PICTORIAL WIRING DIAGRAM



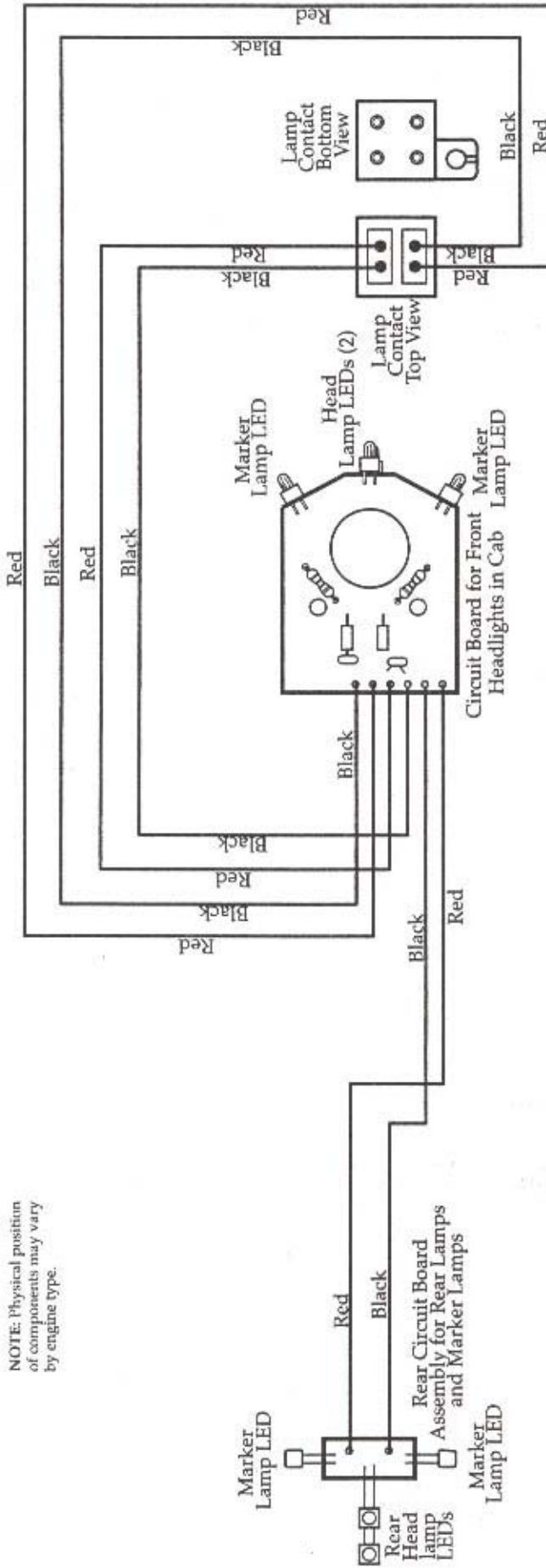
NOTE: Physical position of components may vary by engine type.

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



TYPICAL DIESEL LOCOMOTIVES CONVENTIONAL AND COMMAND CONTROL (NON-ODYSSEY) HEADLIGHT AND MARKER LAMPS PICTORIAL WIRING DIAGRAM

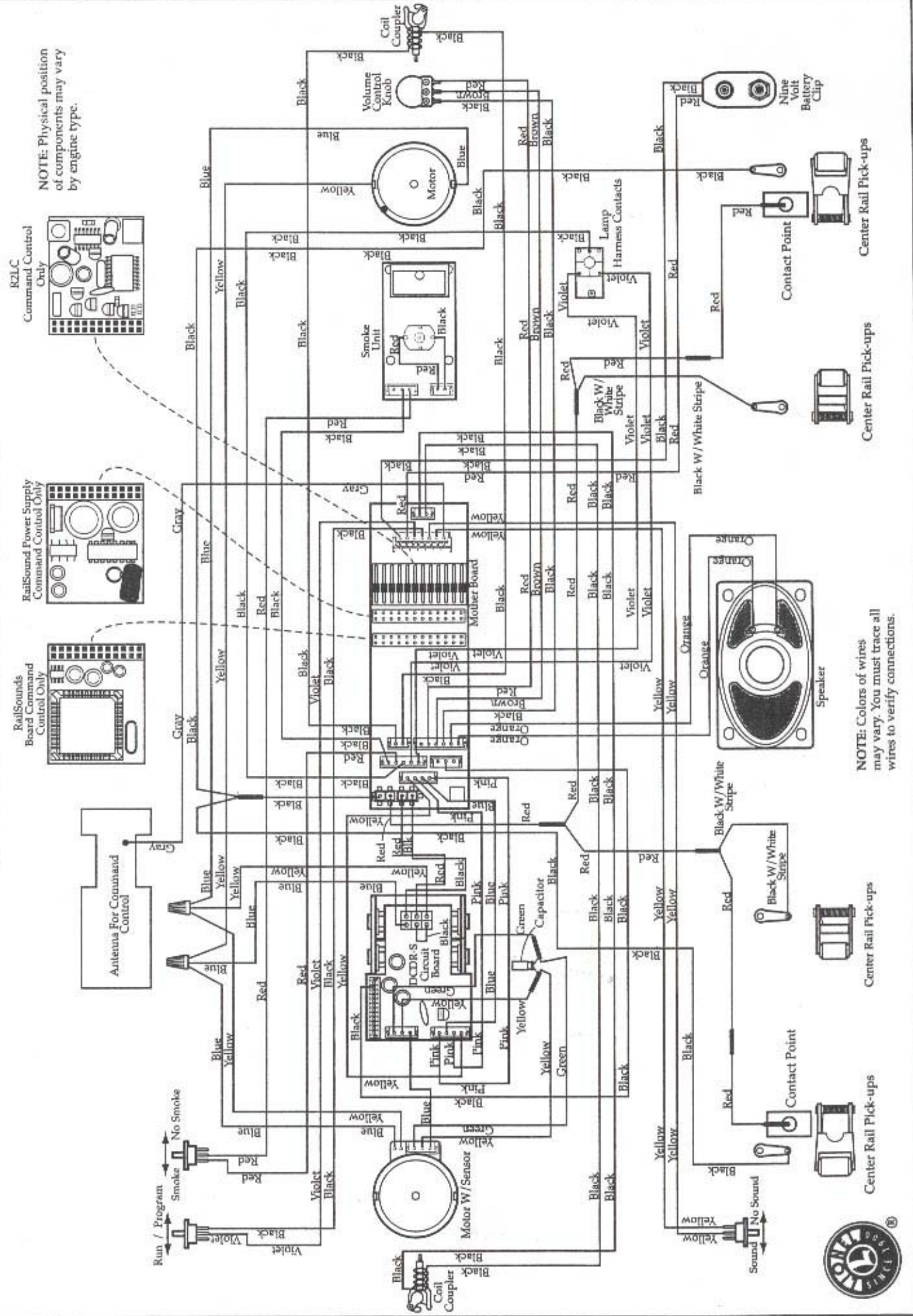
NOTE: Physical position of components may vary by engine type.



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



TYPICAL DIESEL WITH COMMAND CONTROL, RAILSOUNDS, AND ODYSSEY SYSTEM PICTORIAL WIRING DIAGRAM

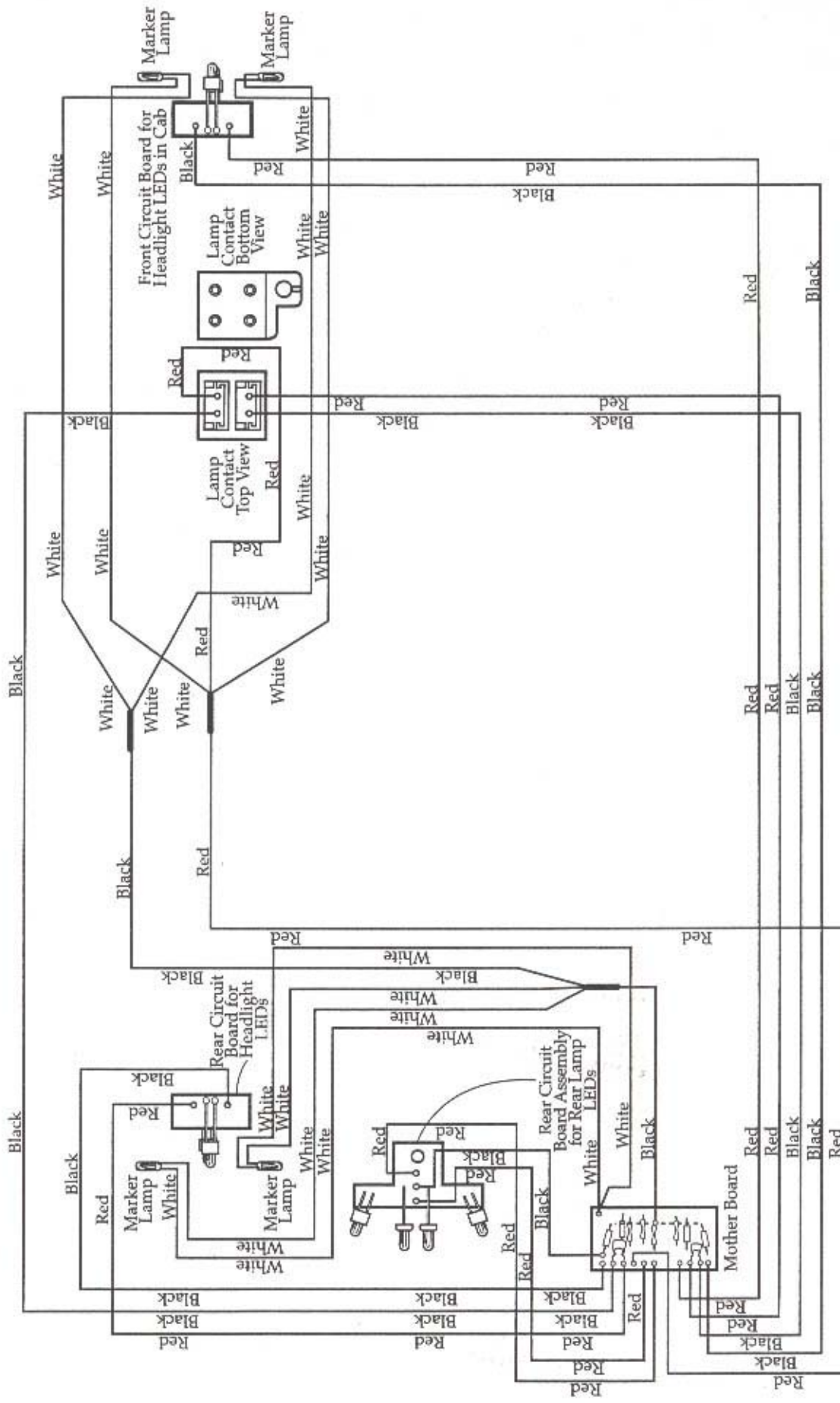


NOTE: Physical position of components may vary by engine type.

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



TYPICAL DIESEL WITH COMMAND CONTROL, RAILSOUNDS AND ODYSSEY SYSTEM FRONT AND REAR HEADLIGHTS AND MARKER LAMPS PICTORIAL WIRING DIAGRAM

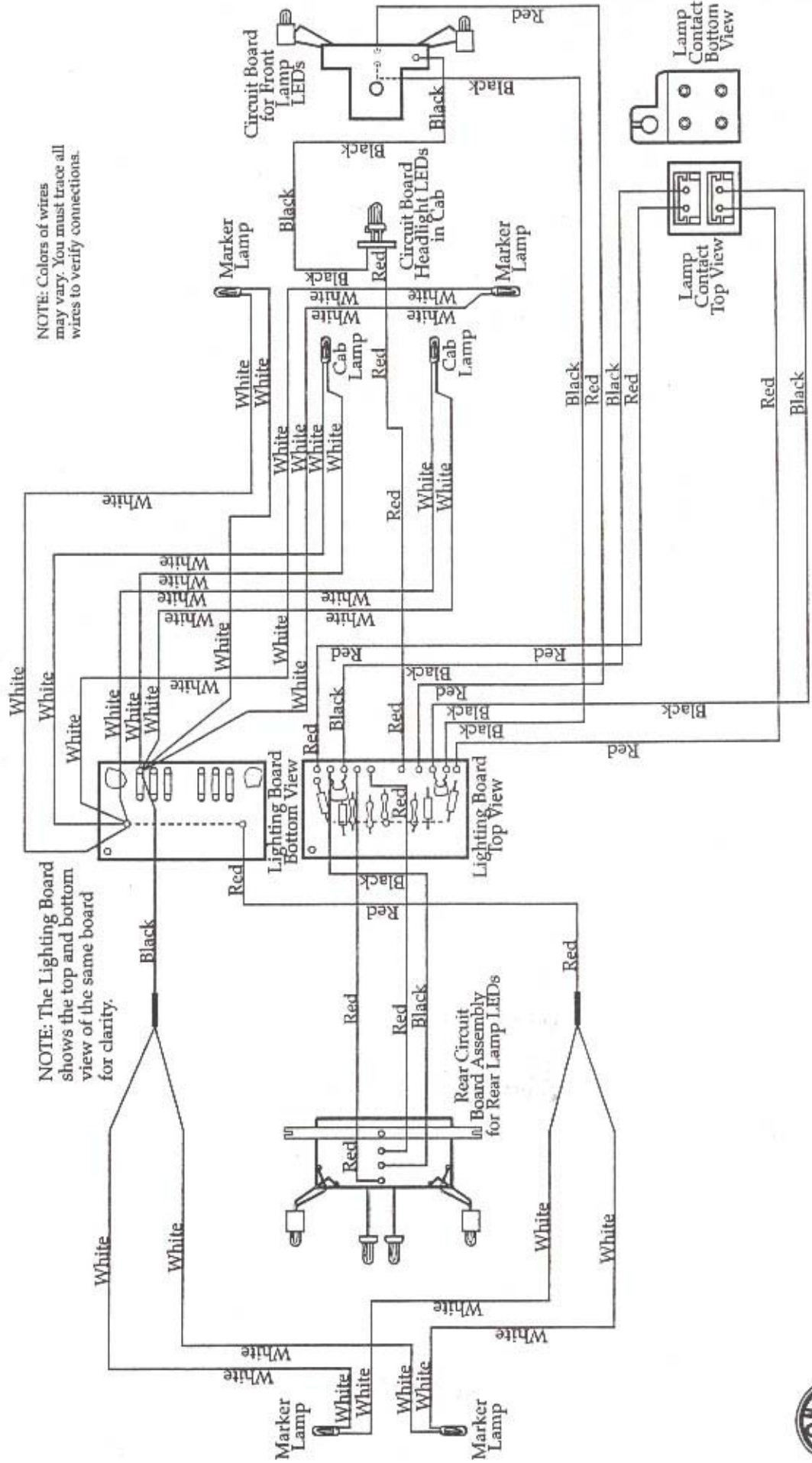


NOTE: Colors of wires may vary. You must trace all wires to verify connections.

NOTE: Physical position of components may vary by engine type.



SD40-2 DIESEL HEADLIGHT CAB LIGHT AND MARKER LAMPS (ODYSSEY) PICTORIAL WIRING DIAGRAM

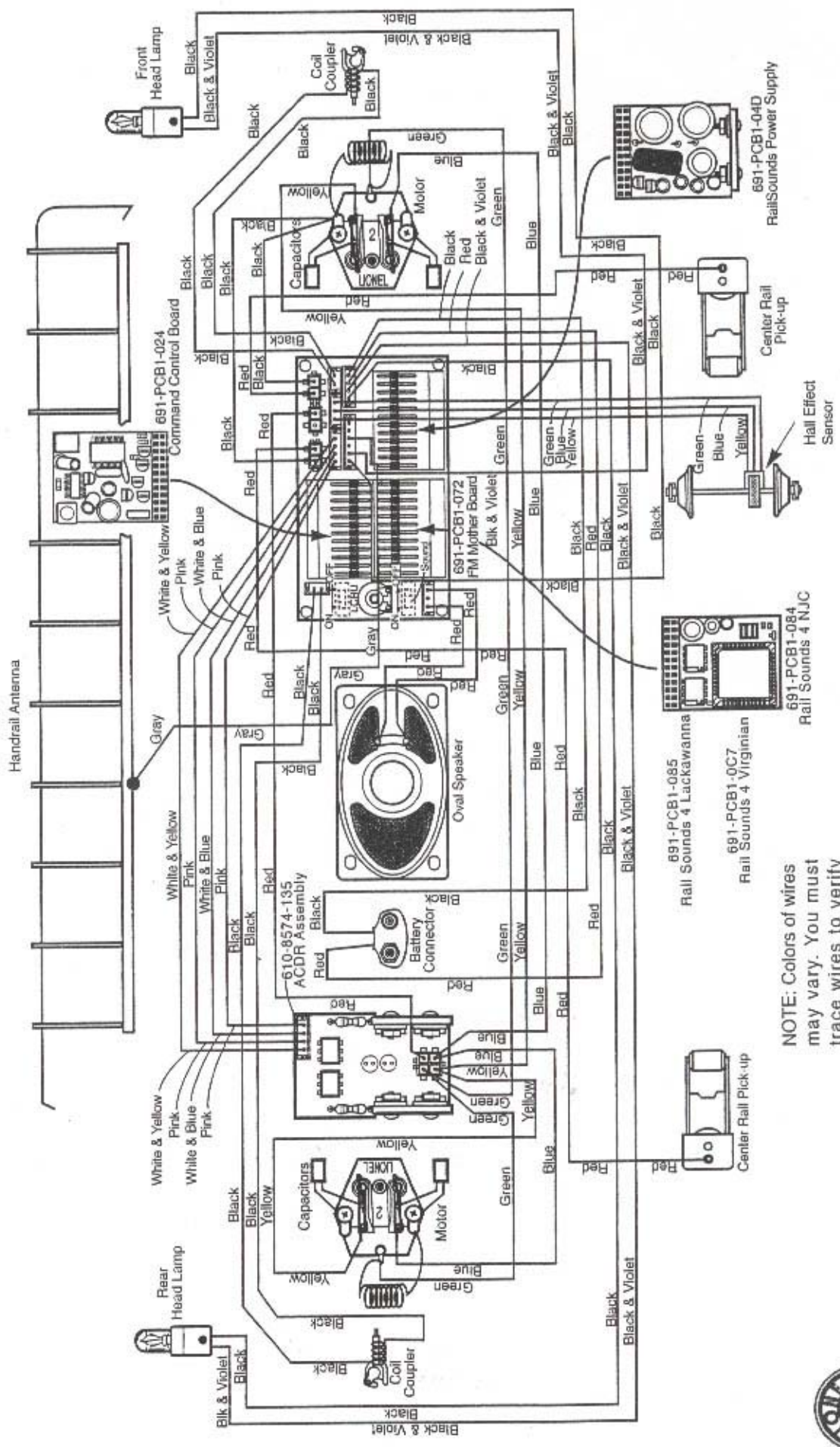


NOTE: Colors of wires may vary. You must trace all wires to verify connections.

NOTE: The Lighting Board shows the top and bottom view of the same board for clarity.



FAIRBANKS MORSE TRAINMASTER 6-18321 JERSEY CENTRAL 6-18322 LACKAWANNA 6-18327 VIRGINIAN PICTORIAL WIRING DIAGRAM

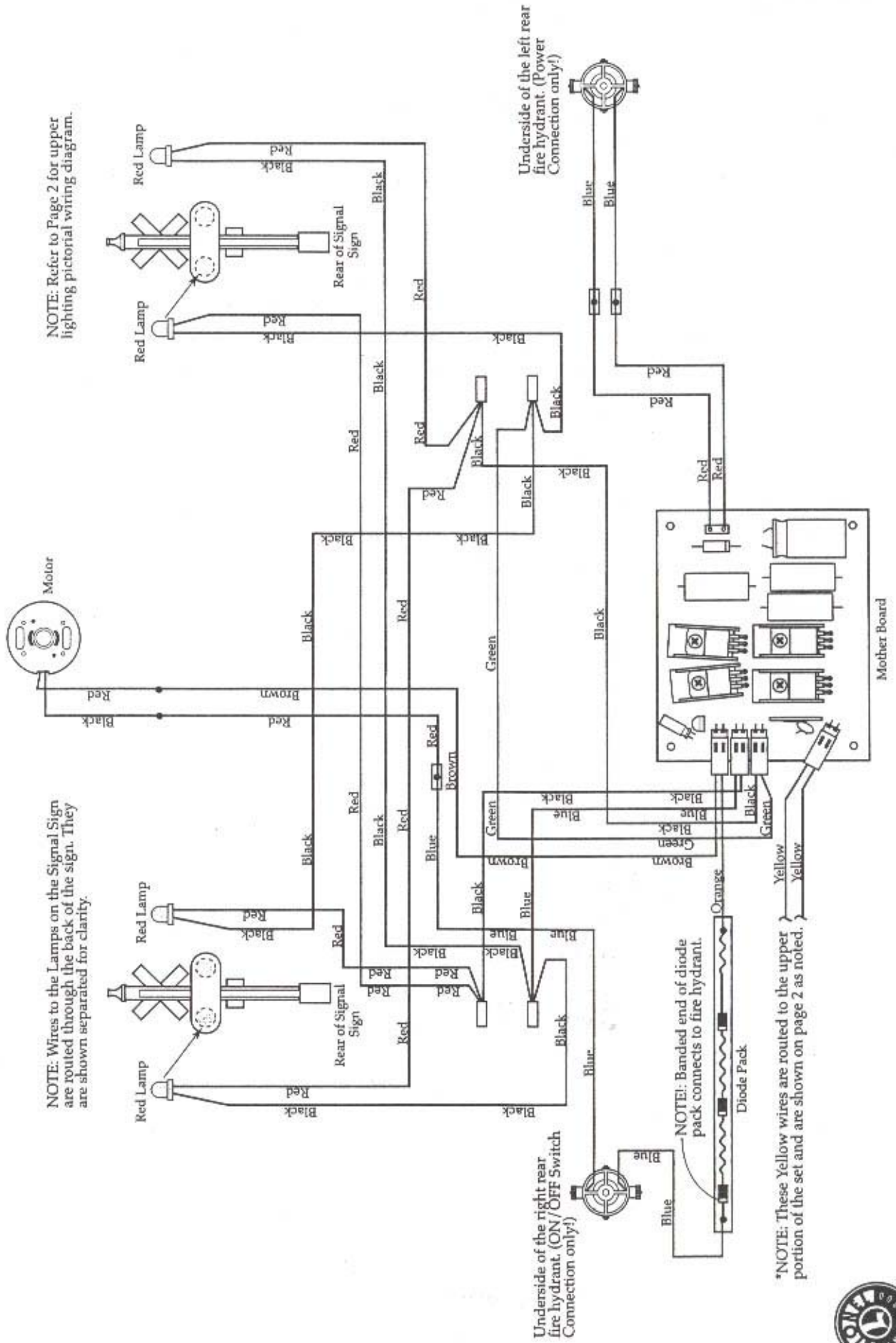


NOTE: Colors of wires may vary. You must trace wires to verify connections



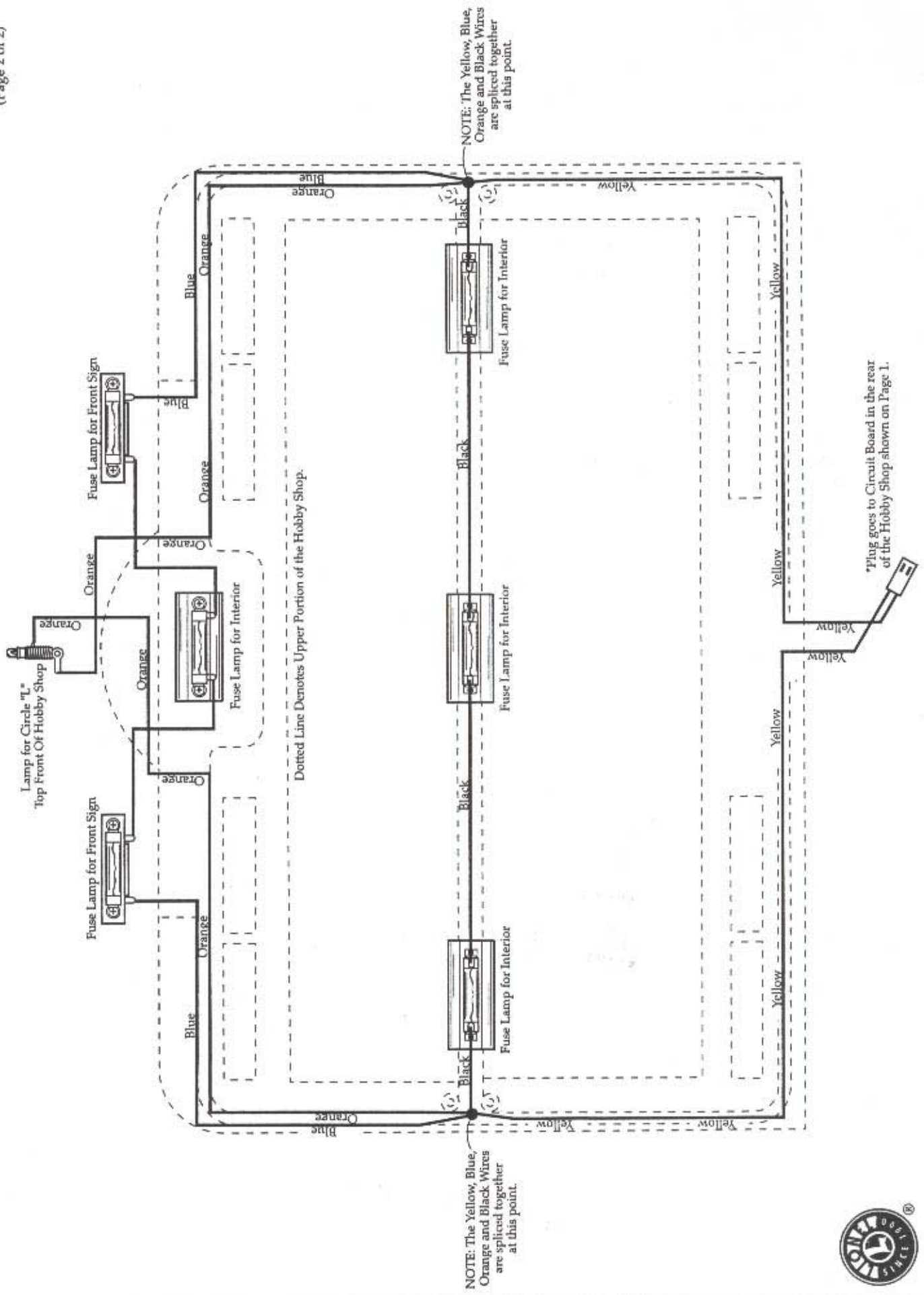
LIONEL HOBBY SHOP PICTORIAL WIRING DIAGRAM

(Page 1 of 2)

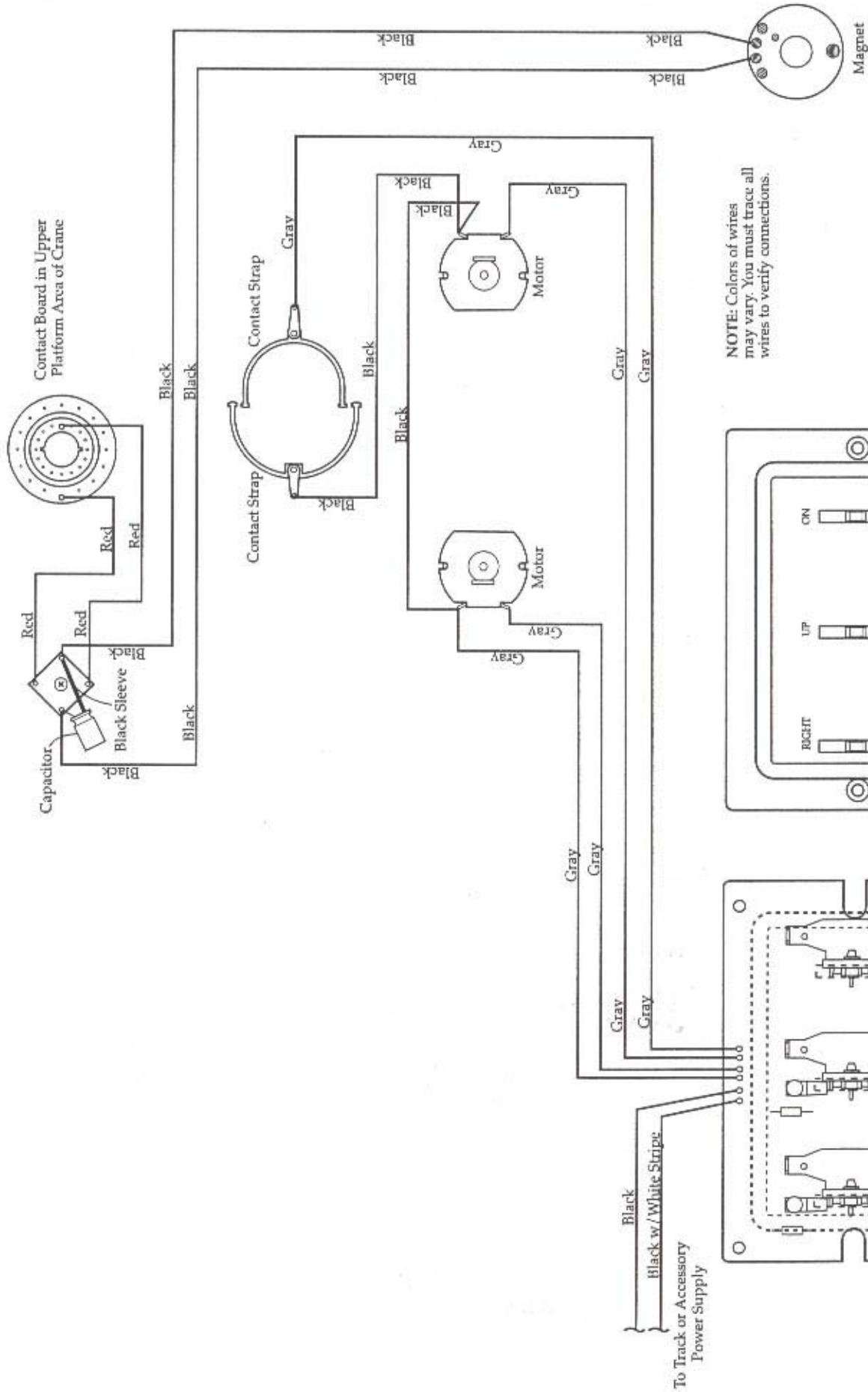


LIONEL HOBBY SHOP LIGHTING PICTORIAL WIRING DIAGRAM

(Page 2 of 2)



TRIPLE-ACTION MAGNETIC CRANE PICTORIAL WIRING DIAGRAM



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

View of the outside of the Controller

View of the inside of the Controller

