



PARTS LISTS AND EXPLODED DIAGRAMS

1970-1986

Edited by Samuel J. Baum

With the assistance of I.D. Smith

Authorized by Lionel Trains, Inc.

Published by Greenberg Publishing Company, Inc.

Copyright © 1987 by Lionel Trains, Inc.

**Greenberg Book Division
Kalmbach Publishing Co.
21027 Crossroads Circle
Waukesha, Wisconsin 53187
(414) 796-8776**

First Edition
Second Printing

Manufactured in the United States of America

All rights reserved. No part of this book may be reproduced in any form or by any means, including electronic, photocopying or recording, or by any information storage system, without written permission of the publisher, except in the case of brief quotations used in critical articles and reviews.

Kalmbach Publishing Co. publishes the world's largest selection of Lionel, American Flyer, LGB, Marx, Ives, and other toy train publications as well as a selection of books on model and prototype railroading, dollhouse building, and collectible toys. For a complete listing of current Greenberg Books, please call 1-800-533-6644 or write to Kalmbach Publishing Co., 21027 Crossroads Circle, Waukesha, Wisconsin 53187.

Greenberg Shows, Inc. sponsors *Greenberg's Great Train, Dollhouse and Toy Shows*, the world's largest of its kind. The shows feature extravagant operating train layouts, and a display of magnificent dollhouses. The shows also present a huge marketplace of model and toy trains, for HO, N, and Z Scales; Lionel O and Standard Gauges; and S and 1 Gauges; plus layout accessories and railroadiana. They also offer a large selection of dollhouse miniatures and building materials, and collectible toys. Shows are scheduled along the East Coast each year from Massachusetts to Florida. For a list of our current shows please call (410) 795-7447 or write to Greenberg Shows, Inc., 7566 Main Street, Sykesville, Maryland 21784 and request a show brochure.

Greenberg Auctions, a division of Greenberg Shows, Inc., offers nationally advertised auctions of toy trains and toys. Please contact our auction manager at (410) 795-7447 for further information.

ISBN0-89778-195-3

Library of Congress Cataloging-in-Publication Data

Lionel parts lists and exploded diagrams, 1970-1986.

On t.p. the registered trademark symbol "R" within a circle is superscript following "Lionel" in the title.

Includes index.

1. Railroads — Models. 2. Lionel Trains, Inc.
I. Baum, Samuel J. II. Smith, Issac D., 1930-
III. Lionel Trains, Inc.
TF197.L525 1987 625.1'9 89-18145
ISBN 0-89778-063-9

TABLE OF CONTENTS

Notes to the User..... iv

	Alphabetical Index	Diagrams and Parts Lists
O and O27 Gauge Trains and Equipment		
Diesel Engines and Electrics.....	v.....	1-1
Dummy Units.....	vi.....	2-1
Steam Locomotives.....	vii.....	3-1
Tenders.....	viii.....	4-1
Automobile Carriers.....	ix.....	5-1
Box, Refrigerator and Stock Cars.....	ix.....	6-1
Cabooses.....	xi.....	7-1
Flatcars.....	xii.....	8-1
Gondolas.....	xii.....	9-1
Hoppers.....	xii.....	10-1
Operating Cars.....	xiii.....	11-1
Passenger Cars.....	xiii.....	12-1
Tank and Vat Cars.....	xiv.....	13-1
Accessories.....	xiv.....	14-1
Motors and Trucks.....	xv.....	15-1
Miscellaneous Equipment.....	xvii.....	16-1
 S Gauge Trains and Equipment.....	 xvii.....	 17-1
for American Flyer		

Numerical Indexes

Lionel O and O27 Gauge Trains and Equipment.....	xix
American Flyer S Gauge by Lionel Fundimensions.....	xxx

NOTES TO THE USER

This manual combines every diagram and parts list which Lionel has provided to Greenberg Publishing Company for its products since 1970. Both an alphabetical and a numerical index have been included for the user's convenience, listing over 1400 separate items. The user should note that not every item number listed in the index appears on the particular exploded diagram and/or parts lists page to which it applies. Nevertheless the index should be taken as the correct guide to using this manual.

In most cases, a drawing and/or parts lists applies to a whole series of locomotives, rolling stock, or accessories. While the interior parts for all the items within a series are the same, the bodies and possibly other exterior parts are almost always different. Therefore, the item numbers which appear on the lists should be used when ordering all parts except for those exterior parts. When ordering the bodies, etc. use the number of the actual piece on which work is being done. For example, if a body for a 9057 Square Window Caboose is needed, the order number for that part is: #9057 - Body.

While many discrepancies from previous publications of these pages have been corrected, we invite the users to inform us of any additions or corrections which they discover. Included with this manual is a form for that purpose. Supplements to this manual will be periodically issued and will include not only changes to previous pages, but also many new pages. These will be made available at a cost of \$10.00. Readers who wish to be notified of the new pages, please fill in and mail the order form which accompanies this manual. If you wish to automatically receive the supplements, please add your credit card number and we will bill you when shipped.

ALPHABETICAL INDEX

Item	Fig.	List	Item	Fig.	List
DIESEL ENGINES AND ELECTRICS					
Diesel Engines					
Alco A Units			GP-7-9 (Early Production)	1-19	1-20
w/AC-DC Wound Motor & Manual & 2 Position Reverse	1-1	1-2	w/AC-DC Wound Motor & 3-Position E-Unit		
8020 8022 8025			8030 8031 8250		
8252 8351 8361			8353 8357 8359		
8452 8563 8570			8454 8478 8550		
8664 8861			8559 8576		
w/AC-DC Wound Motor & 3 Position Reverse	1-3	1-4	GP-7-9 Units (Current Production)		
(Note: Drawing is only an approximation of List)			8064 8654 8665	1-21	1-22
8552 8656			8666 8750 8757		
Alco Units w/DC Can Motor & Electronic E-Unit	1-5	1-6	8759 8763 8774		
8268			8775 8854 8866		
Budd RDC Passenger & Baggage Cars	1-7	1-8	GP-7-9-20 Units	1-26	1-27
w/AC-DC Wound Motor & 3 Position Reverse			w/Dual & Single DC Motor & Electronic E-Unit		
8764 8766 8868			8369 8375 8662		
F-3 A Units w/Single AC-DC Motor, 3 Position Reverse, Traction Tires	1-9	1-10	8679		
8363 8365 8464			GP-7 Units	1-26	1-23
8555 8566 8568			8263 ATSF (Low Cost)		
8652			GP-9 Units w/AC-DC Wound Motor, Magnetraction, E-Unit, Horn	1-28	1-29
F-3 A Units w/Dual Motor			8477 8587		
(See F-3 A Unit Dummy for further info on Truck & Frame ID.)			GP-20 Units	1-24	1-25
w/Traction Tires			w/AC-DC Wound Motor & 3 Position Reverse		
8054 Burlington	1-11	1-14	8066 8068 8160		
8851 New Haven	1-11	1-15	8352 8360 8456		
8952 Penn	1-11	1-16	8463 8562 8772		
8970	1-11	1-12	8776 8957		
w/Magnetraction	1-11	1-13	GP-35 Units	1-21	1-22
8260 8480 8580			8158		
8370			SD Units w/AC-DC Motor & 3 Position Reverse	1-30	1-31
Fairbanks Morse Diesels	1-17	1-18	SD-9 - 8063		
w/Dual AC-DC Wound Motors, Magnetraction, & 3 Pos. E-Unit			SD-18 - 8071 8162 8855 8872		
8056 8157 8378			SD-24 - 8152 8266		
8687 8950 8951			SD-28 - 8151 8380		
			SD-40 Units		
			w/Single Motor,	1-32	1-33

Item	Fig.	List
Magnetraction, 3 Position Reverse, both Mechanical & Electronic E-Units 8265 8376		
w/Dual Motors, Magnetraction, Horn, 3 Position Reverse 1-8200 8458 8585	1-34	1-35
Switchers		
w/DC Can Motor Only (early style) 8350 8670 8769	1-36	1-37
w/DC Can Motor Only (current style) 8161 8377 (No Drawing or List currently available)		
w/AC-DC Wound Motor & 3 Position Reverse 8264 8368	1-38	1-39, 40
w/AC-DC Wound Motor & Manual and 2-Position Reverse 8010 8111 8153 8182 8460 8472 8473 8569 8770	1-41	1-42
w/AC-DC Wound Motor & 3-Position E Unit 8057 8154 8354 8461 8466 8471 8556 8660 8761 8860	1-43	1-44
SW-1 Switchers w/DC Can Motor & Electronic E-Unit 8374 8485	1-45	1-46
U-36-B Units w/AC-DC Wound Motor & 3 Position E-Unit 1776 7500 8155 8470 8564 8571 8650 8669 8755 8771 8773 8857 8955 8962	1-47	1-48, 49
U-36-C Units w/AC-DC Wound Motor & 3 Position E-Unit 8050 8061 8960	1-30, 47	1-50

Item	Fig.	List
Electrics		
Ballast Tamper w/AC-DC Wound Motor & Actuator Clip (No Drawing or List 8578 currently available)		
Fire Car w/AC-DC Wound Motor 8379 (No Drawing or List currently available)		
GG-1 Electrics w/AC-DC Wound Motor & 3 Position E-Unit 8150 8753 8850	1-51	1-52
Little Joe Electrics 8272 8551 8558 8762	1-53	1-54
Rectifiers w/AC-DC Wound Motor & 3 Position Reverse 8659 8754 8859	1-55	1-56
Snowplows 8264	1-38	1-39, 40
Rotary Snowplows (No Drawing or List 1-8400 8459 currently available)		
Trolley Car w/AC-DC Wound Motor (Operating Instructions Only) 8690		1-57 thru 60

DUMMY UNITS

Alco A Unit Dummy w/Plastic Trucks 8269 (to match Power Unit #8268)	1-5	2-2
w/Metal Trucks 8553 8658	2-1	2-2
Alco B Unit Dummy w/Plastic Trucks 8021 8253 8362 8453 8667 8862	2-3	2-4
w/Metal Trucks 8554 8657	2-3	2-4

Item	Fig.	List	Item	Fig.	List
Budd Car Dummy	2-5	2-6	STEAM LOCOMOTIVES		
8765 8767 8768			Cab Removal for Smoke		
8869 8870 8871			Deflector Equipped Loco. 3-1		
F-3 A Unit Dummy	2-7	2-8	Berkshire Type	3-2,3	3-4,5
8055 8262 8364			3100 8002 8003		
8366 8372 8465			8215 8309 8615		
8467 8482 8557					
8567 8582 8653					
8852 8953 8971					
F-3 B Unit Dummy	2-9	2-10	Bullet Nose Type, 4-8-4	3-6	3-7
w/o Horn			8100 8307		
8059 8060 8062					
8468 8475 8575					
8661 8777 8864					
w/Horn					
8164 8261 8371					
8481 8581					
GP-7 Dummy			Columbia Type, 2-4-2		
8258 8455 8751	2-11	2-12	w/Smoke, 2 Pos. E-Unit		
8758			8042 8141 8201	3-11	3-12
			8203 8303 8604		
8356	2-11	2-13	8703		
GP-9 Dummy	2-11	2-12	8308	3-11	3-13
8065 8130 8251					
8254 8255 8358			8904	3-11	3-14
8561 8655 8668					
8760 8778 8867					
GP-20 Dummy	2-14	2-15	Die Cast 4-4-2	3-15	3-16,
8355 8367 8457			w/AC-DC Wound Motor, Smoke,		17
8565 8779 8958			2 Position Reverse		
			8008 8102 8142		
			8204 8304 8305		
			(Note: For 8008, applies to		
			external only. See List 3-21		
			for internal.)		
GP-35 Dummy	2-11	2-12	8800 8805	3-15	3-18
8159					
SD-18 Dummy	2-14	2-16	Die Cast Steam Loco,	3-19,20	3-21
8072 8163 8873			2-4-2 & 4-4-2		
			w/DC Motor, Electronic		
			E-Unit, Smoke		
			8213 8214 8402		
			8403 8616 8617		
U-36-B Dummy	2-17	2-18			
w/Four Wheel Trucks					
8156 8560 8572					
8573 8651 8756					
8858 8956					
U-36-C Dummy	2-17	2-18	General Type, 4-4-0		
w/Six Wheel Trucks			w/AC-DC Wound Motor, 2		
8051 8961			Position E-Unit		
			8004 8104	3-22	3-23,
					24
			8701	3-22	3-25,
					26

Item	Fig.	List
Hudson Type		
Small-sized 4-6-4 w/Smoke, 3 Pos. E-Unit, Magnetraction		
8206 8603	3-27	3-28, 29
8900	3-27	3-30
Medium-sized 4-6-4	3-31	3-32
8006 8101 8210		33
8476 8600 8702		
8801		
Penn K-4 Type, 2-6-4 Loco w/DC Motor	3-34	3-35
8001 8007		
Scout Type, 2-4-0 w/AC-DC Wound Motor, Manual Switch, 2 Pos. E-Unit		
8140 8302	3-36	3-37
8311 8507	3-36	3-38
Scout Type, 2-4-0 w/AC-DC Wound Motor, 2-Position E-Unit	3-39	3-40
8602		
Scout Type, 2-4-0, 2-4-2 w/DC Motor only		
8314 8620 8625	3-41	3-42
8902 Scout Type	3-41	3-43
8903 Columbia Type	3-41	3-42
Small Steam Loco, 2-4-0 w/AC-DC Wound Motor, 2 Pos. E-Unit, Manual Reverse	3-44	3-45
8300 8500 8502		
Small Steam Loco, 0-4-0 w/AC Wound Motor, Manual Reverse		
8601	3-46	3-47
w/DC Motor (Fig. applies to external only. For internal, see Fig. 3-41)		
8212 8313	3-46	3-47
Steam Loco, 2-4-0		
8310	3-48	3-49

Item	Fig.	List
8506	3-48	3-50
Turbine Type, 6-8-6	3-51,52,	3-55,
8404	53,54	56
Wabash Type, 2-6-2	3-27	3-28, 29
8610		
"Working on the RR", 0-4-0, w/Plastic Wheels	3-57	3-58
8803		
Steam Switchers		
Steam Switcher, 0-4-0 w/DC Can Motor, Smoke, Electronic E-Unit	3-59	3-60
8516 8635		
Dockside Switcher, 0-4-0 w/AC-DC Wound Motor, 2 Pos. E-Unit, Manual Reverse	3-61	3-62
8200 8209		
w/DC Can Motor (see note)		3-63
(note: For external, see Fig. 3-41. For internal, see Fig. 3-61)		
8512 8905		
TENDERS		
Die Cast Tender - Small w/SOS, Whistle (Note: Tenders in this series came with both SOS Trigger Truck and Two Wire Connections, and Plain Trucks with Three Pin Plug. Refer to Figure 4-9 for alternate rear truck, Circuit Board, and Three Pin Plug.)	4-1	4-2
8101-T1 8210-T1 8215-T1 8309-T1 8476-T1		
Die Cast Tender - Large "Hudsons" w/SOS, Whistle on Three Plug System	(Note: No Drawing or List yet made)	
8406-T1 8606-T1		
Docksider Tender - Obsolete. No drawing or List ever made.		
8209-T1		

Item	Fig.	List	Item	Fig.	List
Round Top Tender - Small (Coal Pile or Oil Top) w/Electronic or Mechanical SOS (Note: Mechanical SOS Tenders distinguished by large round wheel underneath Tender - Not illustrated)	4-3	4-4	Square Top Tender - Large w/Electronic or Mechanical SOS, Whistle (Note: Mechanical SOS Tenders distinguished by large round wheel underneath Tender - Not Illustrated)	4-18	4-19
8050-T1 8060-T1 8061-T1			8001-T1 8007-T1 8008-T1		
8141-T1 8201-T1 8203-T1			8051-T1 8102-T1 8142-T1		
8208-T1 8214-T1 8302-T1			8204-T1 8205-T1 8304-T1		
8303-T1 8311-T1 8314-T1			8308-T1 8504-T1 8617-T1		
8402-T1 8403-T1 8500-T1			8800-T1		
8602-T1 8616-T1 8625-T1					
8703-T1 8904-T1 8906-T1			"Working on the RR" Tender - Obsolete (No Drawing or List available)		
(Note: 4-5 refers to 8904T-1 only.)			8803-T1		
Round Top Tender - Large w/Four Wheel Trucks, SOS, Whistle (Note: Some of these Tenders have SOS only. Those with Whistle also have Center Roller Pick up)	4-6	4-7	Wood Tender - General Type	4-20	4-21
8006-T1 8206-T1 8305-T1			8004-T1 8005-T1 8104-T1		
8401-T1 8505-T1 8600-T1			8315-T1 8410-T1 8701-T1		
8603-T1 8702-T1 8801-T1					
8900-T1			Instructions for Conversion of Tender w/Steam Sound to SOS and Whistle	4-22	
(Note: 4-8 refers to 8702-T1, 8801-T1, & 8900-T1. Use for historical purposes only.)					
w/SOS, Whistle on Three and Five Pin Plug system (Note: 8404-T1 also has Back-Up Light.)	4-9	4-10	AUTOMOBILE CARRIERS		
8307-T1 8404-T1 8610-T1			Auto Carrier		5-1
8615-T1			9123 9125 9126		
			9129 9139 9145		
			9216 9222 9226		
			9281 9285		
w/6-Wheel Trucks (incl. SOS Trigger Truck), Elec- tronic SOS, Whistle	4-11	4-12	BOX, REFRIGERATOR AND STOCK CARS		
3100-T1 8002-T1 8003-T1			Box Cars		
8100-T1			Early 9200 and 9700 Units		6-1
Slope-Back Tender with & without Back-Up Light	4-13	4-14	9200 9201 9202		
8212-T1 8300-T1 8310-T1			9203 9204 9205		
8313-T1 8506-T1 8601-T1			9206 9207 9208		
8620-T1 8902-T1			9209 9211 9214		
w/Electronic Reverse, Back-Up Lights	3-56	4-15	9215 9230 9700		
8516-T1 8635-T1			9702 9703 9704		
			9705 9706 9709		
			9710		
Square Top Tender - Small	4-16	4-17	Box Cars - Later Units		6-2
8040-T1			9400 9401 9402		
			9403 9404 9405		
			9406 9411 9729		

Item	Fig.	List
Ice Car - 6700	6-24	6-24
Operating Post Office Car - 9301	6-25	6-26
Refrigerator Cars		
Billboard Units	6-27	
7502 7503 7507		
7509 7510 7511		
9819 9827 9828		
9829 9830 9831		
9832 9833 9834		
9835 9836 9837		
9840 9841 9842		
9843 9844 9845		
9846 9847 9849		
9850 9851 9852		
9853 9854 9855		
9856 9858 9859		
9860 9861 9862		
9863 9864 9865		
9866 9867 9869		
9870 9871 9872		
9884 9885 9886		
9887 9888		
Billboard Units	6-28	
9811 9812 9813		
9814 9816 9817		
9818 9879		
Short Units	6-29	
7902 7903 7909		
7910 7925 7926		
9035 9036 9037		
9040 9041 9042		
9043 9044 9365		
Standard O Units	6-30	
6230 9802 9805		
9807 9809 9815		
9825		
Woodside Unit	6-31	
5708 5709 5710		
5711 5712 5713		
5714 5715 5716		
5719 5720 5721		
5722 5730 5731		
5732		

Item	Fig.	List
Stock Cars		
7301 7303 7304		6-32
7309 7808 9407		
9408 9437 9448		
9450 9707 9725		
9773		
CABOOSES		
Bay Window Units		
9231 9316 9317	7-1	7-2
9323 9326		
6401 6421 6422	7-1	7-3
6425 6431 6433		
6438 6439 6441		
6493 9174 9177		
9184 9188 9268		
9269 9271 9272		
9273 9274 9309		
9328 9355 9361		
9368 9372 9387		
Bobber Units		7-4
6494 9067 9068		
9071 9072 9078		
9357		
Extended Vision Units		7-5
6900 6901 6903		
6904 6905 6906		
6910 6913 6917		
Porthole Units (Illuminated)	7-6	7-7
6449 6908 7508		
7600 9160 9161		
9162 9163 9164		
9165 9167 9168		
9170 9175 9180		
9181 9182 9183		
9185 9186 9239		
9270 9278		
Square Window Units		
6430 6432 6485	7-10	7-8
6486 6912 6918		
6919 6921 9057		
9058 9060 9061		
9062 9063 9064		
9065 9066 9069		
9070 9073 9074		
9075 9076 9080		

Item	Fig.	List
9171 9172 9173		
9178 9380 9381		
9341 9346	7-10	7-9
Square Window Units (Illuminated)	7-10	7-11
9166 9169 9178		
Transfer Units	7-12	7-13
6420 6426 6427		
6428 6491		
Work Units		
6496 6500 6916		7-14
9021 9025 9027		
9342		7-15
FLATCARS		
9014 9026		8-1
6531 6562 6573		8-2
6574 6575 6576		
9020 9022 9023		
9024 9120 9121		
9122 9124 9133		
9149 9157 9158		
9282 9383		
9325 9333		8-3
Allis Chalmers Car	8-4	8-4
9232		
Atomic Waste Disposal Car	8-5	8-6
9234 9389		
Depressed Flat Car w/Transformer	8-7	8-7
9233		
General Type Unit		8-8
9553		
GONDOLAS		
6200 6202 6205		9-1
6206 6207 6208		
6210 6211 6214		
6254 6260 6270		
9017 9030 9031		
9032 9033 9055		

Item	Fig.	List
9131 9136 9137		
9140 9141 9142		
9143 9144 9283		
9284 9385		
9084 9315 9336		9-2
9340 9370 9379		9-3
Standard O Units		9-4
6209 6231 9820		
9821 9822 9824		
Animated Gondola	9-5	9-6
9307		
Animated Gondola (Low Cost Unit)		9-7
6201		
Operating Barrel Car		9-8
9225 9290		
HOPPERS		
Short Units		
6113 6115 6137		10-1
6150 6177 9010		
9011 9012 9013		
9015 9016 9018		
9038		
9083 9338		10-2
Covered Units		
6100 6101 6102		10-3
6103 6104 6106		
6107 6110 6111		
6114 6118 6123		
6124 6131 3138		
7504 9110 9111		
9112 9113 9114		
9115 9116 9117		
9119 9130 9134		
9135 9213 9260		
9261 9262 9263		
9264 9265 9267		
9276 9286 9316		
9322		10-4
9371 9374		10-5
Operating Hopper Car	10-6	10-7
6105 6109 6117		
9240 9384		

Item	Fig.	List	Item	Fig.	List
OPERATING CARS			General Type Passenger Car		12-5
Coal Dump Car	11-1	11-2	7215 7216 7217		
6251 9304 9311			9551 9552 9559		
9398 9399			9560 9561		
Crane Car			Passenger Car w/4 Wheel		12-6
6435 6560		11-3	Operating Truck		
			9530 9531 9532		
6508 6510 6524	11-4	11-5	9533 9534		
6579 6593 9329					
9348			Passenger Car w/6 Wheel		
			Operating Truck		
9332	11-4	11-6	7227 7228 7229		12-7
			7230 7231 7232		
Derrick Car	11-7	11-8	9536 9537 9538		
9235 9236 9245			9539 9540 9554		
9378			9555 9556 9557		
			9558 9586 9599		
Log Dump Car		11-9			
9238 9241 9300			9581 9582 9583		12-8
9303 9335			9584 9585		
Searchlight Car	11-10	11-11	Passenger Car -		12-9
6522 6526 6529			Streamlined		
9302 9312 9345			6403 6404 6405		
			6406 6410 6411		
			6412 7200 7201		
			7202		
			Baggage/Mail Car		12-10
			9541		
PASSENGER CARS			Aluminum Cars		
Passenger, Observation, Combine Cars - Roof Removal		12-1	Baggage Car	12-11	12-12
			7220 9545 9562		
			9570 9576 9584		
			9594		
Passenger, Observation, Combine Cars	12-2	12-3	Combination Car		12-13
9500 9501 9502			9546 9563 9569		
9503 9504 9205			9590 9595		
9506 9507 9508			Observation Car	12-14	12-15,
9509 9510 9511			7225 9547 9566		16
9513 9514 9515			9574 9580 9593		
9516 9517 9518			9598		
9519					
9521 9522 9523	12-2	12-4	Aluminum Passenger Car/ Vista Dome Car	12-17	12-18, 19
9524 9525					

Item	Fig.	List	Item	Fig.	List
7211	7222	7223	Bumper - Illuminated		14-7
9548	9549	9564	2260-1		
9565	9567	9571	Bumper - Illuminated		14-8
9572	9573	9575	2290		
9577	9578	9579	Crossing Gate - Auto.	14-9	14-10
9588	9591	9592	2152		
9596	9597		Crossing Gate & Flasher	14-11	14-12
<hr/>			2162		
TANK AND VAT CARS			Drawbridge - Automatic/ Remote Control	14-13	14-14
Single Dome Tank Cars			2317		
6301	6304	6305	13-1		
6306	6307	6313			
6357	9150	9151	Flag Pole		14-15
9152	9153	9154	2320		
9189	9277	9354	Floodlight Tower		14-16
9367	9369	9373	2195		
9386			Floodlight Tower		14-17
9321	9324	9331	2313		
9334			13-2		
6308	9050	9082	13-3		
Two Dome Tank Cars			Freight Platform - Illum.		14-18
6310	6312	6317	2156		
Three Dome Tank Cars			Freight Shed - Whistling		14-19
6300	6302	6314	2125		
9138	9148	9250	13-4		
9279	9327	9344	Freight Shed - Whistling		14-20
9353			2126		
9313			13-5		
Vat Cars			Freight Station - Illum.	14-21	14-22
9106	9107	9128	2133		
9132	9146	9193	13-6		
ACCESSORIES			Gantry Crane	14-23	14-24
Banjo Signal - Automatic	14-1	14-2	2302		
2140			Gateman - Automatic		14-25
Beacon - Rotary			2145		
2494			13-7		
Billboard - Blinking			Highway Flasher - Auto.	14-26	14-27
2307			2154		
Block Signal - Automatic	14-5	14-6	Horn Shed		14-28
2163			2127		
			Icing Station	14-29	14-30
			2306		
			Lumber Mill	14-31	14-32
			2301		
			Microwave Tower		14-33
			2199		
			Newsstand - Animated	14-34	14-35
			2308		

Item	Fig.	List	Item	Fig.	List
Oil Derrick 2305	14-36	14-37	Watch Tower 2319		14-43
Searchlight Tower 2314		14-38	Installing and Operating Instructions for Automatic Operating Accessories		
Semaphore - Operating 2151	14-39	14-40	6-2117 6-2140		14-44
Street Lamp 2170	14-41	14-42	6-2152 6-2154		thru
			6-2162 6-2163		14-47
			6-12704 6-12714		

Ref. #	Description	Fig.	List
MOTORS AND TRUCKS			
217-75	Plain Truck - Alco "B"	15-1	15-2
226E-88	Front Pilot Truck		15-3
486-1	Plain Light Truck		15-4
486-25	Plain Light Truck		15-5
490-1	Coupler Truck		15-6
490-25	Coupler Truck		15-7
492-1	Light Coupler Truck w/Roller		15-8
492-25	Light Coupler Truck w/Roller		15-9
675-19	Front Pilot Truck		15-3
2028-100	F-3 Type Motor	15-10	15-11
2046-22	Front Pilot Truck		15-12
2046-87	Trailing Truck		15-12
2055-42	Trailing Truck		15-12
2321-70	Fairbanks Morse Motor Truck	15-13	15-14
2330-25	GG-1 Motor Truck	15-15	15-16
6403-50	Coupler Truck - Short Coupler		15-17
8002-80	Trailing Truck		15-18
8002-T50	6-Wheel Truck w/Ground		15-19
8002-T80	6-Wheel Truck w/Center Pickup & Coupler		15-19
8002-T90	6-Wheel Truck w/SOS Trigger		15-19
8002-100	Motor		15-20
8005T-70	Archbar Truck w/Coupler (Plastic Wheel)		15-21
8005-23	General Pilot Truck (Plastic Wheel)		15-22
8007-40	Trailing Truck		15-18
8007-100	Motor & Wheel Assembly		15-23
8010-15	Plain Truck - SW-1 Switcher & Alco	15-24	15-25
8010-100	Motor Truck - SW-1 Switcher (Manual)	15-26	15-27
8021-100	Motor Truck - Alco (2-Position)	15-28	15-29
8030-15	Plain Truck w/Black Sides	15-30	15-31
8030-100	Motor Truck	15-32	15-33
8040-15	Rear Truck		15-34
8040-100	Motor		15-35
8040-600	Motor w/Manual Switch		15-36
8130-15	Collector Truck	15-30	15-31
8142-20	Pilot Truck		15-34
8206-100	Hudson Type 6-Wheel Motor	15-37	15-38, 39
8212-102	Motor Body w/Wheels	15-40	15-41
8213	Motor Body w/Wheels	15-40	15-41
8214-101	DC Steam Motor Chassie Assembly w/Wheels	15-40	15-41
8216	Motor Body w/Wheels	15-40	15-41
8217	Motor Body w/Wheels	15-40	15-41
8240-600	Motor w/Manual Switch		15-36
8252-15	Plain Truck - Alco	15-1	15-42
8260-570	F-3 Front Magnetraction Motor Truck	15-51	15-53, 54

Ref. #	Description	Fig.	List
8263-101	DC Motor Truck	15-40	15-43
8263-250	Collector Truck		15-44
8265-511	SD-40 Collector Truck w/Silver Sides		15-45
8265-571	SD-40 Motor Truck w/Silver Sides		15-46
8354-15	Plain Truck - SW-1, Alco A & B	15-47	15-48
8354-100	Motor Truck - SW-1 (3-Position)	15-49	15-50
8370-570	F-3 Front Magnetraction Motor Truck	15-51	15-53, 54
8370-590	F-3 Rear Magnetraction Motor Truck	15-51, 52	15-53
8403-101	DC Steam Motor	15-40	15-41
8458-571	SD-40 Dual Motor Truck	15-55	15-56
8477-150	GP-9 Magnetraction Motor Truck	15-51, 52	15-53
8480-570	F-3 Front Magnetraction Motor Truck	15-51	15-53, 54
8506-601	Motor w/3-Position E-Unit	15-57	15-58
8516-100	DC Motor Truck	15-40	15-59
8551-150	"Little Joe" Power Truck (less motor)	15-60	15-61
8552-100	Motor Truck - Alco (3-Position)	15-62	15-63
8554-15	Plain Truck - SW-1, Alco A & B	15-47	15-48
8555-70	F-3 Collector Truck	15-64	15-65
8555-100	F-3 Rear Motor Truck	15-66	15-67
8557-150	Plain Rear Truck (Alco B, F-3 A & B)	15-1	15-68
8580-570	F-3 Front Magnetraction Motor Truck	15-51	15-53, 54
8600-100	6-Wheel Steam Motor	15-69	15-70
8601-100	Motor w/Manual Switch	15-71	15-72
8602-601	Motor w/E-Unit		15-73
8603-100	Hudson Type 6-Wheel Motor	15-37	15-38, 39
8616-101	DC Steam Motor Chassie Assembly w/Wheels	15-40	15-41
8616-102	Motor Body w/Wheels	15-40	15-41
8652-70	"Little Joe" Collector Truck	15-64	15-65
8652-150	F-3 Motor Truck	15-66	15-67
8653-150	F-3 Plain Rear Truck w/Silver Side		15-74
8659-150	Motor Truck - Budd & Rectifier	15-75	15-76
8665-15	Plain Truck w/Silver Sides	15-30	15-31
8665-100	Motor Truck	15-32	15-33
8670-35	Frame Assembly w/Wheels - Hustler Switcher	15-77	15-78
8670-100	Motor & Gear - Hustler Switcher	15-79	15-80
8701-T60	Archbar Plain Truck w/Metal Wheels		15-81
8701-T70	Archbar Coupler Truck w/Metal Wheels		15-81
8701T-90	Operating Coupler Truck		15-17
8701-100	General AC Motor	15-82	15-83
8702-100	6-Wheel Steam Motor	15-69	15-70
8753-55	GG-1 Pilot Truck	15-84	15-85
8753-100	GG-1 Motor	15-86	15-87
8855-100	SD-18 Motor Truck w/Black Side	15-88	15-89
8855-115	SD-18 Collector Truck w/Black Side	15-90	15-91
8872-100	SD-18 Motor Truck w/Silver Side	15-88	15-89
8872-115	SD-18 Collector Truck w/Silver Side	15-90	15-91
8900-100	6-Wheel Steam Motor	15-69	15-70
8902-100	DC Steam Motor	15-92	15-93
8903-100	DC Steam Motor	15-92	15-93
8905-100	DC Steam Motor	15-92	15-93
8950-100	Fairbanks Morse Motor		15-94
9150-50	Operating Coupler Truck w/Metal Wheels		15-95
9150-75	Dummy Truck w/Metal Wheels		15-95
9150-85	Plain Truck w/Metal Wheels		15-95
9150-90	Operating Coupler Truck w/Plastic Wheels		15-96
9150-95	Dummy Truck w/Plastic Wheels		15-96
9150-105	Plain Truck w/Plastic Wheels		15-96
9150-115	Dummy Truck w/Axle Contact - Metal Wheels		15-97
9150-125	Plain Truck w/Axle Contact - Metal Wheels		15-97
9150-130	Operating Coupler Truck w/Axle Contact		15-97

Ref. #	Description	Fig.	List
9150-135	Dummy Truck w/Axle Contact & Roller		15-98
9150-145	Plain Truck w/Axle Contact & Roller		15-98
9174-50	Operating Coupler Truck		15-44
9233-50	Plain Truck w/Pickup - Die Cast		15-99
9233-60	Coupler Truck w/Pickup - Die Cast		15-99
9234-50	Coupler Truck w/Pickup		15-100
9234-80	Coupler Truck w/Eyelet		15-100
9306-70	Operating Coupler Truck (Plastic Wheel)		15-21
9307-60	Coupler Truck w/Pickup - Die Cast		15-99
9329-50	6-Wheel Truck	15-101	15-102
9500-50	Operating Long Coupler Truck		15-103
9536-50	6-Wheel Truck w/Ground		15-19
9536-80	6-Wheel Truck w/Roller		15-19
9551-80	Archbar Operating Coupler Truck		15-103
Generic Collector Truck w/DC Motor GP7-9-20 and FA-Alco		15-104	15-105
Generic F-3 "A" Dual Motor Truck - Front		15-106	15-107
Rear		15-108	15-109
Instructions for Motor Replacement on all DC Motors		15-110	

Item	Fig.	List	Item	Fig.	List
MISCELLANEOUS			For any AC 3-Position Loco with Mechanical E-Unit and Light		
E-Units - General Info.	16-1			16-18	
2-Position E-Units	16-3		For any Dual AC Motor Loco with 3-Position Mechanical E-Unit with Lights but no Horn		
3-Position E-Units	16-4			16-19	
Screw List	16-5		AMERICAN FLYER S GAUGE by LIONEL FUNDIMENSIONS		
Smoke Unit Assembly 8141-50	16-10	16-11	Diesel Engines		
Tracks			Alco PA-1 A Unit		
O Gauge Switch	16-12,13	16-14, 15	8150 8153	17-1	17-2
5132 - Right			8251		17-3
5133 - Left			Dummy Units		
O27 Switch Modification Information	16-16		Alco PA-1 A Unit		
Wiring Diagrams:			8152 8155	17-4	17-5
For any AC 2-Position E-Unit for Double Wound Field Locomotives with Light	16-17		Alco PB-1 B Unit		
For AC Motor Generals	16-17		8151 8154	17-6	17-7
For following Locomotives:					
8206 8600 8603	16-18				
8702 8801 8900					

Item	Fig.	List	Item	Fig.	List
Rolling Stock			Tank Car - Single Dome	17-17	17-17
Boxcar		17-8	17-8	Motors and Trucks	
9700	9701	9702	Motor Assembly	17-18	17-19
9703			8153-100		
Caboose		17-9	17-10	Caboose Truck	17-20
9400 (non-illuminated)				Illuminated - 9401-050	17-20
9401 (illuminated)				Dummy Truck Assembly	17-21
Gondola		17-11	17-11	8154-200 - B Unit	17-21
9300				8155-250 - A Unit	
9301 (w/cannister)				Operating Coupler Truck	17-22
Hopper Car		17-12	17-12	9700-50	17-22
9200				Passenger Truck	17-23
Passenger Cars				95xx-050 w/Coupler	17-23
Combo Car - 9500		17-13	17-14	95xx-051 Plain	
Observation Car - 9503		17-13	17-14		
Passenger Car - 9501		17-15	17-16		
Vista Dome Car - 9502		17-15	17-16		

NUMERICAL INDEX

Item	Fig.	List	Item	Fig.	List
217-75	15-1	15-2	2330-25	15-15	15-16
226E-88		15-3	2494		14-3
486-1		15-4	3100	3-2,3	3-4,5
486-25		15-5	3100-T1	4-11	4-12
490-1		15-6	5700	(No Drawing or List available)	
490-25		15-7	5701	(No Drawing or List available)	
492-1		15-8	5702	(No Drawing or List available)	
492-25		15-9	5703	(No Drawing or List available)	
675-19		15-3	5704	(No Drawing or List available)	
1776	1-47	1-48,49	5705	(No Drawing or List available)	
2028-100	15-10	15-11	5706	(No Drawing or List available)	
2046-22		15-12	5707	(No Drawing or List available)	
2046-87		15-12	5708		6-31
2055-42		15-12	5709		6-31
2115	(No Drawing or List available)		5710		6-31
2117	14-5		5711		6-31
2125		14-19	5712		6-31
2126		14-20	5713		6-31
2127		14-28	5714		6-31
2128	(No Drawing or List available)		5715		6-31
2129	(No Drawing or List available)		5716		6-31
2133	14-21	14-22	5717		6-20
2140	14-1	14-2	5719		6-31
2145		14-25	5720		6-31
2151	14-39	14-40	5721		6-31
2152	14-9	14-10	5722		6-31
2154	14-26	14-27	5724		6-20
2156		14-18	5726		6-20
2162	14-11	14-12	5727		6-20
2163	14-5	14-6	5728		6-20
2170	14-41	14-42	5730		6-31
2171	(No Drawing or List available)		5731		6-31
2195		14-16	5732		6-31
2199		14-33	5733		6-20
2256	(No Drawing or List available)		5735		6-20
2260		14-7	5739	(No Drawing or List available)	
2283	(No Drawing or List available)		5745		6-20
2290		14-8	5760	(No Drawing or List available)	
2292	(No Drawing or List available)		6100		10-3
2301	14-31	14-32	6101		10-3
2302	14-23	14-24	6102		10-3
2305	14-36	14-37	6103		10-3
2306	14-29	14-30	6104		10-3
2307		14-4	6105	10-6	10-7
2308	14-34	14-35	6106		10-3
2313		14-17	6107		10-3
2314		14-38	6109	10-6	10-7
2315	(No Drawing or List available)		6110		10-3
2316	(No Drawing or List available)		6111		10-3
2317	14-13	14-14	6113		10-1
2318	(No Drawing or List available)		6114		10-3
2319		14-43	6115		10-1
2320		14-15	6116	(No Drawing or List available)	
2321-70	15-13	15-14	6117	10-6	10-7
2323	(No Drawing or List available)		6118		10-3
2324	(No Drawing or List available)		6122	(No Drawing or List available)	

Item	Fig.	List	Item	Fig.	List
6123		10-3	6422	7-1	7-3
6124		10-3	6425	7-1	7-3
6126	(No Drawing or List available)		6426	7-12	7-13
6127	(No Drawing or List available)		6427	7-12	7-13
6131		10-3	6428	7-12	7-13
6134	(No Drawing or List available)		6430	7-10	7-8
6135	(No Drawing or List available)		6431	7-1	7-3
6137		10-1	6432	7-10	7-8
6138		10-3	6433	7-1	7-3
6150		10-1	6435		11-3
6177		10-1	6438	7-1	7-3
6200		9-1	6439	7-1	7-3
6201		9-7	6441	7-1	7-3
6202		9-1	6449	7-6	7-7
6205		9-1	6485	7-10	7-8
6206		9-1	6486	7-10	7-8
6207		9-1	6491	7-12	7-13
6208		9-1	6493	7-1	7-3
6209		9-4	6494		7-4
6210		9-1	6496		7-14
6211		9-1	6500		7-14
6214		9-1	6504	(No Drawing or List available)	
6230		6-30	6505	(No Drawing or List available)	
6231		9-4	6506	(No Drawing or List available)	
6232		6-16	6507	(No Drawing or List available)	
6233	(No Drawing or List available)		6508	11-4	11-5
6234		6-16	6510	11-4	11-5
6235		6-16	6515	(No Drawing or List available)	
6236		6-16	6521	(No Drawing or List available)	
6237		6-16	6522	11-10	11-11
6238		6-16	6524	11-4	11-5
6239		6-16	6526	11-10	11-11
6251	11-1	11-2	6529	11-10	11-11
6254		9-1	6531		8-2
6260		9-1	6560		11-3
6270		9-1	6562		8-2
6300		13-5	6573		8-2
6301		13-1	6574		8-2
6302		13-5	6575		8-2
6304		13-1	6576		8-2
6305		13-1	6579	11-4	11-5
6306		13-1	6585	(No Drawing or List available)	
6307		13-1	6593	11-4	11-5
6308		13-3	6700	6-24	6-24
6310		13-4	6900		7-5
6312		13-4	6901		7-5
6313		13-1	6903		7-5
6314		13-5	6904		7-5
6317		13-4	6905		7-5
6357		13-1	6906		7-5
6401	7-1	7-3	6907	(No Drawing or List available)	
6403		12-9	6908	7-6	7-7
6403-50		15-7	6910		7-5
6404		12-9	6912	7-10	7-8
6405		12-9	6913		7-5
6406		12-9	6916		7-14
6410		12-9	6917		7-5
6411		12-9	6918	7-10	7-8
6412		12-9	6919	7-10	7-8
6420	7-12	7-13	6920	(No Drawing or List available)	
6421	7-1	7-3	6921	7-10	7-8

Item	Fig.	List	Item	Fig.	List
7200		12-9	7706		6-17
7201		12-9	7707		6-17
7202		12-9	7708		6-17
7203	(No Drawing or List available)		7709		6-17
7204	(No Drawing or List available)		7710		6-17
7207	(No Drawing or List available)		7711		6-17
7208	(No Drawing or List available)		7712		6-10
7210	(No Drawing or List available)		7800		6-14
7211	12-17	12-18,19	7801		6-14
7215		12-5	7802		6-14
7216		12-5	7808		6-32
7217		12-5	7809		6-14
7220	12-11	12-12	7810		6-14
7222	12-17	12-18,19	7811		6-14
7223	12-17	12-18,19	7900	(No Drawing or List available)	
7224	(No Drawing or List available)		7901		6-21
7225	12-14	12-15,16	7902		6-29
7227		12-7	7903		6-29
7228		12-7	7904		6-22
7229		12-7	7909		6-29
7230		12-7	7910		6-29
7231		12-7	7913		6-22
7232		12-7	7925		6-29
7301		6-32	7926		6-29
7302	(No Drawing or List available)		8001	3-34	3-35
7303		6-32	8001-T1	4-18	4-19
7304		6-32	8002	3-2,3	3-4,5
7309		6-32	8002-T1	4-11	4-12
7401	(No Drawing or List available)		8002-80		15-18
7404		6-4	8002-T50		15-19
7500	1-47	1-48,49	8002-T80		15-19
7502		6-27	8002-T90		15-19
7503		6-27	8002-100		15-20
7504		10-3	8003	3-2,3	3-4,5
7507		6-27	8003-T1	4-11	4-12
7508	7-6	7-7	8004	3-22	3-23,24
7509		6-27	8004-T1	4-20	4-21
7510		6-27	8005	(No Drawing or List available)	
7511		6-27	8005-T1	4-20	4-21
7515		6-23	8005-T70		15-21
7517		6-23	8005-23		15-22
7518		6-23	8006	3-31	3-32,33
7522		6-23	8006-T1	4-6	4-7
7530		6-23	8007	3-34	3-35
7600	7-6	7-7	8007-T1	4-18	4-19
7601		6-15	8007-40		15-18
7602		6-15	8007-100		15-23
7603		6-15	8008	3-15	3-16,17,21
7604		6-15	8008-T1	4-18	4-19
7605		6-15	8010	1-41	1-42
7606		6-15	8010-15	15-24	15-25
7607		6-15	8010-100	15-26	15-27
7608		6-15	8020	1-1	1-2
7609		6-15	8021	2-3	2-4
7610		6-15	8021-100	15-28	15-29
7611		6-15	8022	1-1	1-2
7612		6-15	8025	1-1	1-2
7613		6-15	8030	1-19	1-20
7701		6-17	8030-15	15-30	15-31
7702		6-17	8030-100	15-32	15-33
7703		6-17	8031	1-19	1-20

Item	Fig.	List
8040	3-8	3-9
8040-T1	4-16	4-17
8040-T3	4-16	4-17
8040-15		15-34
8040-100		15-35
8040-600		15-36
8041	3-8	3-10
8042	3-11	3-12
8043	3-8	3-9
8050	1-30, 47	1-50
8050-T1	4-3	4-4
8051	2-17	2-18
8051-T1	4-18	4-19
8054	1-11	1-14
8055	2-7	2-8
8056	1-17	1-18
8057	1-43	1-44
8059	2-9	2-10
8060	2-9	2-10
8060-T1	4-3	4-4
8061	1-30, 47	1-50
8061-T1	4-3	4-4
8062	2-9	2-10
8063	1-30	1-31
8064	1-21	1-22
8065	2-11	2-12
8066	1-24	1-25
8068	1-24	1-25
8071	1-30	1-31
8072	2-14	2-16
8100	3-6	3-7
8101	3-31	3-32, 33
8101-T1	4-1	4-2
8102	3-15	3-16, 17
8102-T1	4-18	4-19
8104	3-22	3-23, 24
8104-T1	4-20	4-21
8111	1-41	1-42
8130	2-11	2-12
8130-15	15-30	15-31
8140	3-36	3-37
8141	3-11	3-12
8141-T1	4-3	4-4
8142	3-15	3-16, 17
8142-T1	4-18	4-19
8142-20		15-34
8150	1-51	1-52
8151	1-30	1-31
8152	1-30	1-31
8153	1-41	1-42
8154	1-43	1-44
8155	1-47	1-48, 49
8156	2-17	2-18
8157	1-17	1-18
8158	1-21	1-22
8159	2-11	2-12
8160	1-24	1-25
8161	(No Drawing or List available)	
8162	1-30	1-31
8163	2-14	2-16
8164	2-9	2-10

Item	Fig.	List
8182	1-41	1-42
8200	3-61	3-62
1-8200	1-34	1-35
8201	3-11	3-12
8201-T1	4-3	4-4
8203	3-11	3-12
8203-T1	4-3	4-4
8204	3-15	3-16, 17
8204-T1	4-18	4-19
8205-T1	4-18	4-19
8206	3-27	3-28, 29
8206-T1	4-6	4-7
8206-100	15-37	15-38, 39
8208-T1	4-3	4-4
8209	3-61	3-62
8209-T1	(Obsolete)	
8210	3-31	3-32, 33
8210-T1	4-1	4-2
8212	3-41, 46	3-47
8212-T1	4-13	4-14
8212-102	15-40	15-41
8213	3-19, 20	3-21
8213-xxx	15-40	15-41
8214	3-19, 20	3-21
8214-T1	4-3	4-4
8214-101	15-40	15-41
8215	3-2, 3	3-4, 5
8215-T1	4-1	4-2
8216-xxx	15-40	15-41
8217-xxx	15-40	15-41
8240-600		15-36
8250	1-19	1-20
8251	2-11	2-12
8252	1-1	1-2
8252-15	15-1	15-42
8253	2-3	2-4
8254	2-11	2-12
8255	2-11	2-12
8258	2-11	2-12
8260	1-11	1-13
8260-570	15-51	15-53, 54
8261	2-9	2-10
8262	2-7	2-8
8263	1-26	1-23
8263-101	15-40	15-43
8263-250		15-44
8264	1-38	1-39, 40
8265	1-32	1-33
8265-511		15-45
8265-571		15-46
8266	1-30	1-31
8268	1-5	1-6
8269	1-5	2-2
8272	1-53	1-54
8300	3-44	3-45
8300-T1	4-13	4-14
8302	3-36	3-37
8302-T1	4-3	4-4
8303	3-11	3-12
8303-T1	4-3	4-4
8304	3-15	3-16, 17

Item	Fig.	List
8304-T1	4-18	4-19
8305	3-15	3-16,17
8305-T1	4-6	4-7
8307	3-6	3-7
8307-T1	4-9	4-10
8308	3-11	3-13
8308-T1	4-18	4-19
8309	3-2,3	3-4,5
8309-T1	4-1	4-2
8310	3-48	3-49
8310-T1	4-13	4-14
8311	3-36	3-38
8311-T1	4-3	4-4
8313	3-41,46	3-47
8313-T1	4-13	4-14
8314	3-41	3-42
8314-T1	4-3	4-4
8315	(No Drawing or List available)	
8315-T1	4-20	4-21
8350	1-36	1-37
8351	1-1	1-2
8352	1-24	1-25
8353	1-19	1-20
8354	1-43	1-44
8354-15	15-47	15-48
8354-100	15-49	15-50
8355	2-14	2-15
8356	2-11	2-12,13
8357	1-19	1-20
8358	2-11	2-12
8359	1-19	1-20
8360	1-24	1-25
8361	1-1	1-2
8362	2-3	2-4
8363	1-9	1-10
8364	2-7	2-8
8365	1-9	1-10
8366	2-7	2-8
8367	2-14	2-15
8368	1-38	1-39,40
8369	1-26	1-27
8370	1-11	1-13
8370-570	15-51	15-53,54
8370-590	15-51,52	15-53
8371	2-9	2-10
8372	2-7	2-8
8374	1-45	1-46
8375	1-26	1-27
8376	1-32	1-33
8377	(No Drawing or List Available)	
8378	1-17	1-18
8379	(No Drawing or List Available)	
8380	1-30	1-31
1-8400	(No Drawing or List Available)	
8401-T1	4-6	4-7
8402	3-19,20	3-21
8402-T1	4-3	4-4
8403	3-19,20	3-21
8403-T1	4-3	4-4
8403-101	15-40	15-41
8404	3-51 to 54	3-55,56

Item	Fig.	List
8404-T1	4-9	4-10
8406	(No Drawing or List available)	
8406-T1	(No Drawing or List Available)	
8410	(No Drawing or List Available)	
8410-T1	4-20	4-21
8452	1-1	1-2
8453	2-3	2-4
8454	1-19	1-20
8455	2-11	2-12
8456	1-24	1-25
8457	2-14	2-15
8458	1-34	1-35
8458-571	15-55	15-56
8459	(No Drawing or List Available)	
8460	1-41	1-42
8461	1-43	1-44
8463	1-24	1-25
8464	1-9	1-10
8465	2-7	2-8
8466	1-43	1-44
8467	2-7	2-8
8468	2-9	2-10
8470	1-47	1-48,49
8471	1-43	1-44
8472	1-41	1-42
8473	1-41	1-42
8475	2-9	2-10
8476	3-31	3-32,33
8476-T1	4-1	4-2
8477	1-28	1-29
8477-150	15-51,52	15-53
8478	1-19	1-20
8480	1-11	1-13
8480-570	15-51	15-53,54
8481	2-9	2-10
8482	2-7	2-8
8485	1-45	1-46
8500	3-44	3-45
8500-T1	4-3	4-4
8502	3-44	3-45
8504-T1	4-18	4-19
8505-T1	4-6	4-7
8506	3-48	3-50
8506-T1	4-13	4-14
8506-601	15-57	15-58
8507	3-36	3-38
8512	3-41,61	3-63
8516	3-59	3-60
8516-T1	3-56	4-15
8516-100	15-40	15-59
8550	1-19	1-20
8551	1-53	1-54
8551-150	15-60	15-61
8552	1-3	1-4
8552-100	15-62	15-63
8553	2-1	2-2
8554	2-3	2-4
8554-15	15-47	15-48
8555	1-9	1-10
8555-70	15-64	15-65
8555-100	15-66	15-67

Item	Fig.	List	Item	Fig.	List
8556	1-43	1-44	8651	2-17	2-18
8557	2-7	2-8	8652	1-9	1-10
8557-150	15-1	15-68	8652-70	15-64	15-65
8558	1-53	1-54	8652-150	15-66	15-67
8559	1-19	1-20	8653	2-7	2-8
8560	2-18	2-18	8653-150		15-74
8561	2-11	2-12	8654	1-21	1-22
8562	1-24	1-25	8655	2-11	2-12
8563	1-1	1-2	8656	1-3	1-4
8564	1-47	1-48, 49	8657	2-3	2-4
8565	2-14	2-15	8658	2-1	2-2
8566	1-9	1-10	8659	1-55	1-56
8567	2-7	2-8	8659-150	15-75	15-76
8568	1-9	1-10	8660	1-43	1-44
8569	1-41	1-42	8661	2-9	2-10
8570	1-1	1-2	8662	1-26	1-27
8571	1-47	1-48, 49	8664	1-1	1-2
8572	2-17	2-18	8665	1-21	1-22
8573	2-17	2-18	8665-15	15-30	15-31
8575	2-9	2-10	8665-100	15-32	15-33
8576	1-19	1-20	8666	1-21	1-22
8578	(No Drawing or List Available)		8667	2-3	2-4
8580	1-11	1-13	8668	2-11	2-12
8580-570	15-51	15-53, 54	8669	1-47	1-48, 49
8581	2-9	2-10	8670	1-36	1-37
8582	2-7	2-8	8670-35	15-77	15-78
8585	1-34	1-35	8670-100	15-79	15-80
8587	1-28	1-29	8679	1-26	1-27
8600	3-31	3-32, 33	8687	1-17	1-18
8600-T1	4-6	4-7	8690	1-57 thru	1-60
8600-100	15-69	15-70	8701	3-22	3-25, 26
8601	3-46	3-47	8701-T1	4-20	4-21
8601-T1	4-13	4-14	8701-T60		15-81
8601-100	15-71	15-72	8701-T70		15-81
8602	3-39	3-40	8701-T90		15-17
8602-T1	4-3	4-4	8701-100	15-82	15-83
8602-601		15-73	8702	3-31	3-32, 33
8603	3-27	3-28, 29	8702-T1	4-6	4-7, 8
8603-T1	4-6	4-7	8702-100	15-69	15-70
8603-100	15-37	15-38, 39	8703	3-11	3-12
8604	3-11	3-12	8703-T1	4-3	4-4
8606	(No Drawing or List Available)		8750	1-21	1-22
8606-T1	(No Drawing or List Available)		8751	2-11	2-12
8610	3-27	3-28, 29	8753	1-51	1-52
8610-T1	4-9	4-10	8753-55	15-84	15-85
8615	3-2, 3	3-4, 5	8753-100	15-86	15-87
8615-T1	4-9	4-10	8754	1-55	1-56
8616	3-19, 20	3-21	8755	1-47	1-48, 49
8616-T1	4-3	4-4	8756	2-17	2-18
8616-101	15-40	15-41	8757	1-21	1-22
8616-102	15-40	15-41	8758	2-11	2-12
8617	3-19, 20	3-21	8759	1-21	1-22
8617-T1	4-18	4-19	8760	2-11	2-12
8620	3-41	3-42	8761	1-43	1-44
8620-T1	4-13	4-14	8762	1-53	1-54
8625	3-41	3-42	8763	1-21	1-22
8625-T1	4-3	4-4	8764	1-7	1-8
8630	(No Drawing or List Available)		8765	2-5	2-6
8635	3-59	3-60	8766	1-7	1-8
8635-T1	3-56	4-15	8767	2-5	2-6
8650	1-47	1-48, 49	8768	2-5	2-6

Item	Fig.	List
8769	1-36	1-37
8770	1-41	1-42
8771	1-47	1-48, 49
8772	1-24	1-25
8773	1-47	1-48, 49
8774	1-21	1-22
8775	1-21	1-22
8776	1-24	1-25
8777	2-9	2-10
8778	2-11	2-12
8779	2-14	2-15
8800	3-15	3-18
8800-T1	4-6	4-7
8801	3-31	3-32, 33
8801-T1	4-6	4-7, 8
8803	3-57	3-58
8803-T1	(Obsolete)	
8805	3-15	3-18
8807	3-4	3-5
8850	1-51	1-52
8851	1-11	1-15
8852	2-7	2-8
8854	1-21	1-22
8855	1-30	1-31
8855-100	15-88	15-89
8855-115	15-90	15-91
8857	1-47	1-48, 49
8858	2-17	2-18
8859	1-55	1-56
8860	1-43	1-44
8861	1-1	1-2
8862	2-3	2-4
8864	2-9	2-10
8866	1-21	1-22
8867	2-11	2-12
8868	1-7	1-8
8869	2-5	2-6
8870	2-5	2-6
8871	2-5	2-6
8872	1-30	1-31
8872-100	15-88	15-89
8872-115	15-90	15-91
8873	2-14	2-16
8900	3-27	3-30
8900-T1	4-6	4-7, 8
8900-100	15-69	15-70
8902	3-41	3-43
8902-T1	4-13	4-14
8902-100	15-92	15-93
8903	3-41	3-42
8903-100	15-92	15-93
8904	3-11	3-14
8904-T1	4-3	4-4, 5
8905	3-26, 61	3-63
8905-100	15-92	15-93
8906-T1	4-3	4-4
8950	1-17	1-18
8950-100		15-94
8951	1-17	1-18
8952	1-11	1-16
8953	2-7	2-8

Item	Fig.	List
8955	1-47	1-48, 49
8956	2-17	2-18
8957	1-24	1-25
8958	2-14	2-15
8960	1-30, 47	1-50
8961	2-17	2-18
8962	1-47	1-48, 49
8970	1-11	1-12
8971	2-7	2-8
9010		10-1
9011		10-1
9012		10-1
9013		10-1
9014		8-1
9015		10-1
9016		10-1
9017		9-1
9018		10-1
9020		8-2
9021		7-14
9022		8-2
9023		8-2
9024		8-2
9025		7-14
9026		8-1
9027		7-14
9030		9-1
9031		9-1
9032		9-1
9033		9-1
9035		6-29
9036		6-29
9037		6-29
9038		10-1
9040		6-29
9041		6-29
9042		6-29
9043		6-29
9044		6-29
9050		13-3
9055		9-1
9057	7-10	7-8
9058	7-10	7-8
9060	7-10	7-8
9061	7-10	7-8
9062	7-10	7-8
9063	7-10	7-8
9064	7-10	7-8
9065	7-10	7-8
9066	7-10	7-8
9067		7-4
9068		7-4
9069	7-10	7-8
9070	7-10	7-8
9071		7-4
9072		7-4
9073	7-10	7-8
9074	7-10	7-8
9075	7-10	7-8
9076	7-10	7-8
9078		7-4

Item	Fig.	List
9080	7-10	7-8
9082		13-3
9083		10-2
9084		9-2
9106		13-7
9107		13-7
9110		10-3
9111		10-3
9112		10-3
9113		10-3
9114		10-3
9115		10-3
9116		10-3
9117		10-3
9119		10-3
9120		8-2
9121		8-2
9122		8-2
9123		5-1
9124		8-2
9125		5-1
9126		5-1
9128		13-7
9129		5-1
9130		10-3
9131		9-1
9132		13-7
9133		8-2
9134		10-3
9135		10-3
9136		9-1
9137		9-1
9138		13-5
9139		5-1
9140		9-1
9141		9-1
9142		9-1
9143		9-1
9144		9-1
9145		5-1
9146		13-7
9148		13-5
9149		8-2
9150		13-1
9150-50		15-95
9150-75		15-95
9150-85		15-95
9150-90		15-96
9150-95		15-96
9150-105		15-96
9150-115		15-97
9150-125		15-97
9150-130		15-97
9150-135		15-98
9150-145		15-98
9151		13-1
9152		13-1
9153		13-1
9154		13-1
9157		8-2
9158		8-2

Item	Fig.	List
9160	7-6	7-7
9161	7-6	7-7
9162	7-6	7-7
9163	7-6	7-7
9164	7-6	7-7
9165	7-6	7-7
9166	7-10	7-11
9167	7-6	7-7
9168	7-6	7-7
9169	7-10	7-11
9170	7-6	7-7
9171	7-10	7-8
9172	7-10	7-8
9173	7-10	7-8
9174	7-1	7-3
9174-50		15-44
9175	7-6	7-7
9177	7-1	7-3
9178	7-10	7-8
9180	7-6	7-7
9181	7-6	7-7
9182	7-6	7-7
9183	7-6	7-7
9184	7-1	7-3
9185	7-6	7-7
9186	7-6	7-7
9187	7-10	7-11
9188	7-1	7-3
9189		13-1
9193		13-7
9200		6-1
9201		6-1
9202		6-1
9203		6-1
9204		6-1
9205		6-1
9206		6-1
9207		6-1
9208		6-1
9209		6-1
9210		6-12
9211		6-1
9213		10-3
9214		6-1
9215		6-1
9216		5-1
9217	(No Drawing or List Available)	
9218	(No Drawing or List Available)	
9219	(No Drawing or List Available)	
9220	(No Drawing or List Available)	
9221	(No Drawing or List Available)	
9222		5-1
9223	(No Drawing or List Available)	
9224	(No Drawing or List Available)	
9225		9-8
9226		5-1
9228	(No Drawing or List Available)	
9229	6-25	6-26
9230		6-1
9231	7-1	7-2
9232	8-4	8-4

Item	Fig.	List	Item	Fig.	List
9233	8-7	8-7	9322		10-4
9233-50		15-99	9323	7-1	7-2
9233-60		15-99	9324		13-2
9234	8-5	8-6	9325		8-3
9234-50		15-100	9326	7-1	7-2
9234-80		15-100	9327		13-5
9235	11-7	11-8	9328	7-1	7-3
9236	11-7	11-8	9329	11-4	11-5
9238		11-9	9329-50	15-101	15-102
9239	7-6	7-7	9330	(No Drawing or List available)	
9240	10-6	10-7	9331		13-2
9241		11-9	9332	11-4	11-6
9245	11-7	11-8	9333		8-3
9250		13-5	9334		13-2
9260		10-3	9335		11-9
9261		10-3	9336		9-2
9262		10-3	9338		10-2
9263		10-3	9339		6-10
9264		10-3	9340		9-3
9265		10-3	9341	7-10	7-9
9267		10-3	9342		7-15
9268	7-1	7-3	9344		13-5
9269	7-1	7-3	9345	11-10	11-11
9270	7-6	7-7	9346	7-10	7-9
9271	7-1	7-3	9348	11-4	11-5
9272	7-1	7-3	9349		6-23
9273	7-1	7-3	9353		13-5
9274	7-1	7-3	9354		13-1
9276		10-3	9355	7-1	7-3
9277		13-1	9357		7-4
9278	7-6	7-7	9361	7-1	7-3
9279		13-5	9365		6-29
9280	(No Drawing or List available)		9366		10-3
9281		5-1	9367		13-1
9282		8-2	9368	7-1	7-3
9283		9-1	9369		13-1
9284		9-1	9370		9-3
9285		5-1	9371		10-5
9286		10-3	9372	7-1	7-3
9290		9-8	9373		13-1
9300		11-9	9374		10-5
9301	6-25	6-26	9378	11-7	11-8
9302	11-10	11-11	9379		9-3
9303		11-9	9380	7-10	7-8
9304	11-1	11-2	9381	7-10	7-8
9305	(No Drawing or List available)		9383		8-2
9306	(No Drawing or List available)		9384	10-6	10-7
9306-70		15-21	9385		9-1
9307	9-5	9-6	9386		13-1
9307-60		15-99	9387	7-1	7-3
9308	6-18	6-19	9389	8-5	8-6
9309	7-1	7-3	9398	11-1	11-2
9311	11-1	11-2	9399	11-1	11-2
9312	11-10	11-11	9400		6-2
9313		13-6	9401		6-2
9315		9-2	9402		6-2
9316	7-1	7-2	9403		6-2
9317	7-1	7-2	9404		6-2
9319		6-23	9405		6-2
9320		6-23	9406		6-2
9321		13-2	9407		6-32

Item	Fig.	List
9408		6-32
9411		6-2
9412		6-3
9413		6-3
9414		6-3
9415		6-3
9416		6-3
9417		6-3
9418		6-4
9419		6-4
9420		6-4
9421		6-4
9422		6-4
9423		6-4
9424		6-4
9425		6-11
9426		6-4
9427		6-4
9428		6-4
9429		6-4
9430		6-4
9431		6-4
9432		6-4
9433		6-4
9434		6-4
9436		6-4
9437		6-32
9438		6-4
9439		6-4
9440		6-4
9441		6-4
9442		6-4
9443		6-4
9444		6-4
9445		6-4
9446		6-4
9447		6-4
9448		6-32
9449		6-4
9450		6-32
9451		6-4
9452		6-4
9453		6-4
9454		6-4
9455		6-4
9456		6-12
9457		6-4
9461		6-4
9462		6-4
9463		6-4
9464		6-4
9465		6-4
9468		6-12
9469		6-16
9470		6-4
9471		6-4
9472		6-4
9473		6-4
9474		6-4
9475		6-4
9476		6-4

Item	Fig.	List
9480		6-4
9481		6-4
9482		6-4
9483		6-4
9484		6-4
9486		6-4
9491		6-4
9492		6-4
9500	12-2	12-3
9500-50		15-103
9501	12-2	12-3
9502	12-2	12-3
9503	12-2	12-3
9504	12-2	12-3
9505	12-2	12-3
9506	12-2	12-3
9507	12-2	12-3
9508	12-2	12-3
9509	12-2	12-3
9510	12-2	12-3
9511	12-2	12-3
9513	12-2	12-3
9514	12-2	12-3
9515	12-2	12-3
9516	12-2	12-3
9517	12-2	12-3
9518	12-2	12-3
9519	12-2	12-3
9521	12-2	12-4
9522	12-2	12-4
9523	12-2	12-4
9524	12-2	12-4
9525	12-2	12-4
9530		12-6
9531		12-6
9532		12-6
9533		12-6
9534		12-6
9536		12-7
9536-50		15-19
9536-80		15-19
9537		12-7
9538		12-7
9539		12-7
9540		12-7
9541		12-10
9545	12-11	12-12
9546		12-13
9547	12-14	12-15, 16
9548	12-17	12-18, 19
9549	12-17	12-18, 19
9551		12-5
9551-80		15-103
9552		12-5
9553		8-8
9554		12-7
9555		12-7
9556		12-7
9557		12-7
9558		12-7
9559		12-5

Item	Fig.	List	Item	Fig.	List
9560		12-5	9663		6-13
9561		12-5	9664		6-13
9562	12-11	12-12	9665		6-13
9563		12-13	9666		6-13
9564	12-17	12-18,19	9667		6-13
9565	12-17	12-18,19	9668		6-13
9566	12-14	12-15,16	9669		6-13
9567	12-17	12-18,19	9670		6-13
9569		12-13	9671		6-13
9570	12-11	12-12	9700		6-1
9571	12-17	12-18,19	9701		6-12
9572	12-17	12-18,19	9702		6-1
9573	12-17	12-18,19	9703		6-1
9574	12-14	12-15,16	9704		6-1
9575	12-17	12-18,19	9705		6-1
9576	12-11	12-12	9706		6-1
9577	12-17	12-18,19	9707		6-32
9578	12-17	12-18,19	9708		6-7
9579	12-17	12-18,19	9709		6-1
9580	12-14	12-15,16	9710		6-1
9581		12-8	9711		6-7
9582		12-8	9712		6-12
9583		12-8	9713		6-7
9584		12-8	9714		6-7
9585		12-8	9715		6-7
9586		12-7	9716		6-7
9588	12-17	12-18,19	9717		6-7
9589	12-11	12-12	9718		6-7
9590		12-13	9719		6-12
9591	12-17	12-18,19	9723		6-7
9592	12-17	12-18,19	9724		6-7
9593	12-14	12-15,16	9725		6-32
9594	12-11	12-12	9726		6-4
9595		12-13	9729		6-2
9596	12-17	12-18,19	9730		6-7
9597	12-17	12-18,19	9731		6-7
9598	12-14	12-15,16	9732		6-3
9599		12-7	9734		6-3
9600		6-5	9735		6-7
9601		6-5	9737		6-7
9602		6-5	9738		6-4
9603		6-5	9739		6-7
9604		6-5	9740		6-7
9605		6-5	9742		6-7
9606		6-5	9743		6-7
9607		6-5	9744		6-7
9608		6-5	9745		6-7
9610		6-5	9748		6-7
9620		6-6	9749		6-7
9621		6-6	9750		6-8
9622		6-6	9751		6-8
9623		6-6	9752		6-8
9624		6-6	9753		6-8
9625		6-6	9754		6-8
9626		6-5	9755		6-8
9627		6-5	9758		6-8
9628		6-5	9759		6-8
9629		6-5	9760		6-4
9660		6-13	9761		6-4
9661		6-13	9767		6-8
9662		6-13	9768		6-8

Item	Fig.	List
9769		6-8
9770		6-8
9771		6-8
9772		6-4
9773		6-32
9775		6-4
9776		6-4
9777		6-8
9781		6-8
9782		6-8
9783		6-8
9784		6-8
9785		6-8
9786		6-8
9787		6-8
9788		6-8
9789		6-4
9801		6-16
9802		6-30
9803		6-16
9805		6-30
9806		6-16
9807		6-30
9808		6-16
9809		6-30
9811		6-28
9812		6-28
9813		6-28
9814		6-28
9815		6-30
9816		6-28
9817		6-28
9818		6-28
9819		6-27
9820		9-4
9821		9-4
9822		9-4
9823	(No Drawing or List Available)	
9824		9-4
9825		6-30
9826		6-16
9827		6-27
9828		6-27
9829		6-27
9830		6-27
9831		6-27
9832		6-27
9833		6-27
9834		6-27
9835		6-27
9836		6-27
9837		6-27
9840		6-27
9841		6-27
9842		6-27
9843		6-27
9844		6-27
9845		6-27
9846		6-27
9847		6-27
9849		6-27

Item	Fig.	List
9850		6-27
9851		6-27
9852		6-27
9853		6-27
9854		6-27
9855		6-27
9856		6-27
9858		6-27
9859		6-27
9860		6-27
9861		6-27
9862		6-27
9863		6-27
9864		6-27
9865		6-27
9866		6-27
9867		6-27
9869		6-27
9870		6-27
9871		6-27
9872		6-27
9873		6-9
9874		6-9
9875		6-9
9876		6-9
9877		6-9
9878		6-9
9879		6-28
9880		6-9
9881		6-9
9882		6-9
9883		6-9
9884		6-27
9885		6-27
9886		6-27
9887		6-27
9888		6-27

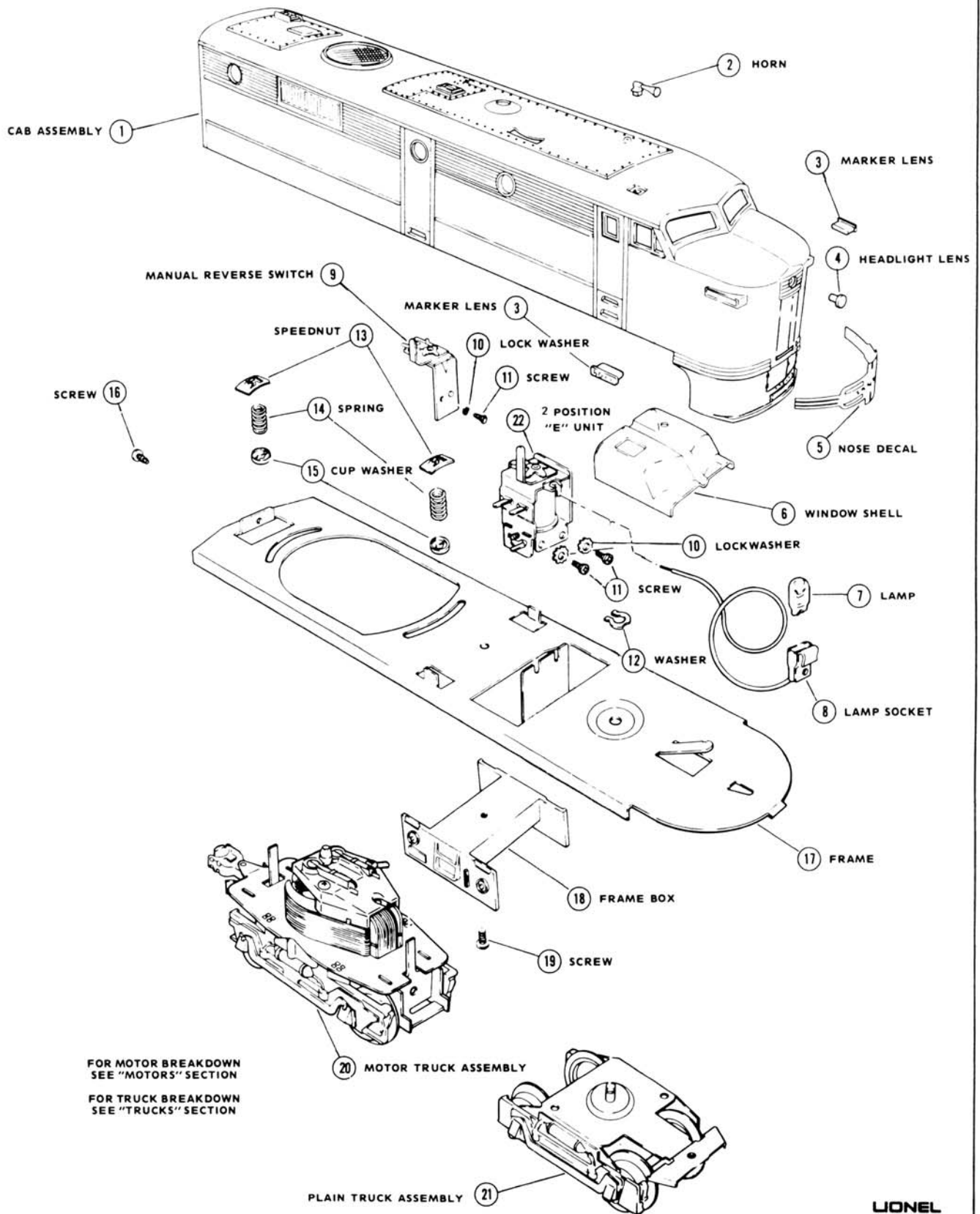
AMERICAN FLYER S GAUGE by
LIONEL FUNDIMENSIONS

8150	17-1	17-2
8151	17-6	17-7
8152	17-4	17-5
8153	17-1	17-2
8153-100	17-18	17-19
8154	17-6	17-7
8154-200	17-21	17-21
8155	17-4	17-5
8155-250	17-21	17-21
8251		17-3
9200	17-12	17-12
9300	17-11	17-11
9301	17-11	17-11
9400	17-9	17-10
9401	17-9	17-10
9401-050	17-20	17-20
95xx-050	17-23	17-23

Item	Fig.	List
95xx-051	17-23	17-23
9500	17-13	17-14
9501	17-15	17-16
9502	17-15	17-16
9503	17-13	17-14

Item	Fig.	List
9700	17-8	17-8
9700-50	17-22	17-22
9701	17-8	17-8
9702	17-8	17-8
9703	17-8	17-8

ALCO "A" DIESEL POWER UNIT



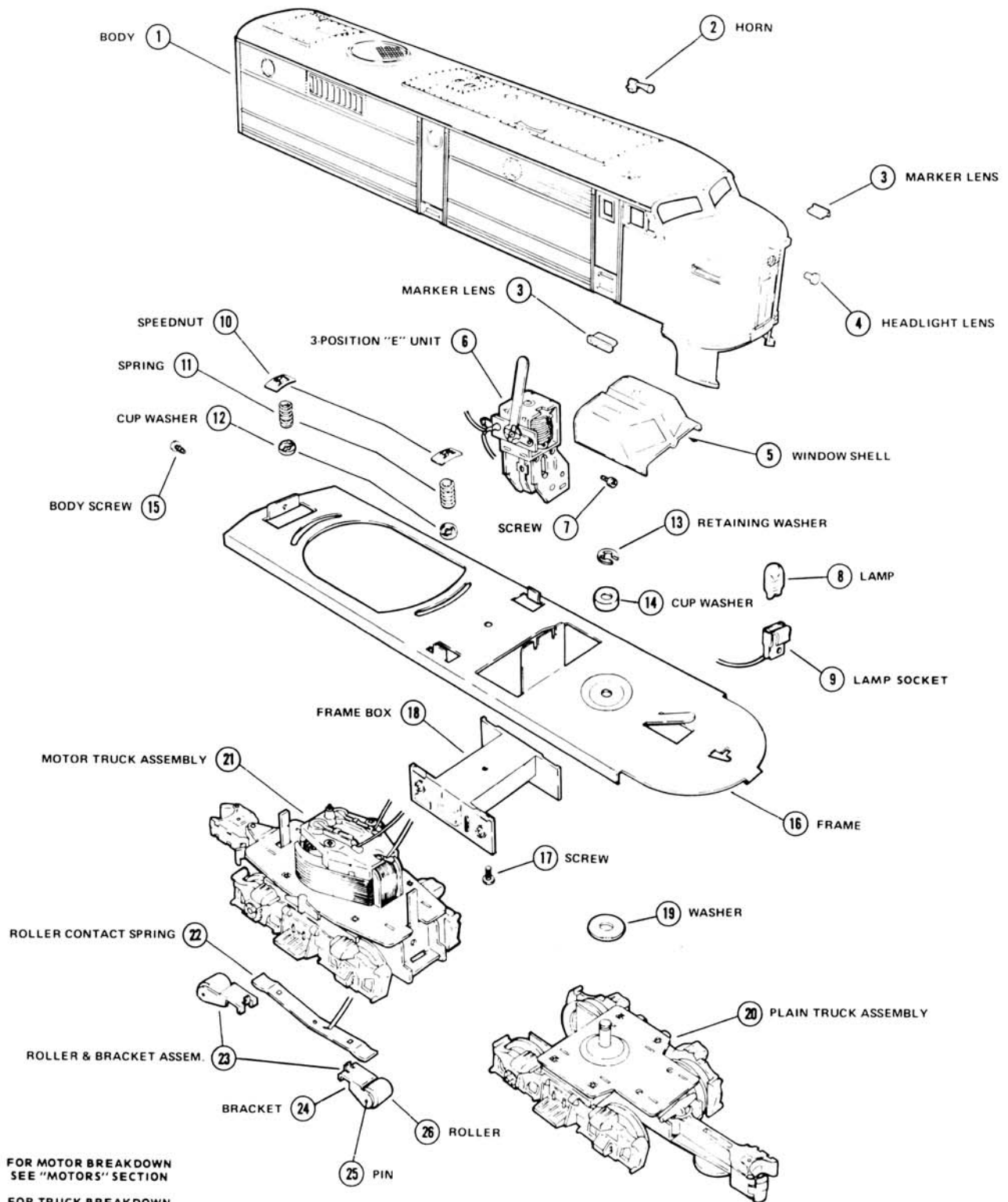
LIONEL

ALCO "A" DIESEL POWER UNIT
W/MANUAL & 2 POS. REVERSE

SECTION Loco, D & E
DATE 2-78
Reference
Drawings

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXXX-3	1	Cab
2	50-100	1	Ornamental Horn
3	8252-10	2	Marker Lens
4	8040-151	1	Headlight Lens
5	218-5	1	Nose Decal (8020-8022)
5	8220-7	1	Nose Decal (8252)
5	8351-6	1	Nose Decal
5	8361-6	1	Nose Decal
5	8452-6	1	Nose Decal
5	8563-8	1	Nose Decal
5	8570-8	1	Nose Decal
	8221-7	2	Side Decal - (8252)
6	8020-15	1	Window Shell
7	161-300	1	Lamp
8	8030-14	1	Lamp Socket
9	8040-7	1	Manual Switch
10	8142-63	1	Lockwasher (Rev. Unit & Manual Switch Mtg)
11	8142-62	1&2	Screw (Rev. Unit & Manual Switch Mtg)
12	TS-70	1	Retaining Washer (Plain Trk)
13	600-133	2	Speednut (Motor Truck Mtg)
14	1055-56	2	Spring (Motor Trk. Mtg)
15	601-131	2	Cup Washer (Motor Trk. Mtg)
16	8304-165	1	Screw (Cab Mtg.) 4-40 X 1/4 "
17	8021-11	1	Frame
18	202-54	1	Frame Box
19	8142-46	1	Screw (Frame Box Mtg)
20	8021-100	1	Motor Truck
21	8252-15	1	Plain Truck
22	101-1	1	2 Position Reverse Unit
			NOTE: 8010-15 Plain Truck replaced by 8252-15 Plain Truck.

ALCO "A" POWERED DIESEL (with 3-POS. "E" UNIT)



LIONEL

ALCO "A" DIESEL POWER
UNIT W/3 POS. REVERSE

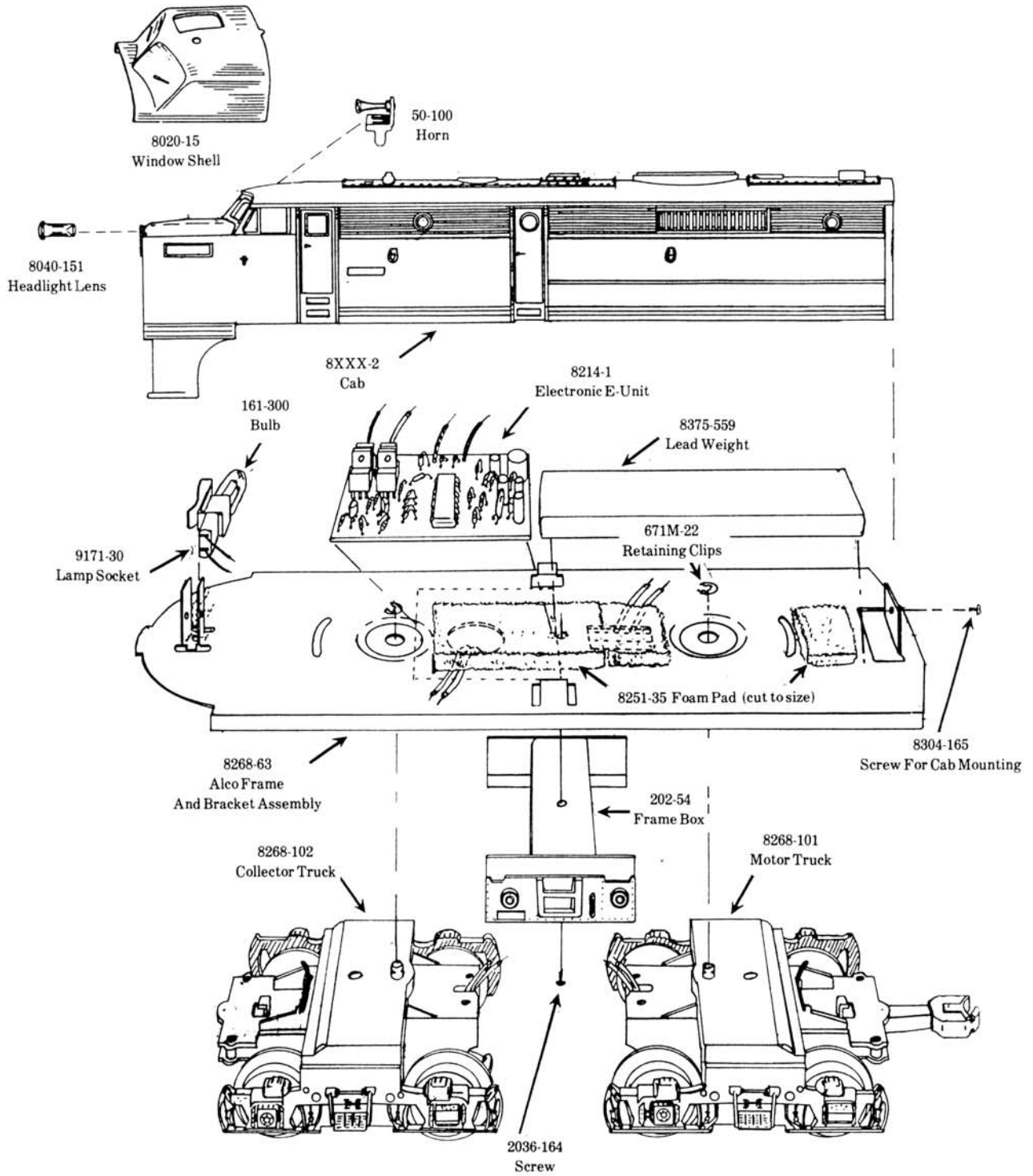
SECTION Loco, D & E
DATE 2 / 78

REFERENCE
DRAWINGS

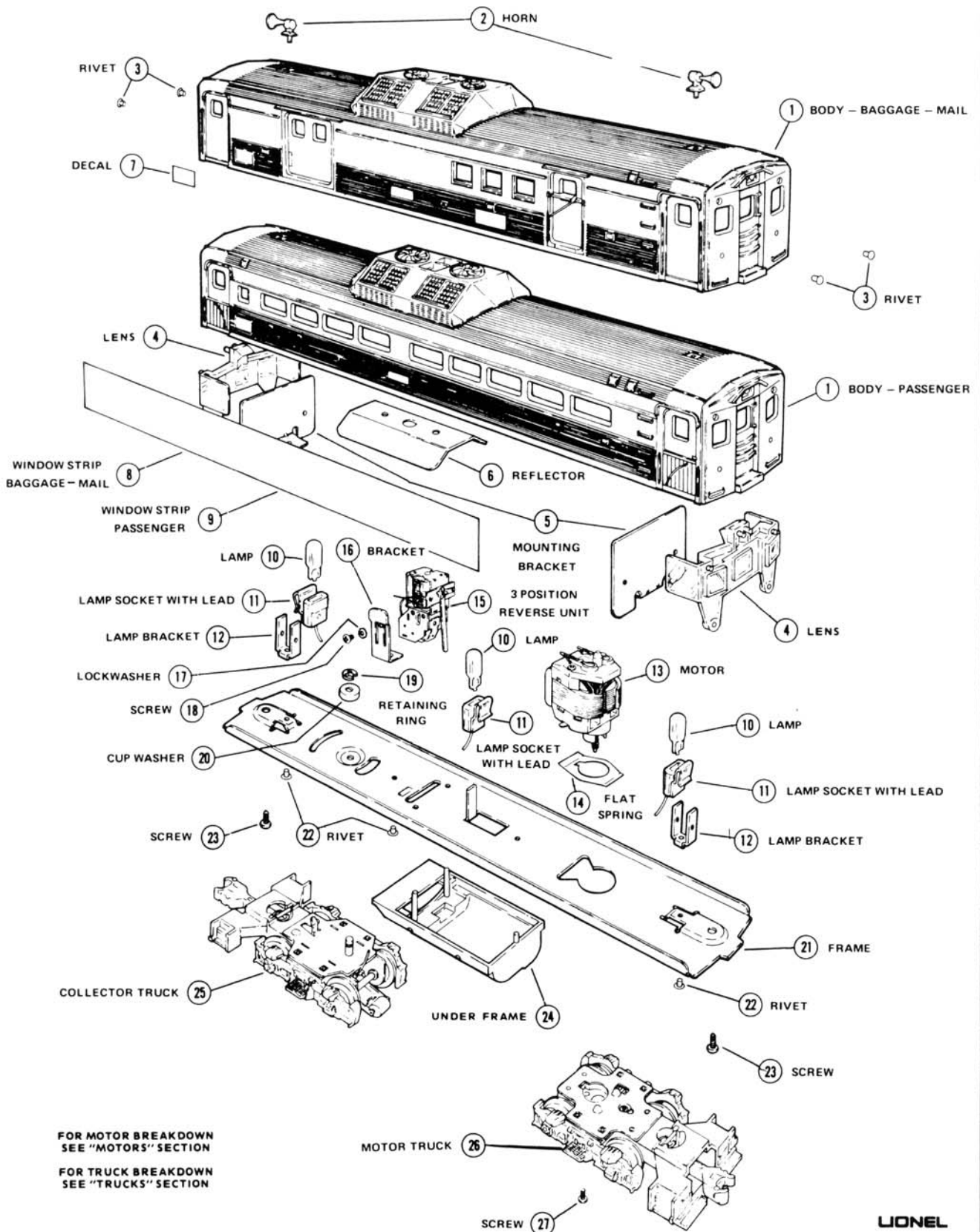
REF. NO.	PART NUMBER	QTY. PER UNIT	DESCRIPTION
1	8XXX-3	1	Body
2	50-100	1	Ornamental Horn
3	8252-10	2	Marker Lens
4	8040-151	1	Headlight Lens
5	8020-15	1	Window Shell
6	8552-250	1	3 Position Reverse Unit
7	8142-62	2	Screw (Rev. Unit Mtg.)
8	161-300	1	Lamp
9	8030-14	1	Lamp Socket W/Lead
10	600-133	2	Speed Nut (Motor Truck Mtg.)
11	1055-56	2	Spring (Motor Truck Mtg.)
12	601-131	2	Cup Washer (Motor Truck Mtg.)
13	671M-22	1	Retaining Ring (Plain Truck)
14	8030-23	1	Cup Washer (Plain Truck)
15	8142-46	1	Screw (Body Mtg.)
16	8021-11	1	Frame
17	8304-165	1	Screw (Frame Box Mtg.) 4-40' x 1/4"
18	202-54	1	Frame Box
19	1063-41	1	Washer (Brass-Plain Truck)
20	8354-15	1	Plain Truck
21	8552-100	1	Motor Truck
22	8209-120	1	Contact Spring
23	8209-165	1	Roller & Bracket
24	8209-130	1	Collector Bracket
25	2328-96	1	Pin
26	2328-95	2	Roller

Rev. 6/92

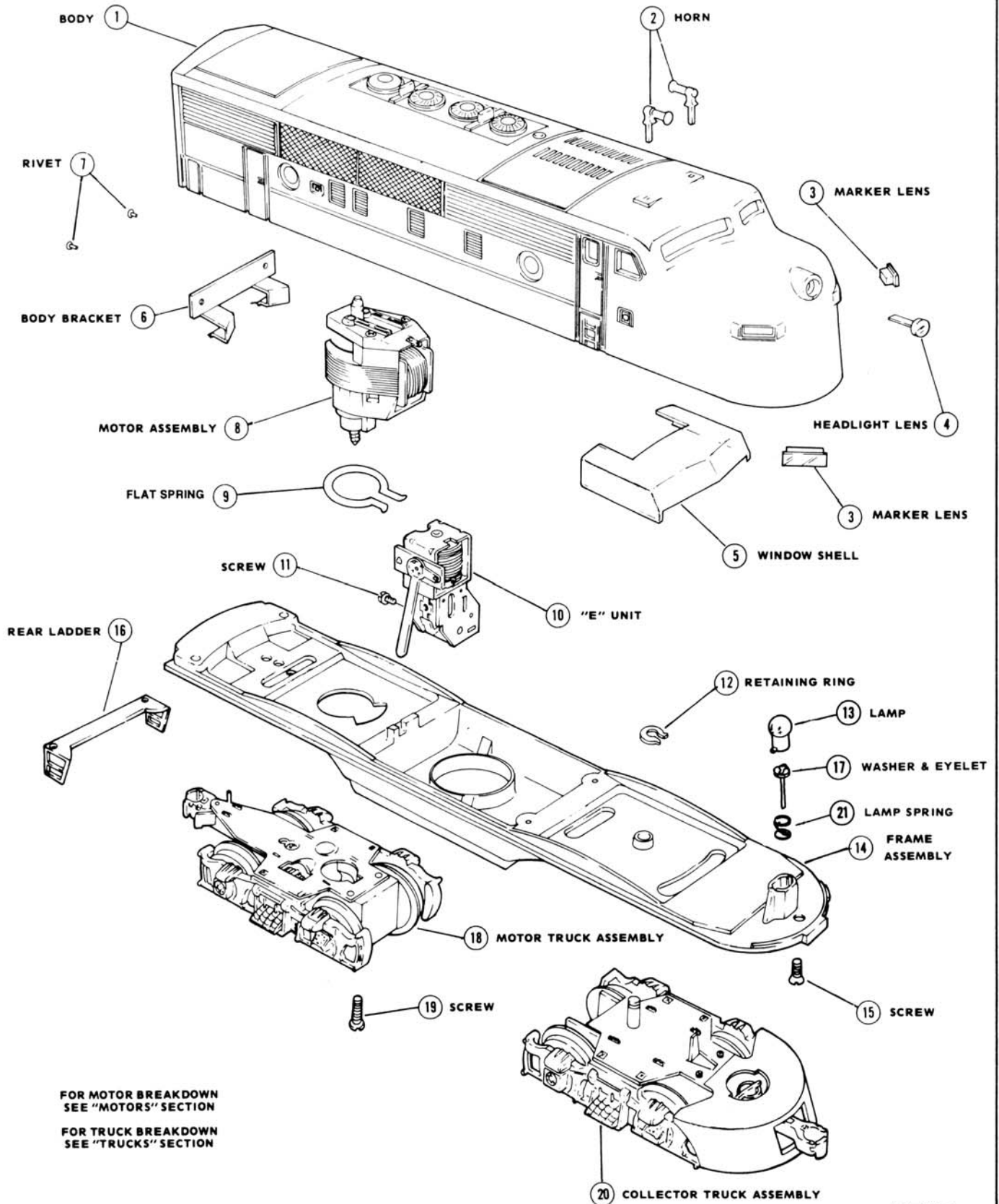
Alco Diesel Locomotive With DC Motor And Electronic E-Unit



"BUDD" CARS – POWERED



F-3 "A" DIESEL POWER UNIT



FOR MOTOR BREAKDOWN
SEE "MOTORS" SECTION

FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

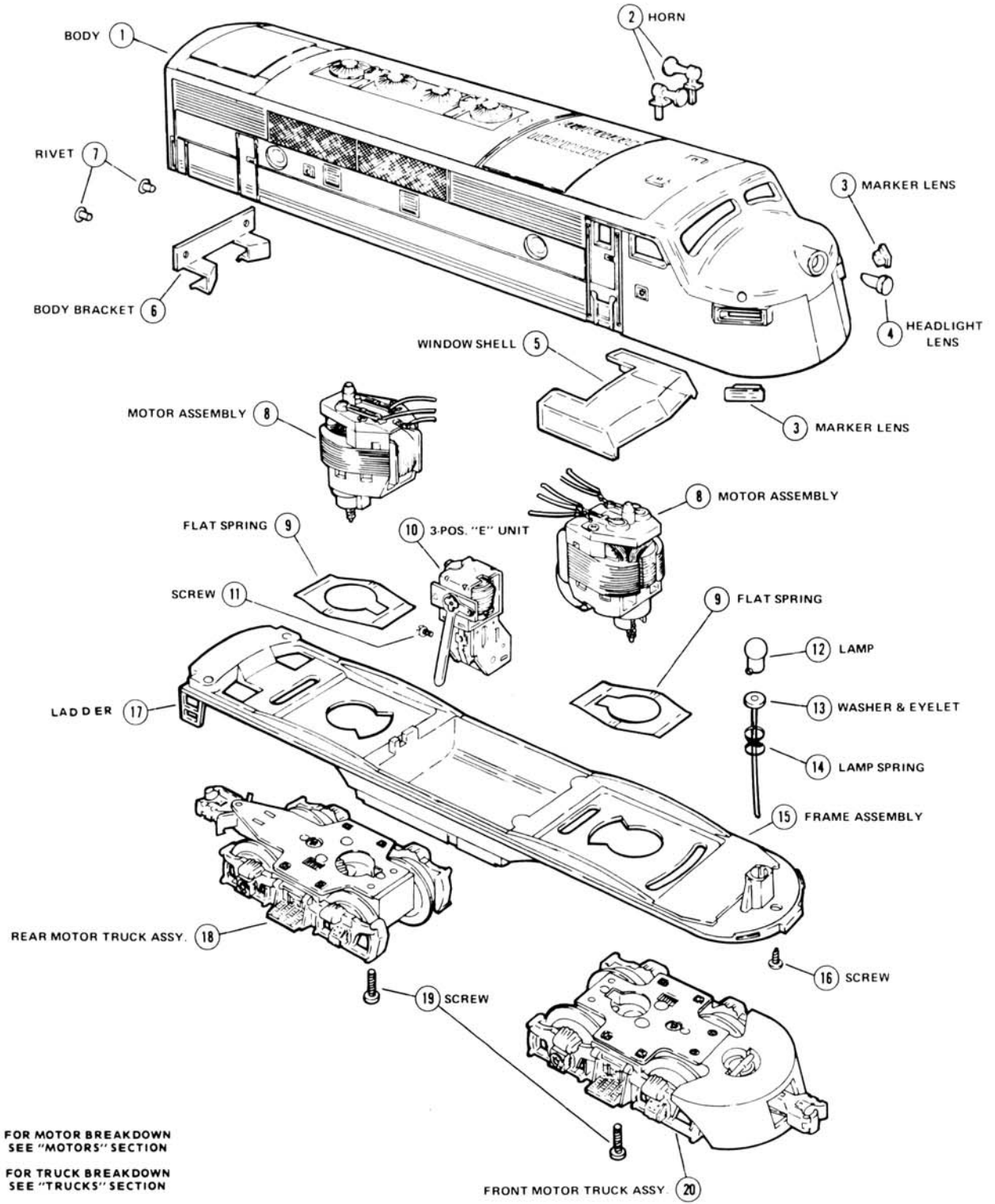
F-3 "A" DIESEL POWER UNIT

SECTION Loco, D & E
DATE 2-78

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXXX-3	1	Body
2	50-100	2	Ornamental Horn, Metal or Plastic (Specify)
3	2243-8	2	Marker Lens
4	2333-11	1	Headlight Lens
5	2333-25	1	Window Shell
6	2353-22	1	Body Bracket
7	622-17	2	Rivet (Cab Brkt)
8	2028-100	1	Motor Assm.
9	2367-52	1	Flat Spring (Motor) (Showing) - (Open End)
9	8659-335	1	Flat Spring (Motor) (Not Shown - Closed Ends)
10	100-4	1	3 Position Reverse Unit
11	8142-51	1	Screw (Rev. Unit Mtg)
12	671M-22	1	Retaining Ring (Coll. Trk)
13	363-300	1	Lamp (See Note)
14	2243-31	1	Frame (Black)
14	8652-31	1	Frame (Silver)
15	8205-T50	1	Screw (Body Mtg)
16	2333-23	1	Rear Ladder
17	61-22	1	Washer & Eyelet (Lamp Contact) (See Note)
18	8555-150	1	Motor Truck Assm. (Black)
18	8652-150	1	Motor Truck Assm. (Silver)
19	8551-31	1	Screw (Motor Mtg)
20	8555-70	1	Collector Truck Assm - (Black)
20	8652-70	1	Collector Truck Assm - (Silver)
21	R-91	1	Lamp Spring (See Note)
			Note: Some F-3 Units May Require 8030-14 Socket W/Leads & 161-300 Lamp.

F-3 "A" DIESEL POWER UNIT (DUAL MOTOR)

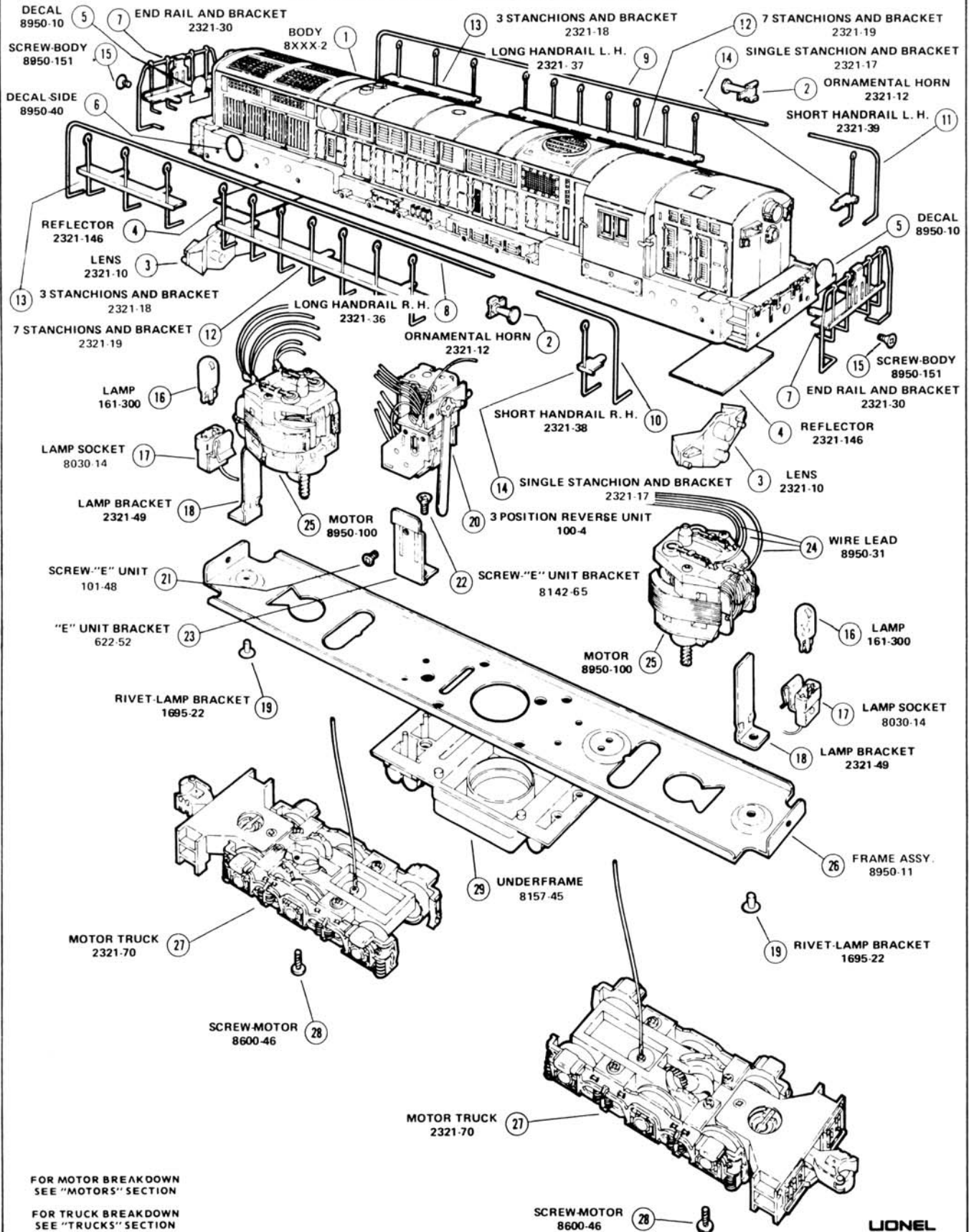


FOR MOTOR BREAKDOWN
SEE "MOTORS" SECTION

FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

FAIRBANKS MORSE DIESEL

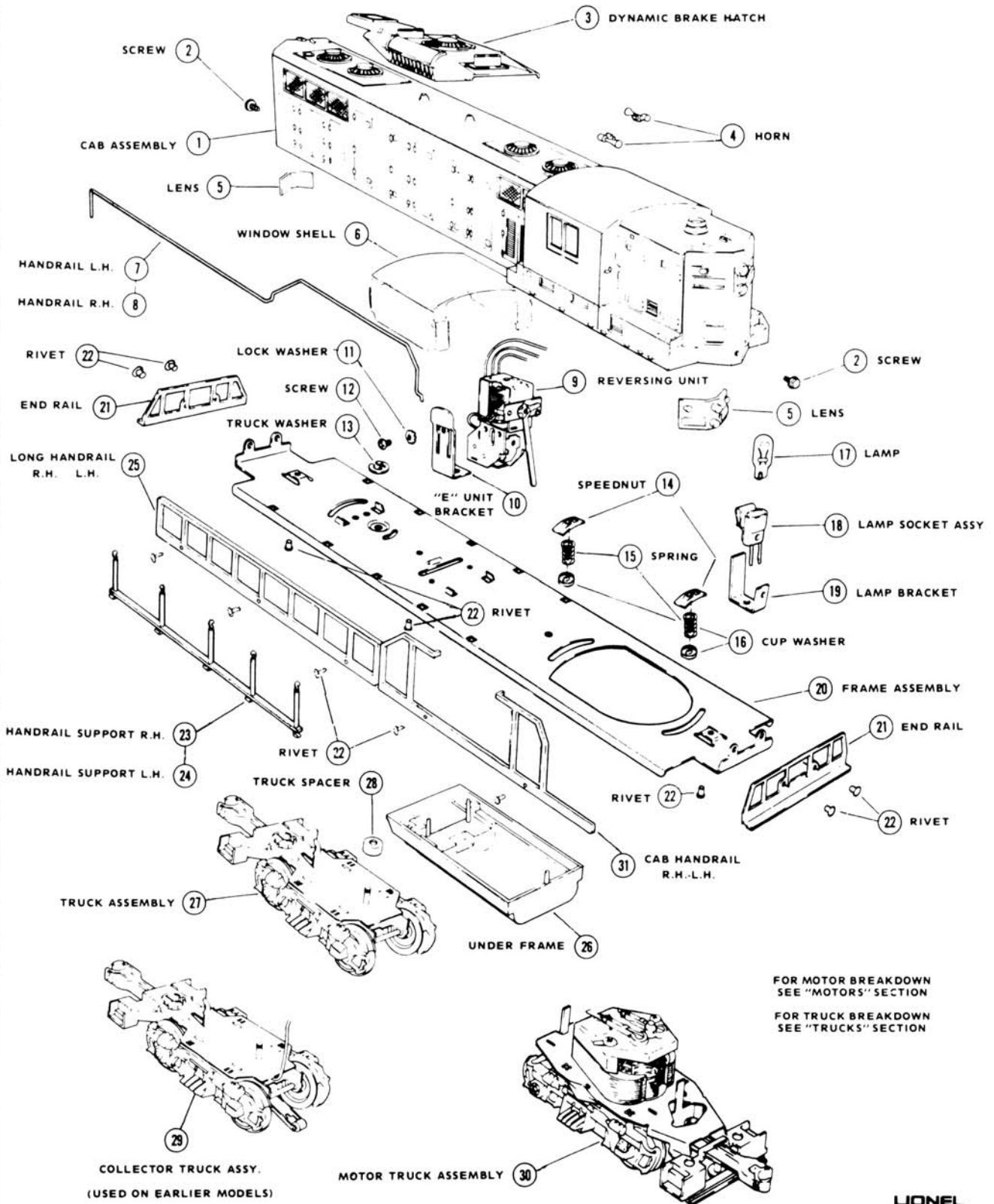


FOR MOTOR BREAKDOWN
 SEE "MOTORS" SECTION
 FOR TRUCK BREAKDOWN
 SEE "TRUCKS" SECTION

SCREW-MOTOR 8600-46

LIONEL

GP-7, GP-9 DIESEL POWER UNIT (early unit)



LIONEL

GP-7, GP-9 DIESEL POWER UNITS
(EARLY PRODUCTION)

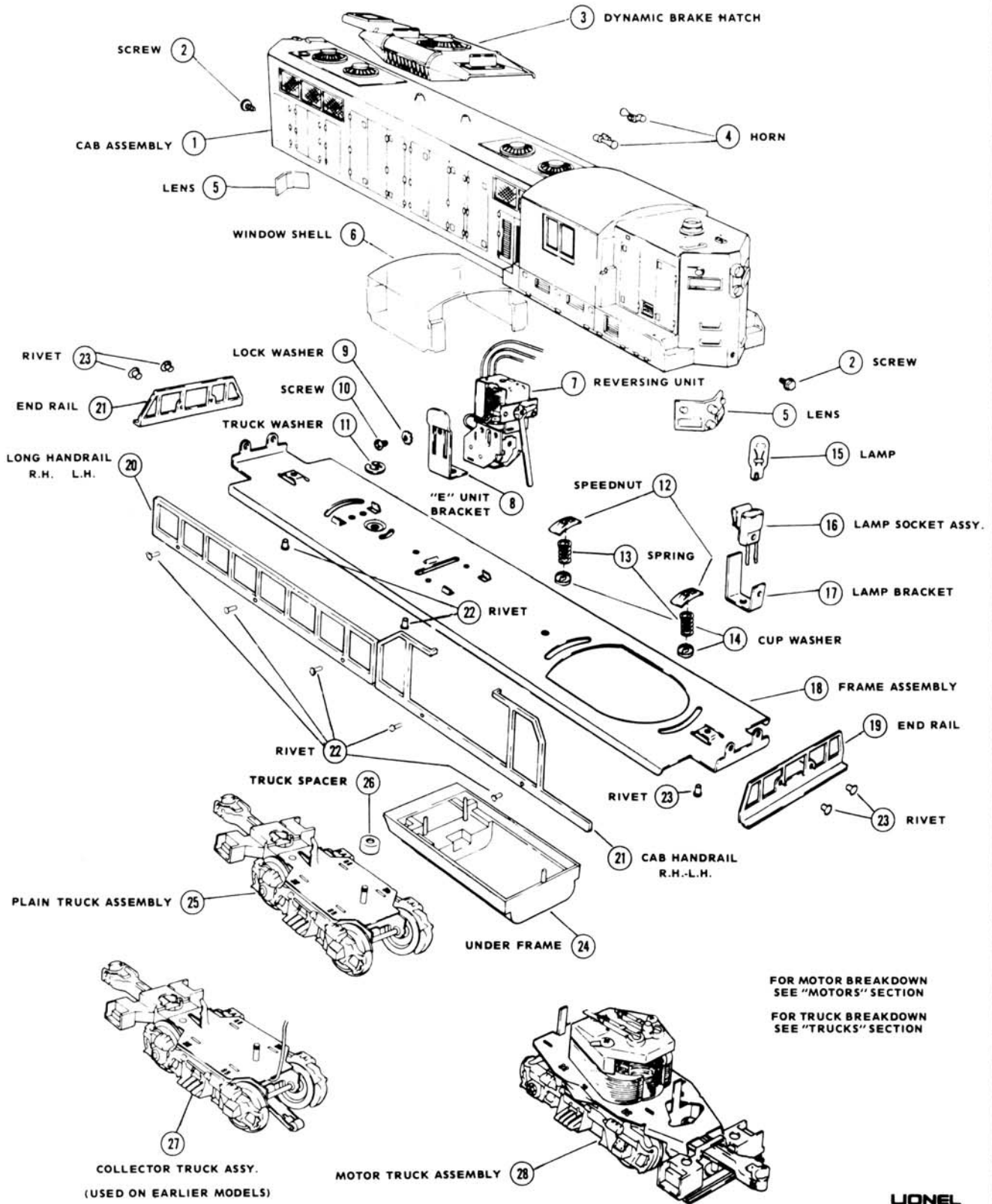
SECTION Loco, D & E
DATE 2-78

Reference
Drawings .

REF. NO.	PART NUMBER	QTY. PER UNIT	DESCRIPTION
1	8XXX-3	1	Body and Brake Hatch Assm. (GP-9)
1	8XXX-3	1	Body without Brake Hatch (GP-7)
2	8010-165	2	Screw (Cab Mtg.)
3	8XXX-25	1	Dynamic Brake (Not Sold Separately)
4	50-100	2	Ornamental Horn
5	2328-10	2	Lens
6	8030-56	1	Window Shell
7	8030-20	1	Handrail R. H.
8	8030-21	1	Handrail L. H.
9	100-4	1	3-Position Reversing Unit
10	622-52	1	Rev. Unit Bracket
11	8142-63	1	Lock Washer (Rev. Unit Mtg.)
12	8142-62	1	Screw (Rev. Unit Mtg.)
13	TS-70	1	Retaining Washer (Plain Truck)
14	600-133	2	Speed Nut (Motor Mtg.)
15	1055-56	2	Spring (Motor Mtg.)
16	601-131	2	Cup Washer (Motor Mtg.)
17	161-300	1	Lamp - Note: Some early units had 2 lights.
18	8030-14	1	Lamp Socket W/Lead - Note: Some early units had 2 lights.
19	2328-178	2	Lamp and Cab Bracket
20	8030-11	1	Frame
21	2328-25	2	End Frame Rail
22	530-40	7	Rivet
23	8030-25	1	Handrail Support R. H.
24	8030-30	1	Handrail Support L. H.
25	2411-4	10	Handrail Support (Metal) Used on Early 8030 and 8031 only.
26	8030-80	1	Under Frame
27	8030-15	1	Plain Truck
28	8030-23	1	Truck Spacer (Cup Washer)
29	8030-15	1	Collector Truck (Used on some 8030-8031-8250)
30	8030-100	1	Motor Truck
31	8456-20	1	Cab Handrail R. H.
31	8456-21	1	Cab Handrail L. H.
	8030-6	1	Decal (8030) not shown
	8250-6	1	Decal (8250) not shown

Rev. 6/92

GP-7, GP-9 DIESEL POWER UNIT (current unit)



LIONEL

GP-7, GP-9 DIESEL POWER UNITS
(LATER PRODUCTION)

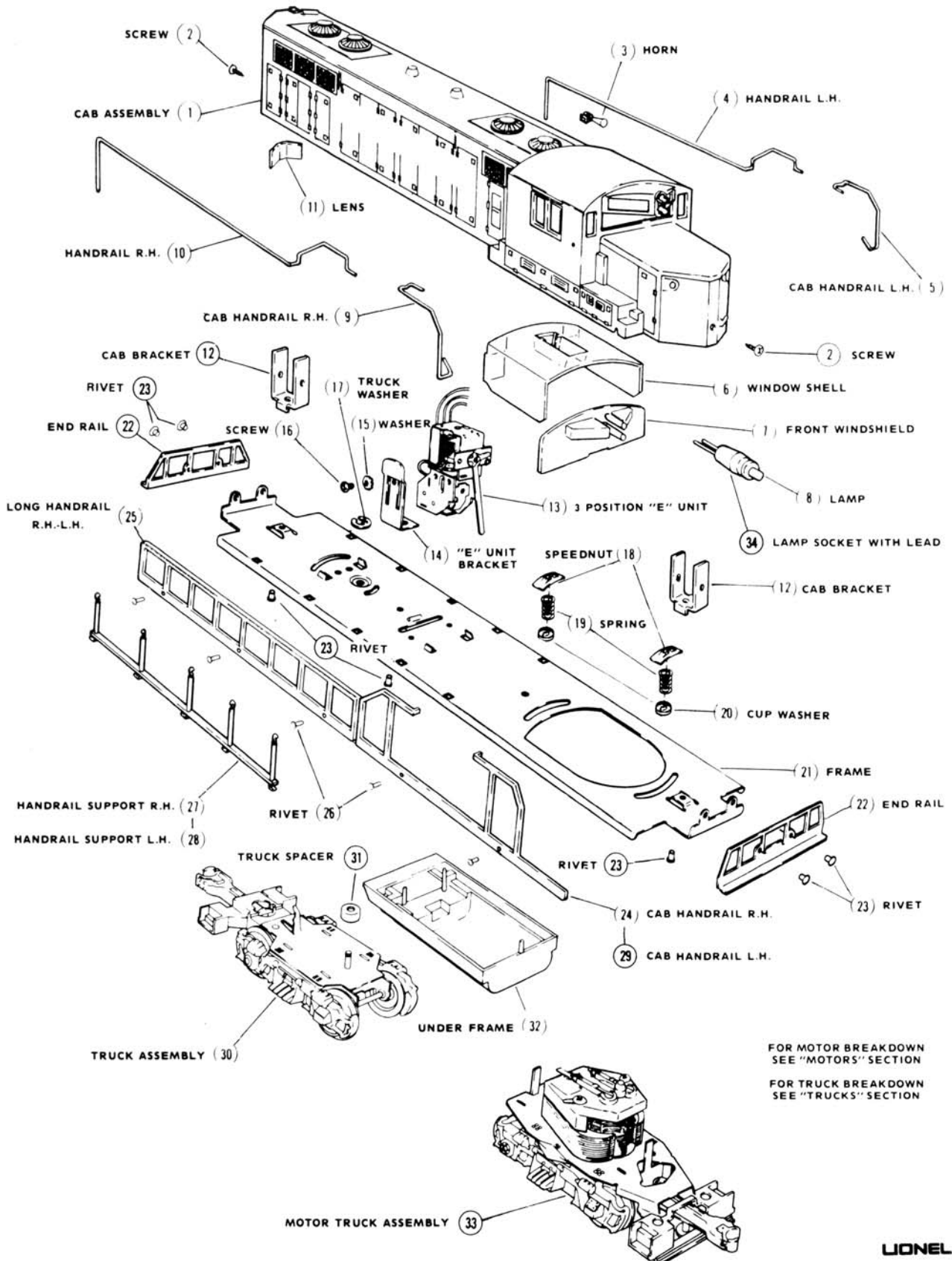
SECTION Loco, D & E

DATE 2-78

Reference
Drawings

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Body & Brake Hatch Assm (GP-9)
1	8XXX-3	1	Body W/O Brake Hatch (GP-7)
2	8010-165	2	Screw (Body Mtg.)
3	8XXX-25	1	Dynamic Brake Hatch (Not Sold Separately)
4	50-100	2	Ornamental Horn
5	2328-10	2	Marker Light & Lens
6	8750-56	1	Window Shell
7	100-4	1	Reverse Unit- 3 Pos.
8	622-52	1	Reverse Unit Bracket
9	8142-63	1	Lock Washer - ("E" Unit Mtg.)
10	8142-62	1	Screw (Rev. Unit Mtg.)
11	671M-22	1	Retaining Ring (Plain Truck)
12	600-133	2	Speednut (Motor Trk. Mtg.)
13	8855-56	2	Spring (Motor Trk. Mtg.)
14	601-131	2	Cup Washer (Motor Trk. Mtg.)
15	161-300	2	Lamp - Some Units Have Only 1 Light
16	8030-14	2	Lamp Socket W/Lead - Some Units Have Only 1 Light
17	2328-178	2	Lamp & Body Bracket
18	8759-211	1	Frame Assm. (Yellow) - Include End Rails
18	8463-11	1	Frame Assm. (Black)
18	8654-211	1	Frame Assm. (White) - Include End Rails
19	2328-25	2	End Frame Rail (Black)
20	2328-28	2	Long Side Rail R&L (Black)
21	8456-20	1	Short Side Rail R.H. (Black)
	8456-21	1	Short Side Rail L.H. (Black) (Not Shown)
22	1615-62	10	Rivet (Side Rails)
23	530-40	7	Rivet (Lamp & Body Bracket - Rev. Bracket & End Rail)
24	8030-80	1	Under Frame
25	8030-15	1	Plain Truck (Black Sides)
25	8665-15	1	Plain Truck (Silver Sides)
26	8030-23	1	Truck Mounting Spacer (Plain Trk.)
27	8130-15	1	Collector Truck - (Black Sides) (Earlier Models)
28	8030-100	1	Motor Truck Complete (Black Sides)
28	8665-100	1	Motor Truck Complete (Silver Sides)

GP-20 DIESEL POWER UNIT



LIONEL

GP-20 DIESEL POWER UNIT

SECTION Loco, D & E

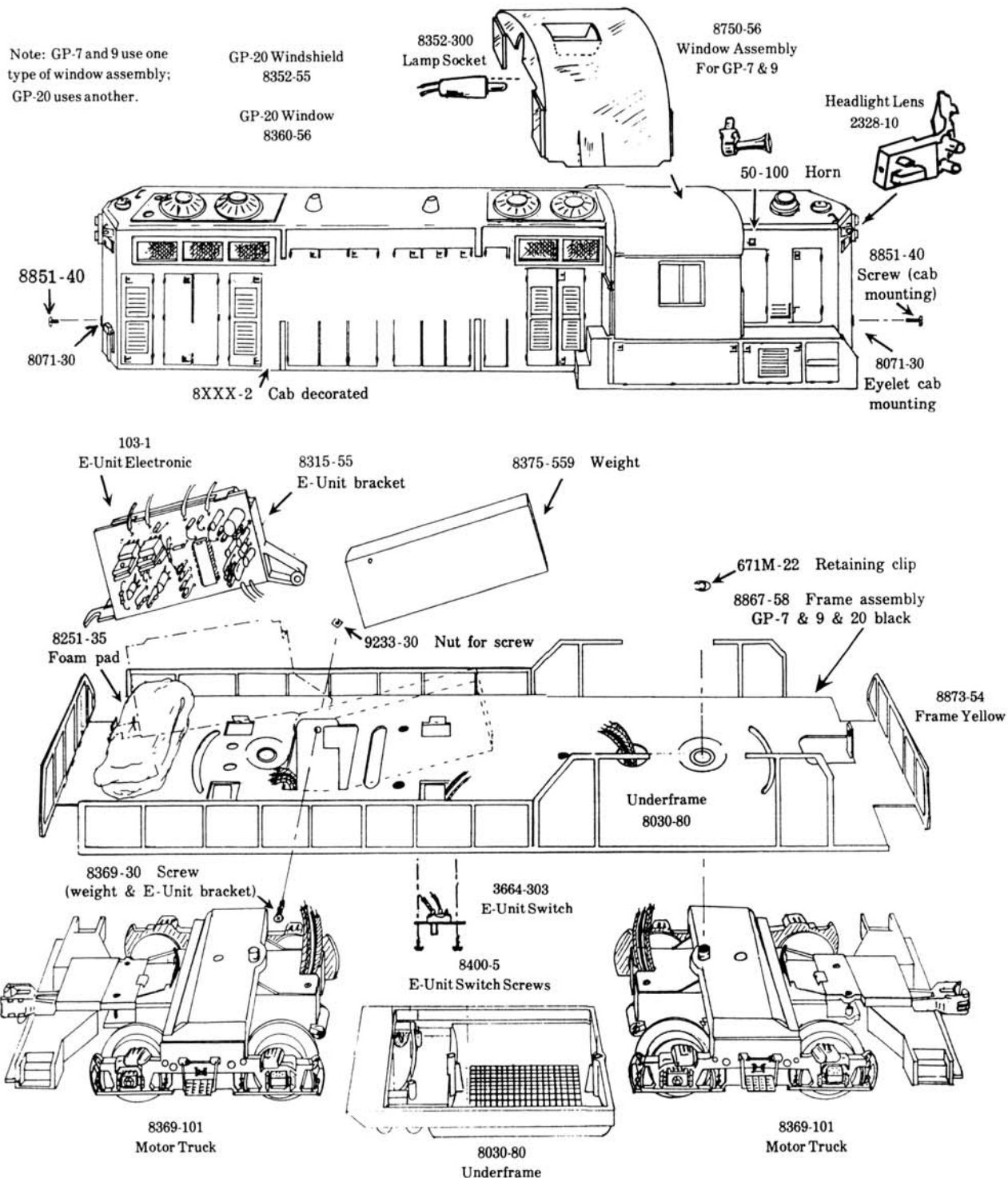
DATE 2-78

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Cab
2	8010-165	2	Screw (Cab Mtg)
3	50-100	2	Ornamental Horn
4	8352-23	1	Handrail LH (Long)
5	8352-21	1	Cab Handrail LH (Short)
6	8360-56	1	Window Shell
7	8352-55	1	Front Windshield
8	8352-310	1	Lamp
9	8352-20	1	Cab Handrail RH (Short) - Wire
10	8352-22	1	Handrail RH (Long) - Wire
11	2328-10	1	Lens
12	2328-178	2	Cab Bracket
13	100-4	1	3 Position Reversing Unit
14	622-52	1	Reverse Unit Bracket
15	8142-63	1	Lockwasher
16	8142-62	1	Screw (Reverse Unit Mtg)
17	TS-70	1	Retaining Washer (Plain Truck)
18	600-133	2	Speednut (Motor Truck Retaining)
19	1055-56	2	Spring (Motor Truck)
20	601-131	2	Cup Washer (Motor Truck)
21	8030-11	1	Frame - Early Type - W/Wire Handrails
21	8675-11	1	Frame - Current Type W/Stamped Handrails
22	2328-25	2	End Rail - Stamped
23	530-40	7	Rivet
24	8456-20	1	Cab Handrail RH (Short) - Stamped
25	2328-28	2	Long Handrail R&L - Stamped
26	1615-62	10	Rivet - Stamped Handrail Mtg.
27	8030-25	1	Handrail Support RH - For Wire Handrail
28	8030-30	1	Handrail Support LH - For Wire Handrail
29	8456-21	1	Cab Handrail LH (Short) - Stamped
30	8030-15	1	Plain Truck
31	8030-23	1	Cup Washer
32	8030-80	1	Under Frame
33	8030-100	1	Motor Truck
34	8352-320	1	Lamp Socket W/Lead

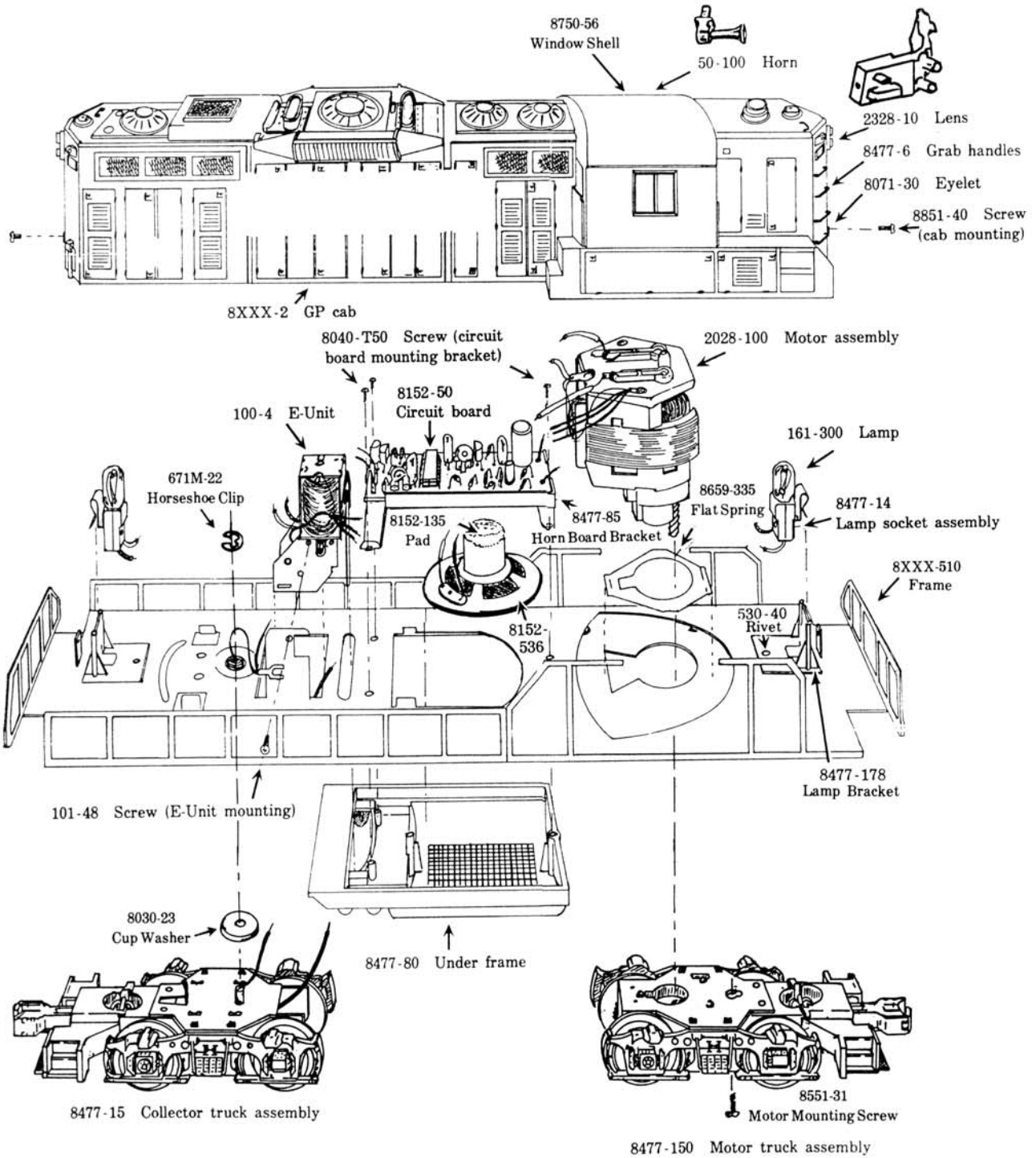
Geep Type Diesels GP-7-9-20 With DC Motor And Electronic E-Unit

Note: GP-7 and 9 use one type of window assembly; GP-20 uses another.



Geep Locomotives With Magntraction And Horn

Note: notation 8XXX means that user is to supply engine number to order part.



GEEP LOCOMOTIVES w/MAGNETRACTION & HORN

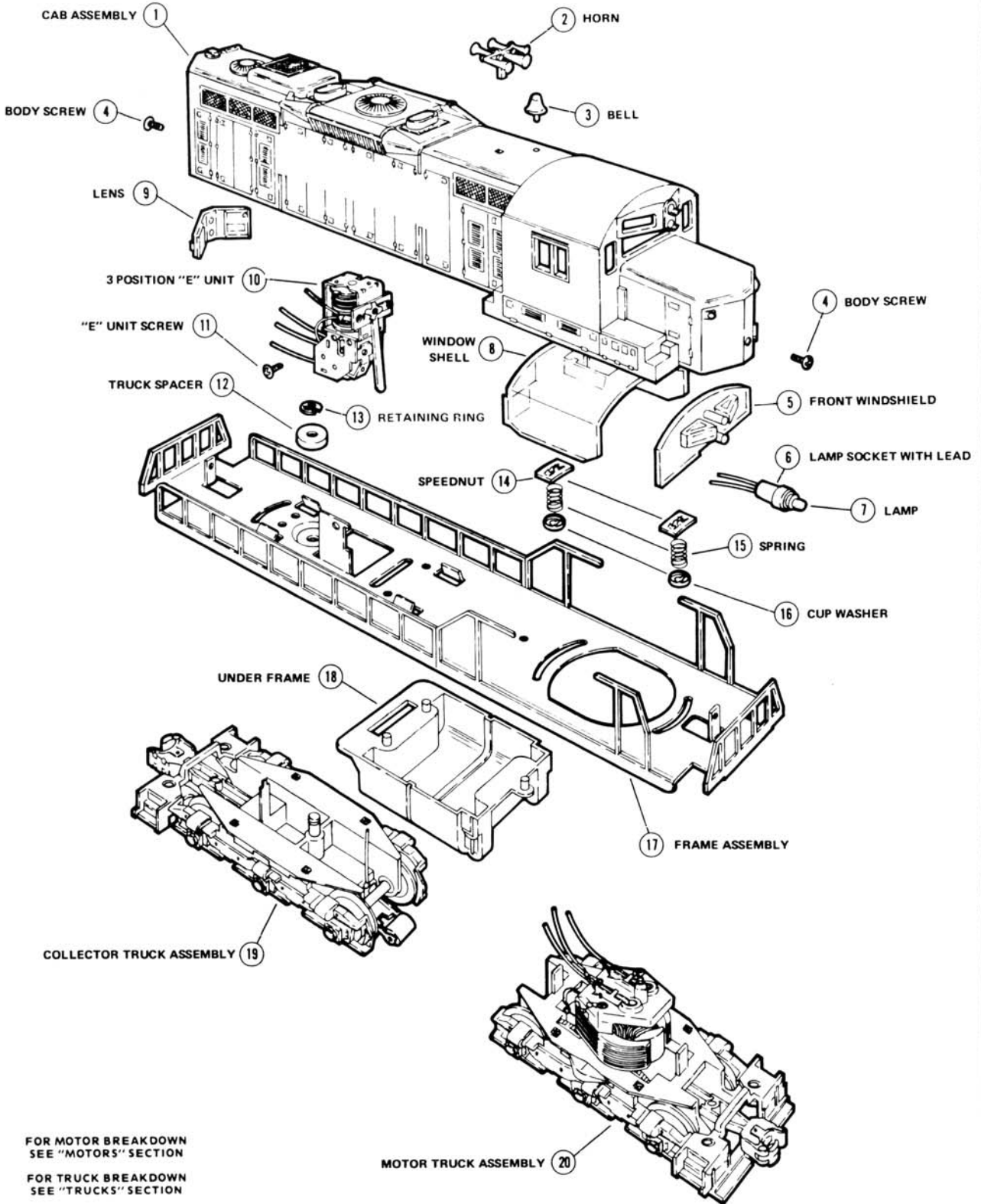
SECTION DIESEL ENGINES

DATE 4/86

Reference
Drawing

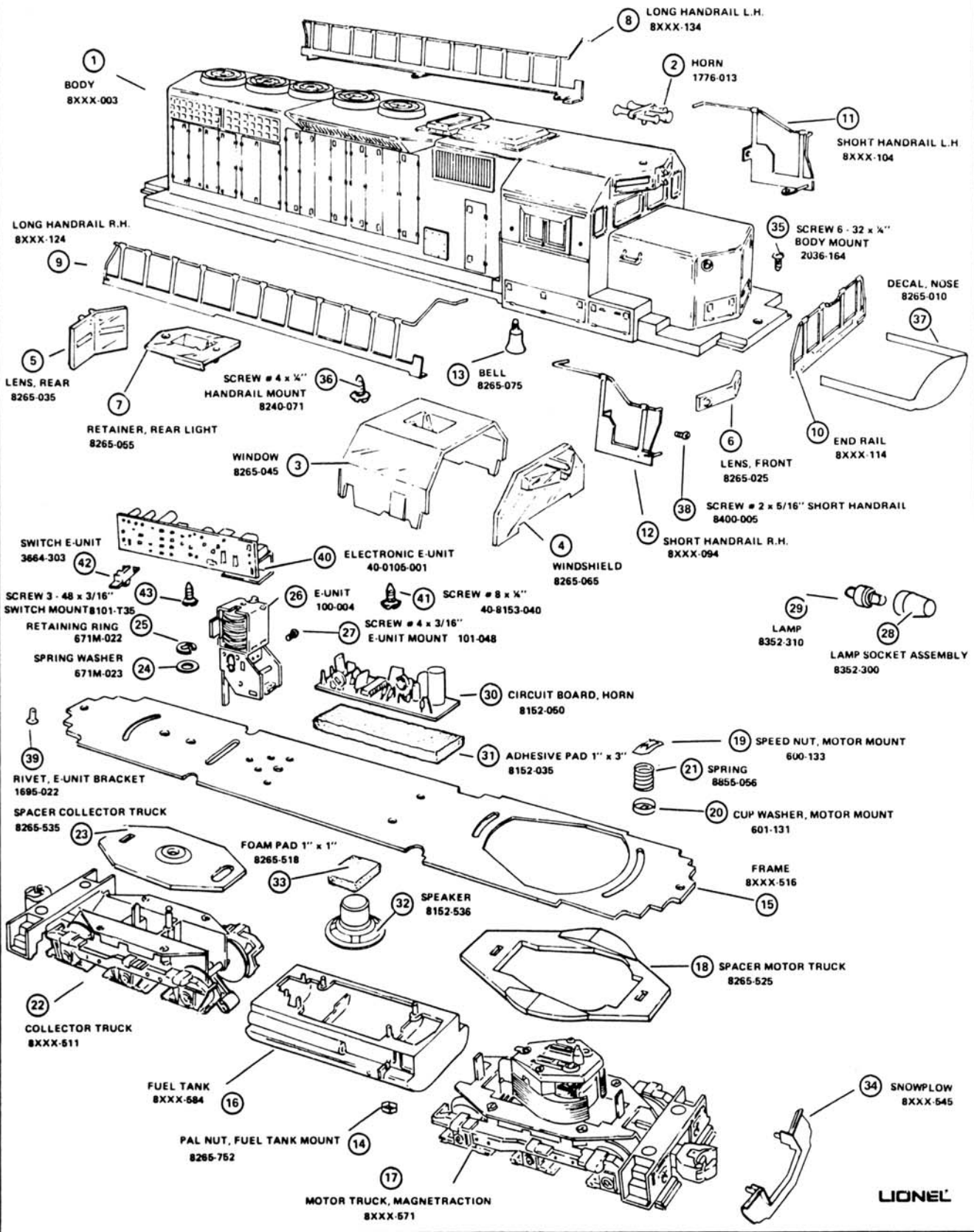
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-2	1	GP cab
2	8071-30	2	Eyelet
3	50-100	2	Horn
4	2328-10	2	Lens
5	8477-6	9	Grab handles
6	8750-56	1	Window
7	8851-40	2	Screw (cab mounting)
8	100-4	1	E-Unit
9	101-48	1	Screw (E-Unit mounting)
10	161-300	2	Lamp
11	530-40	2	Rivet (lamp bracket)
12	2028-100	1	Motor assembly
13	8030-23	1	Cup washer
14	8152-50	1	Circuit board
15	8152-135	1	Foam pad round speaker mounting
16	8152-536	1	Speaker
17	8477-14	2	Lamp socket assembly
18	8477-15	1	Collector truck assembly
19	8477-80	1	Under frame
20	8477-85	1	Circuit board mounting bracket
21	8477-150	1	Motor truck assembly
22	8477-178	2	Lamp bracket
23	8XXX-510	1	Frame assembly
24	8551-31	1	Screw motor assembly
25	8659-335	1	Flat spring
26	671M-22	1	Retaining clip
27	8040-T50	3	Screw (circuit board mounting bracket)
28	2036-164	1	Screw (collector assembly mounting)
29	2328-170	1	Insulation
30	2328-171	1	Collector assembly
31	8250-35	1	Insulation washer

SD-18 DIESEL POWER UNIT



LIONEL

SD-40 SINGLE MOTOR



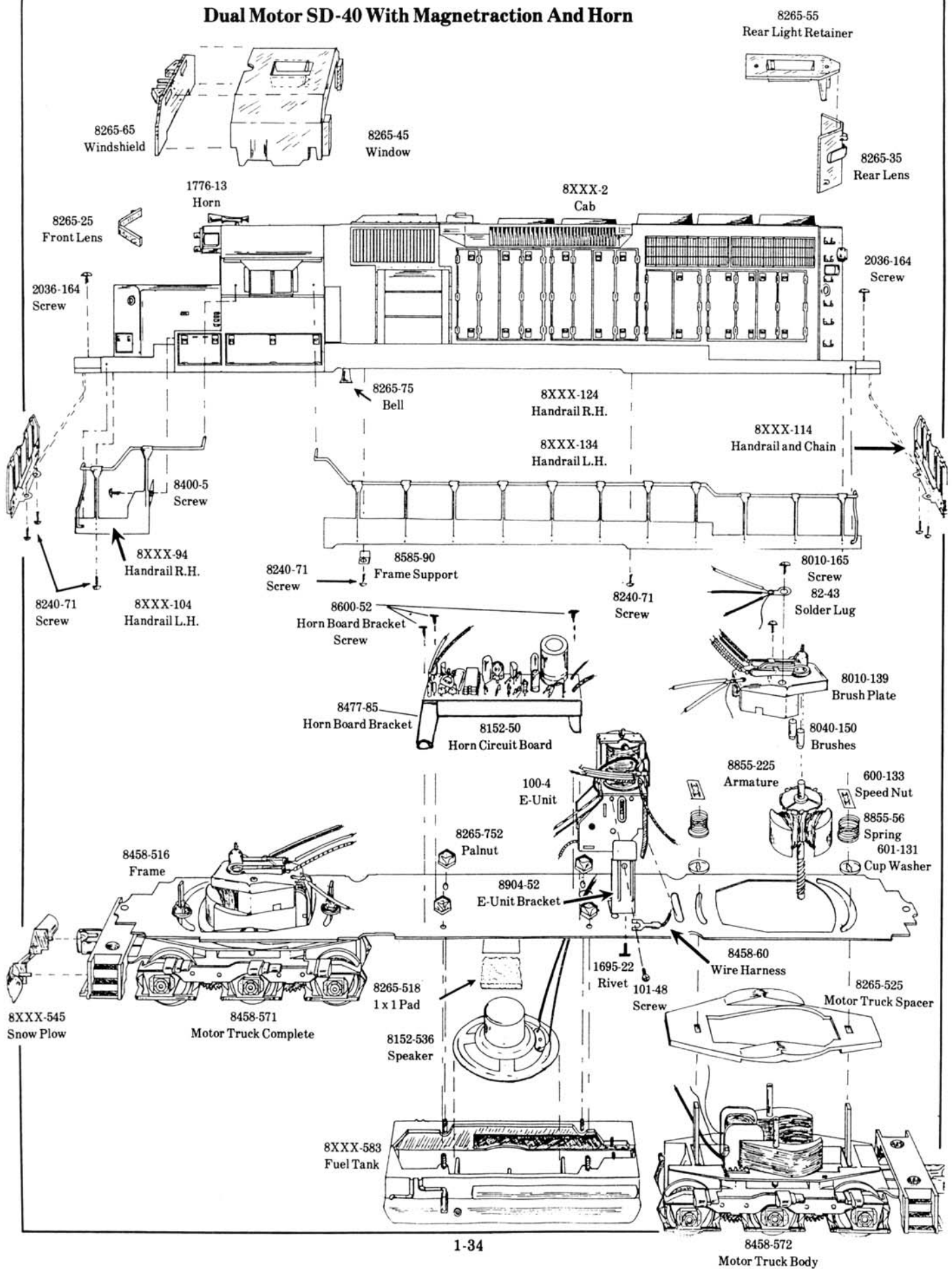
LIONEL

SD-40 LOCOMOTIVE
 8265 ATSF
 8376 UP

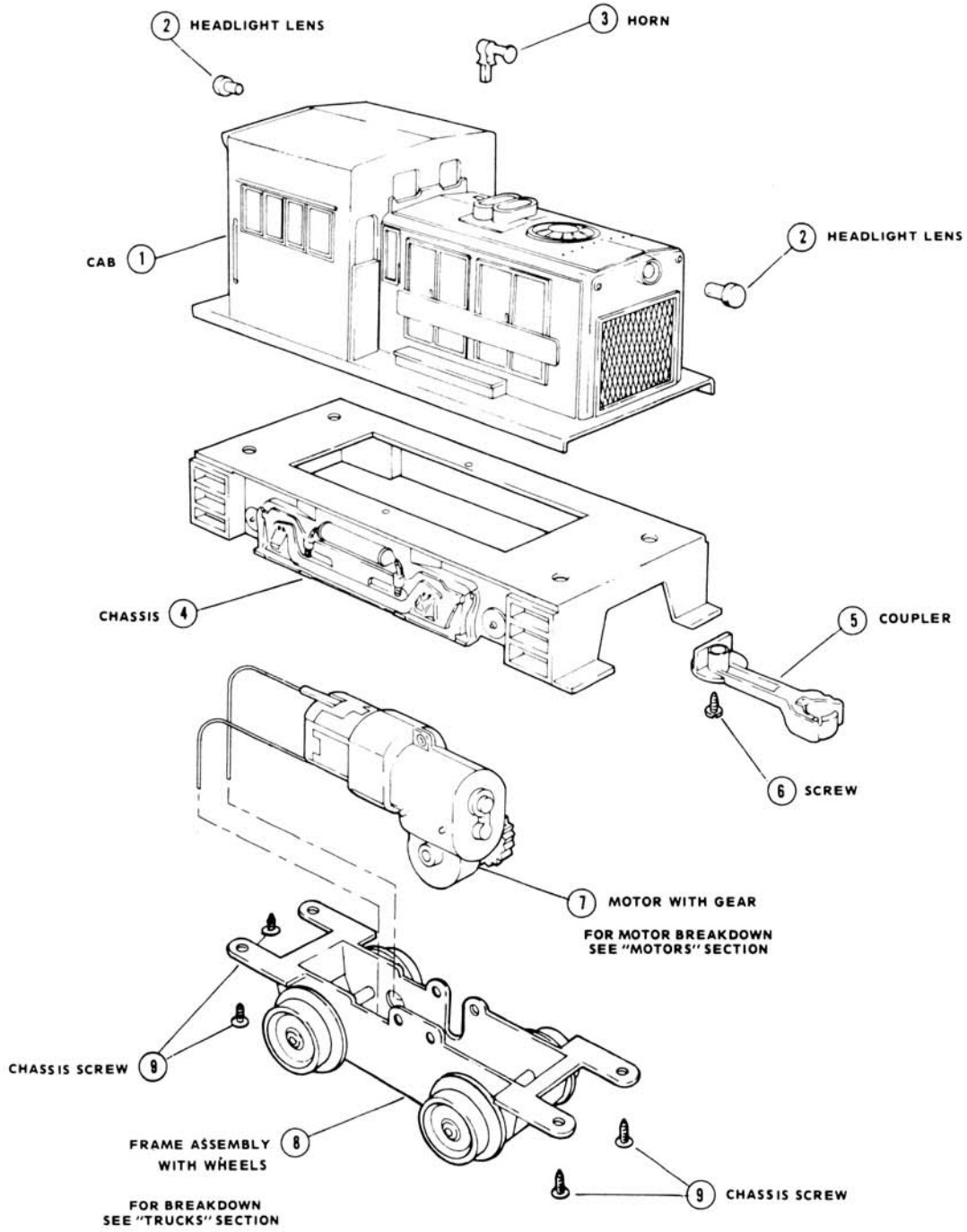
SECTION DIESEL LOCOMOTIVES
 DATE REV. 11/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
	8XXX-003	1	Body
	1776-013	1	Horn
	8265-045	1	Window
	8265-065	1	Windshield
	8265-035	1	Lens, rear
	8265-025	1	Lens, front
	8265-055	1	Retainer, rear light
	8XXX-134	1	Long handrail, LH
	8XXX-124	1	Long handrail, RH
	8XXX-114	2	End rail
	8XXX-104	1	Short handrail, LH
	8XXX-094	1	Short handrail, RH
	8265-075	1	Bell
	8265-752	4	Palnut, fuel tank mount
	8XXX-516	1	Frame
	8XXX-584	1	Fuel tank
	8XXX-571	1	Motor truck, magnetraction
	8265-525	1	Spacer, motor truck
	600-133	2	Speednut, motor mount
	601-131	2	Cup washer, motor mount
	8855-056	2	Spring
	8XXX-511	1	Collector truck
	8265-535	1	Spacer, collector truck
	90-671M-022	1	Retaining ring
	100-004	1	E-unit; 8265 only, for 8376 see below
	101-048	1	Screw, #4x3/16", E-unit mount
	8352-300	1	Lamp socket assembly
	8352-310	1	Lamp
	8152-050	1	Circuit board, horn
	8152-035	1	Adhesive pad, 1x3"
	8152-536	1	Speaker
	8265-518	1	Foam pad, 1"x1"
	8XXX-545	1	Snowplow
	2036-164	2	Screw, 6-32x $\frac{1}{4}$ ", body mount
	8240-071	12	Screw, #4x $\frac{1}{4}$ ", handrail mount
	8265-010	1	Decal, nose
	8400-005	2	Screw, #2x5/16, short front handrails
	1695-022	1	Rivet, E-unit bracket
	90-671M-023	1	Spring washer
	40-0105-001	1	Electronic E-unit
	40-8153-040	2	Screw, #8x $\frac{1}{4}$ "
	25-3664-303	1	Switch, E-unit
	90-8101-T35	2	Screw, 3-48x3/16", switch mount

Dual Motor SD-40 With Magntraction And Horn

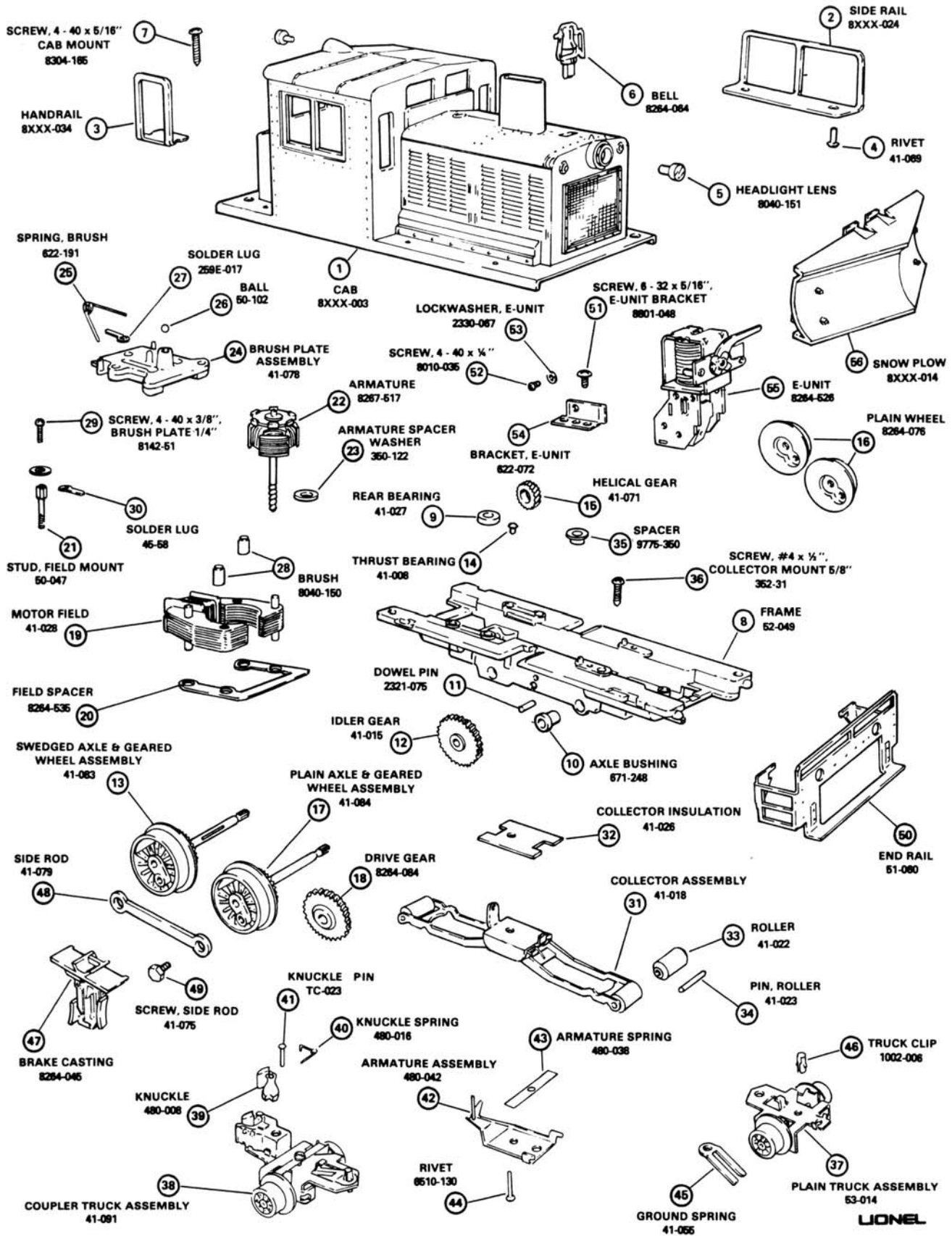


INDUSTRIAL SWITCHER



LIONEL

INDUSTRIAL SWITCHER LOCOMOTIVE 8264 C.P. SNOWPLOW 8368 ALASKA



LIONEL

INDUSTRIAL SWITCHER LOCOMOTIVE

SECTION DIESEL LOCOMOTIVES

8264 C. P. SNOWPLOW 8368 ALASKA

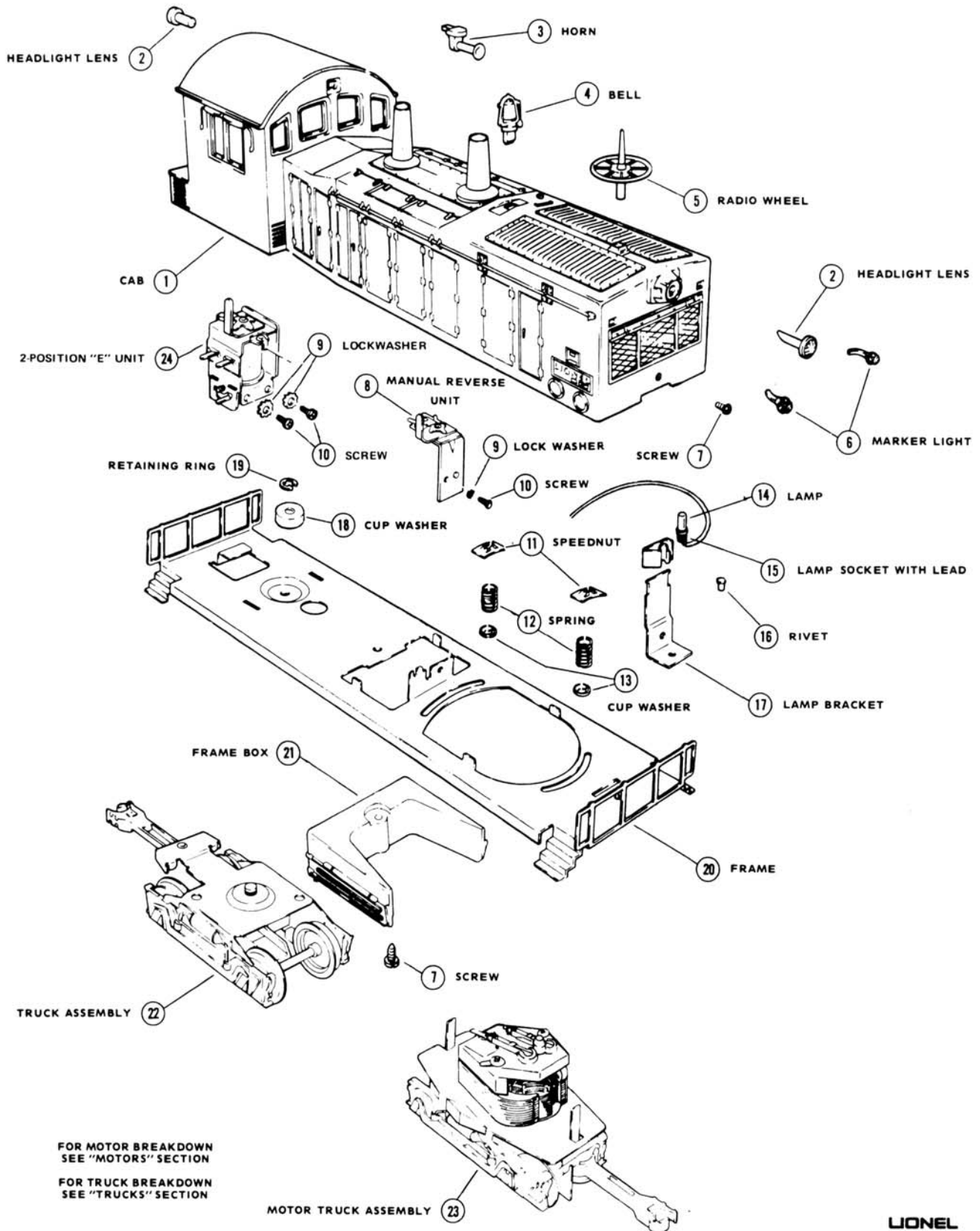
DATE 5/83

REF. QUANTITY PER
NO. PART NUMBER UNIT

DESCRIPTION

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-003	1	Cab
2	8XXX-024	2	Side Rail
3	8XXX-034	2	Handrail
4	41-069	6	Rivet
5	8040-151	2	Headlight Lens
6	8264-064	1	Bell
7	8304-165	2	Screw, 4-40x5/16", cab mount
8	52-049	1	Frame
9	41-027	1	Rear Bearing
10	671-248	4	Axle Bushing
11	2321-075	1	Dowel Pin
12	41-015	1	Idler Gear
13	41-083	1	Swedged axle & geared wheel assembly
14	41-008	1	Thrust bearing
15	41-071	1	Helical gear
16	8264-076	2	Plain wheel
17	41-084	1	Plain axle & geared wheel assembly
18	8264-084	1	Drive gear
19	41-028	1	Motor field
20	8264-535	1	Field spacer
21	50-047	2	Stud, field mount
22	8264-517	1	Armature
23	350-122	2	Armature spacer washer
24	41-078	1	Brush plate assembly
25	622-191	2	Spring, brush
26	50-102	1	Ball
27	259E-017	1	Solder lug
28	8040-150	2	Brush
29	8142-51	2	Screw, 4-40x3/8", brush plate 1/4"
30	45-58	1	Solder lug
31	41-018	1	Collector Assembly
32	41-026	1	Collector insulation
33	41-022	2	Roller
34	41-023	2	Pin, roller
35	9775-350	1	Spacer
36	352-31	1	Screw, #4x1/2", collector mount 5/8"

DIESEL SWITCHER WITH MANUAL AND 2-POSITION REVERSE



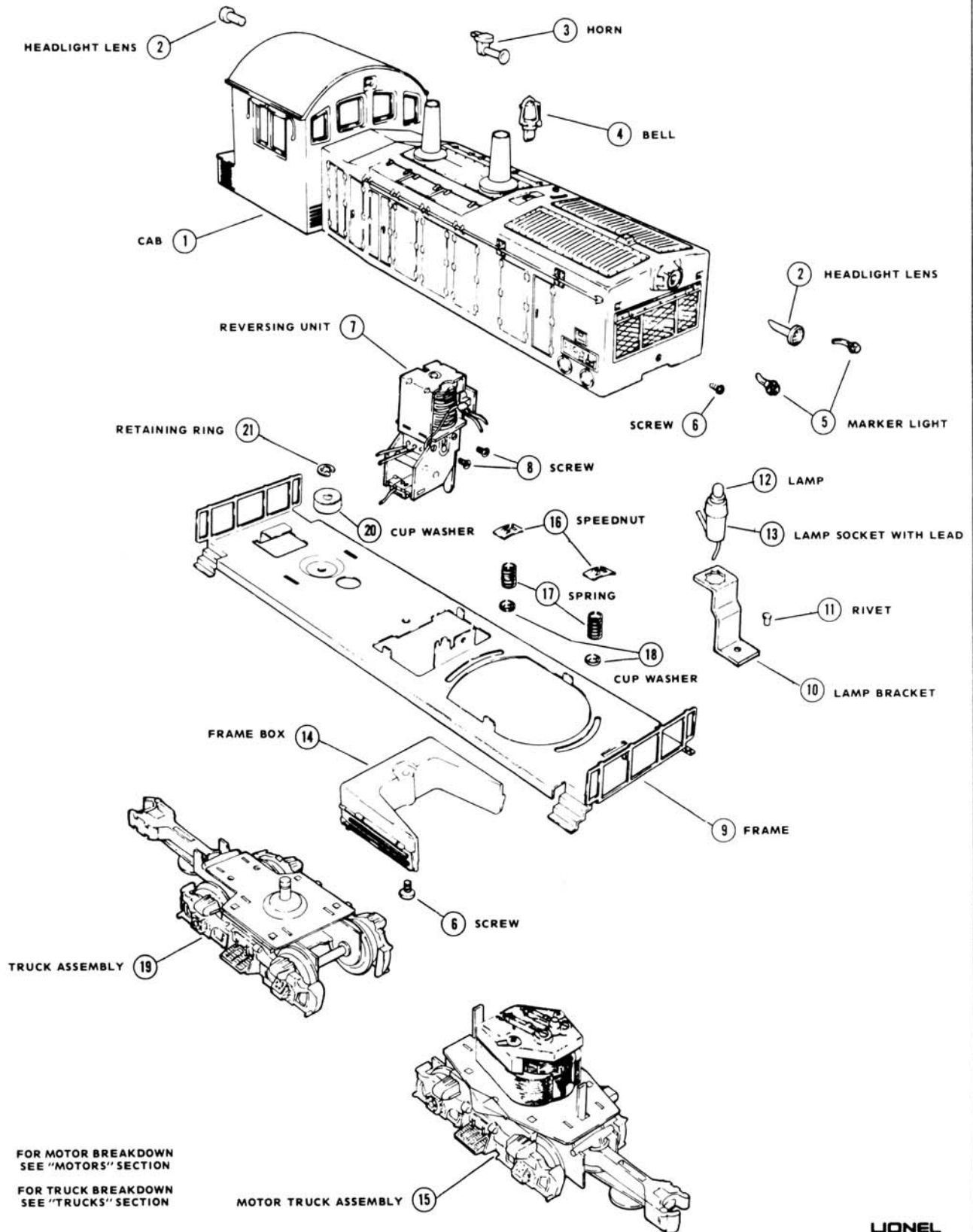
LIONEL

DIESEL SWITCHER W/MANUAL
& 2 POSITION REVERSE

SECTION Loco, D&E
DATE 2-78
Reference
Drawing

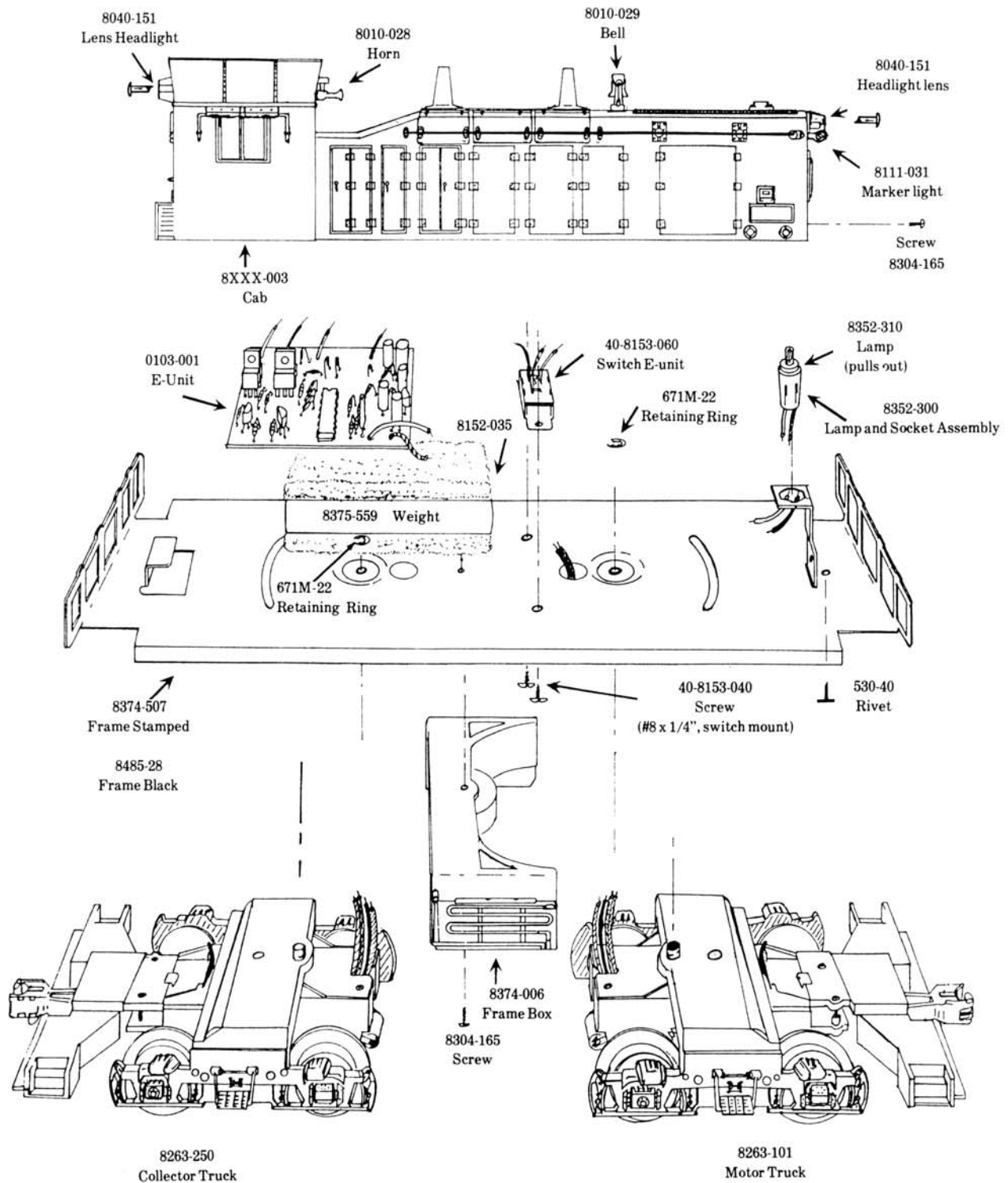
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Body
2	8040-151	2	Headlight Lens
3	8010-28	1	Ornamental Horn
4	8010-29	1	Ornamental Bell
5	8010-30	1	Radio Wheel (8010-8111)
6	8111-31	2	Marker Light (Red) *
6	8111-26	2	Marker Light (Green) *
7	8010-165	2	Screw (Body & Frame Box Mtg)
8	8040-7	1	Manual Switch
10	8142-62	2	Screw (Rev Unit Mtg)
11	600-133	2	Speednut (Motor Trk Mtg)
12	1055-56	2	Spring (Motor Trk Mtg)
13	601-131	2	Cupwasher (Motor Trk Mtg)
14	8010-24	1	Lamp (8010-8111)
14	8352-310	1	Lamp
15	8010-32	1	Lamp Socket (8010-8111)
15	8352-320	1	Lamp Socket
16	530-40	1	Rivet (Light Brkt)
17	8010-20	1	Light Bracket
18	8030-23	1	Cupwasher (Plain Trk Mtg)
19	671M-22	1	Retaining Ring (Plain Truck)
20	8010-11	1	Frame
21	601-6	1	Frame Box
22	8010-15	1	Plain Truck
23	8010-100	1	Motor Truck
24	102-1	1	2 Position "E" Unit
			NOTE: * 8111-31 Will Be Used In Place Of 8010-26 - 8010-27
			8010-30 Radio Wheel Not Used On Later Models

DIESEL SWITCHER WITH 3-POSITION "E" UNIT

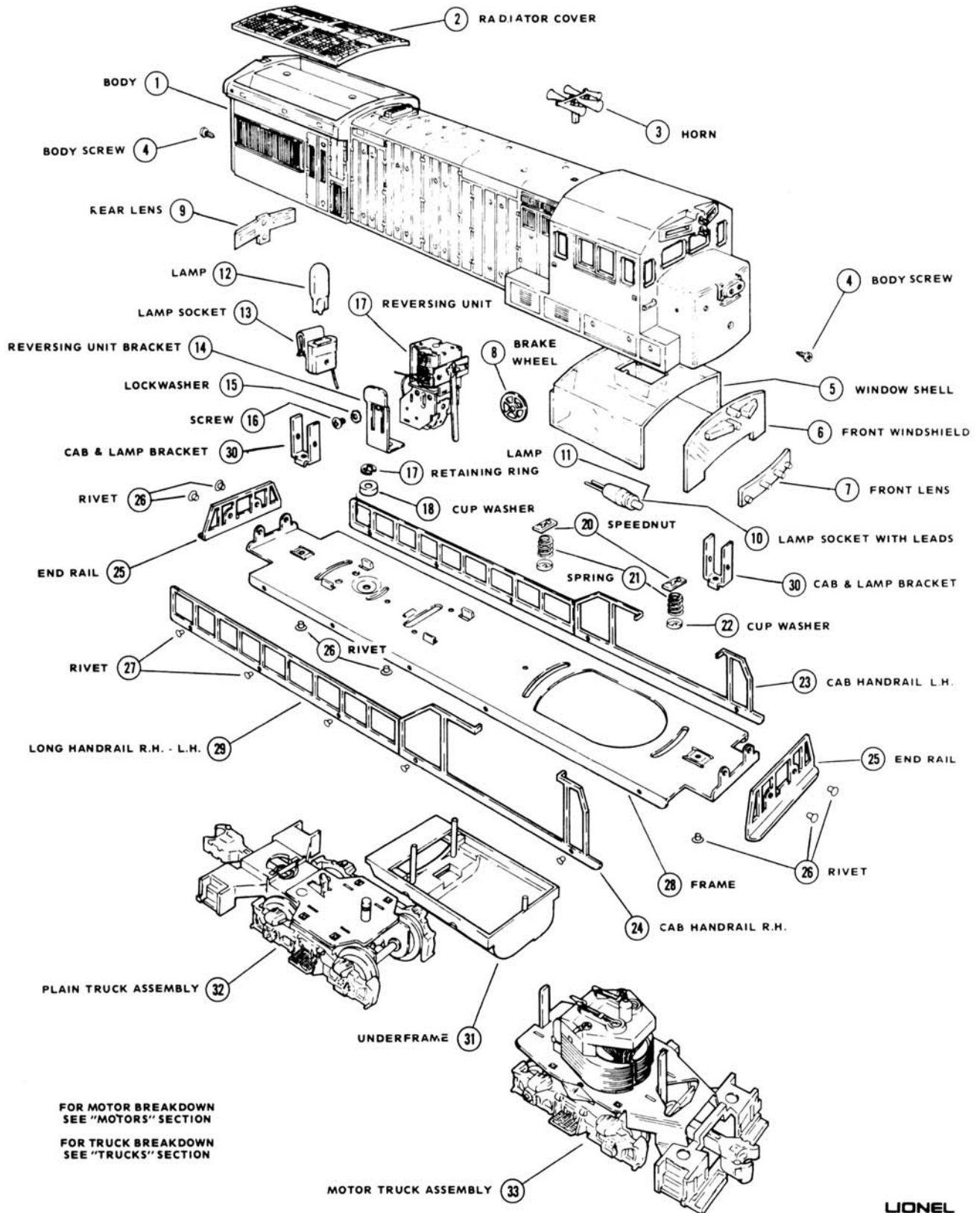


LIONEL

SW-1 Switcher With DC Motor



U-36 B DIESEL POWER UNIT



LIONEL

U-36B DIESEL POWER UNIT

SECTION Loco, D & E

DATE 2-78

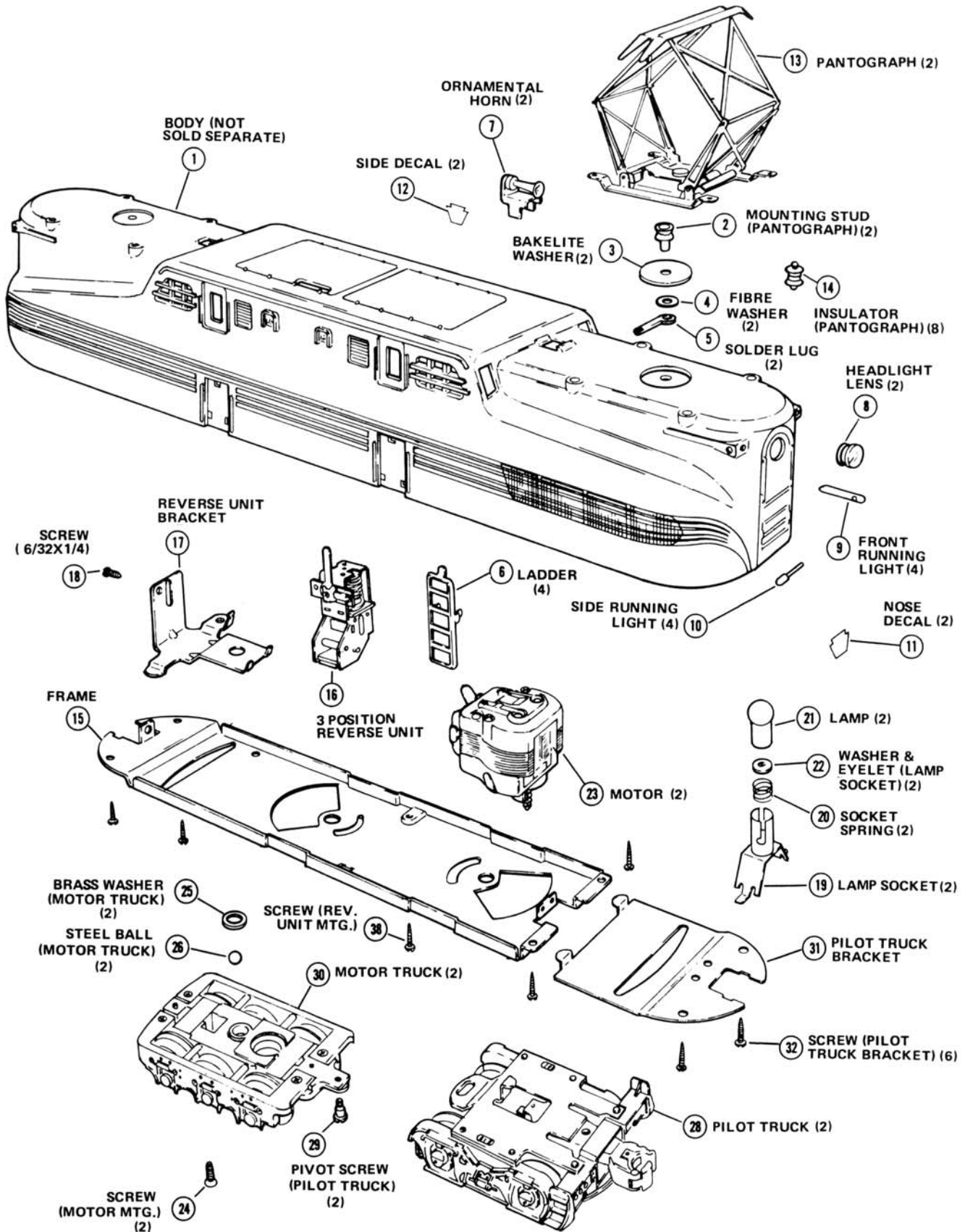
Reference
Drawing

REF. QUANTITY PER
NO. PART NUMBER UNIT

DESCRIPTION

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	1776-3	1	Body
1	7500-3	1	Body
1	8XXX-3	1	Body
2	1776-25	1	Radiator Cover
2	7500-25	1	Radiator Cover
2	8XXX-25	1	Radiator Cover
3	1776-13	1	Ornamental Horn
4	8010-165	2	Screw, Body
5	1776-8	1	Window Shell
6	1776-16	1	Front Windshield
7	1776-18	1	Front Lens
8	1776-14	1	Brakewheel
9	1776-17	1	Rear Lens
10	8352-310	1	Lamp
11	8352-320	1	Lamp Socket W/Leads
12	161-300	1	Lamp * (Later Units Do Not Have Second Light)
13	8030-14	1	Lamp Socket W/Lead
14	622-52	1	Reverse Unit Bracket
15	8142-63	1	Lockwasher, Reverse Unit Mtg.
16	8142-62	1	Screw, Reverse Unit Mtg.
17	100-4	1	3 Position Reverse Unit
18	8030-23	1	Cup Washer
19	671M-22	1	Retaining Ring, Plain Truck
20	600-133	2	Speednut, Motor Truck Mtg.
21	1055-56	2	Spring
22	601-131	2	Cup Washer
23	1776-21	1	Short Side Rail LH (Black)
23	8755-21	1	Short Side Rail LH (Yellow) - Not Sold Separately
24	1776-20	1	Short Side Rail RH (Black)
24	8771-20	1	Short Side Rail RH (Yellow) - Not Sold Separately
25	2328-25	2	End Rail (Black)
25	2328-26	2	End Rail (Yellow) - Not Sold Separately
26	530-40	7	Rivet - End Rails & Brackets
27	1615-52	10	Rivet -Side Rails
28	1776-11	1	Frame (Black)
28	8755-11	1	Frame (Yellow) - Includes Side & End Rails

8753 GG 1 ELECTRIC



GG-1 ELECTRIC

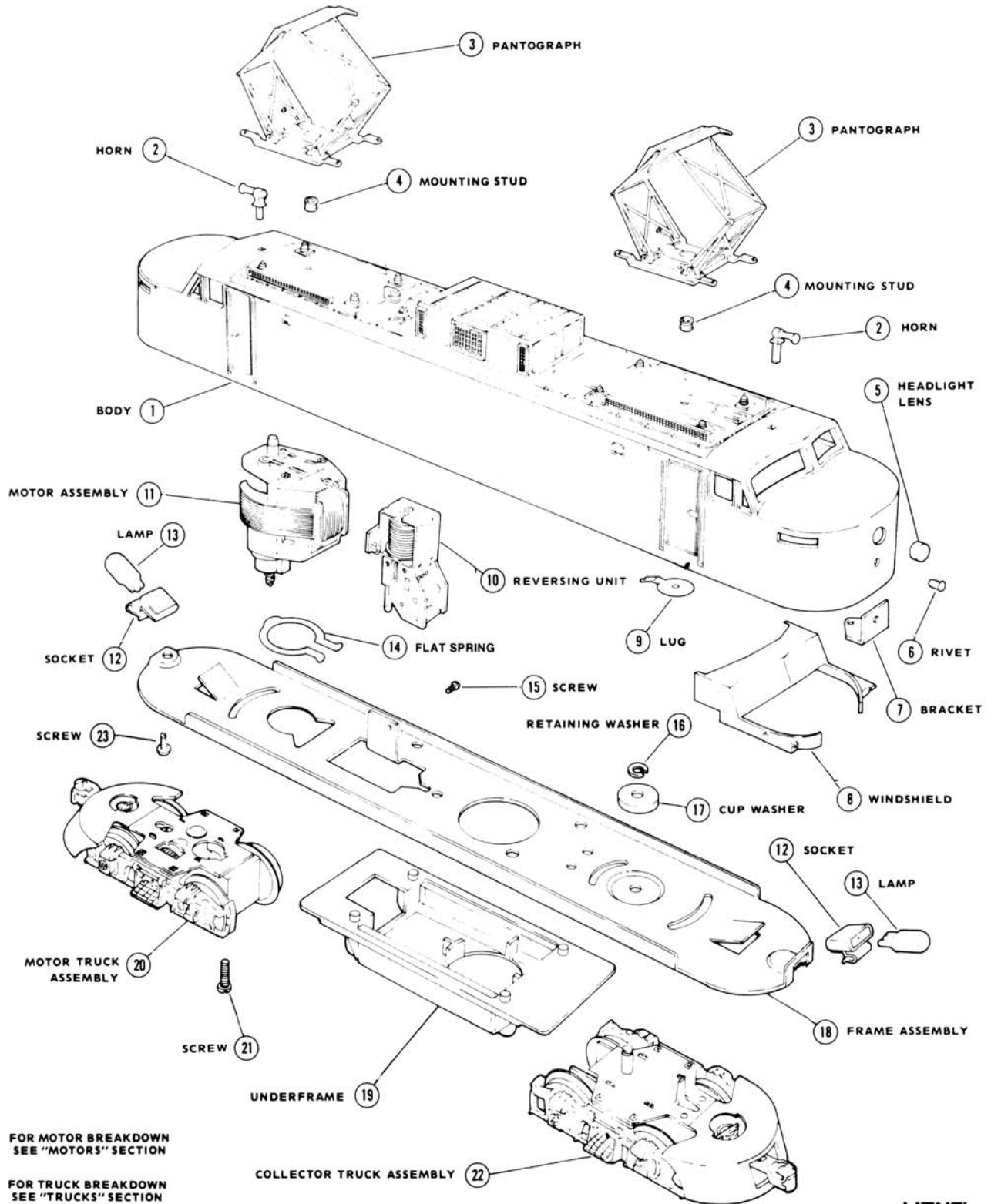
SECTION Loco, D & E

DATE 2-78

Reference
Drawing

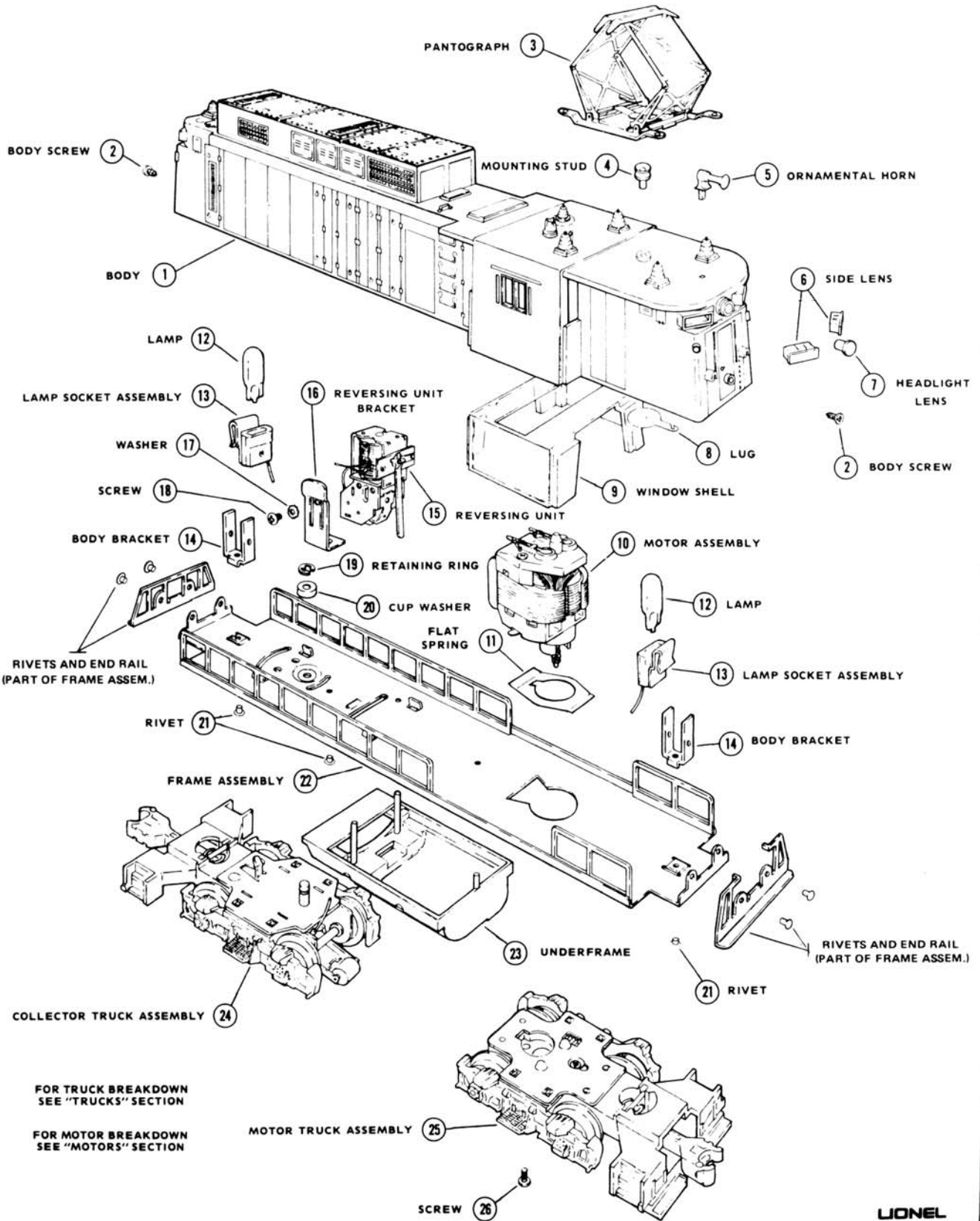
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-6	1	Body (Not Sold Separate)
2	2332P-14	2	Mounting Stud (Pantograph)
3	2332-P15	2	Bakelight Washer
4	2332-109	2	Fibre Washer
5	82-43	2	Solder Lug
6	2332-10	4	Ladder
7	2332-7	2	Ornamental Horn
8	2332-11	2	Headlight Lens
9	2332-12	4	Front Running Light
10	2332-34	4	Side Running Light
11	8753-10	2	Nose Decal - Pennsylvania "Keystone"
12	8753-11	2	Side Decal - Pennsylvania "Keystone"
13	2350-15	2	Pantograph Assm.
14	2332P-7	8	Insulator (Pantograph)
15	2330-10	1	Frame
16	8506-50	1	3 Position Reverse Unit
17	2330-21	1	Reverse Unit Bracket
18	8142-62	1	Screw (Rev. Unit Mtg.) 4-40-X 3/16"
19	8753-45	2	Lamp Socket Assm.
20	2145-91	2	Socket Spring
21	53-300	2	Lamp
22	61-22	2	Washer & Eyelet (Lamp Socket)
23	622-100	2	Motor - (See Motor Section For Breakdown)
24	8753-325	2	Screw (Motor Mtg.)
25	8753-345	2	Brass Washer (Motor Truck)
26	8753-335	2	Steel Ball (Motor Truck)
27	8040-171	1	Screw (6/32 X 1/4 (-Rev. Unit Bracket Mtg.))
28	8753-55	2	Pilot Truck - (See Truck Section For Breakdown)
29	2330-58	2	Pivot Screw (Pilot Truck)
30	2330-25	2	Motor Truck - (See Truck Section For Breakdown)
31	2330-51	1	Pilot Truck Bracket
32	8040-172	6	Screw (Pilot Truck Bracket)
28A	8150-55	2	Pilot Truck (for 8150 only)

"LITTLE JOE" ELECTRICS



LIONEL
 Rev. 6/92

RECTIFIER



LIONEL

RECTIFIER

SECTION Loco, D & E

DATE 2-78

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Body
2	8040-171	2	Screw (Body Mtg)
3	2350-15	1	Pantograph
4	2332P-14	1	Mounting Stud (Pantograph)
5	50-100	1	Ornamental Horn
6	2329-8	4	Side Lens
7	2329-7	2	Headlight Lens -Center
8	2350-8	1	(Lug (Body)
9	8659-25	1	(window Shell)
10	2028-100	1	Motor Assm.
11	2367-52	1	Flat Spring (Motor) - (Not Shown - Open End)
11	8659-335	1	Flat Spring (Motor) - (Shown- Closed Ends)
12	161-300	2	Lamp
13	8030-14	2	Lamp Socket W/Lead
14	2328-178	2	Lamp & Body Bracket
15	100-4	1	3 Position Reversing Unit
16	622-52	1	Reversing Unit Bracket
17	8142-63	1	Lock Washer (Rev. Unit Mtg)
18	8142-62	1	Screw (Rev. Unit Mtg)
19	671M-22	1	Retaining Ring (Coll. Trk)
20	8030-105	1	Cup Washer - Spacer
21	530-40	3	Rivet (Rev & Lamp/Body Brkt)
22	8659-211	1	Frame Assm. (Yellow) - Former
22	8754-211	1	Frame Assm. (Black) - Current
23	8030-80	1	Under Frame
24	8130-15	1	Collector Truck
25	8659-150	1	Motor Truck
26	8551-31	1	Screw (Motor Mtg)
			Note - 8659-335 Flat Spring Replaces 2367-52 - Either May Be Used



© Lionel Trains, Inc., Mt. Clemens, MI. 48045

LIONEL TROLLEY OPERATING INSTRUCTIONS

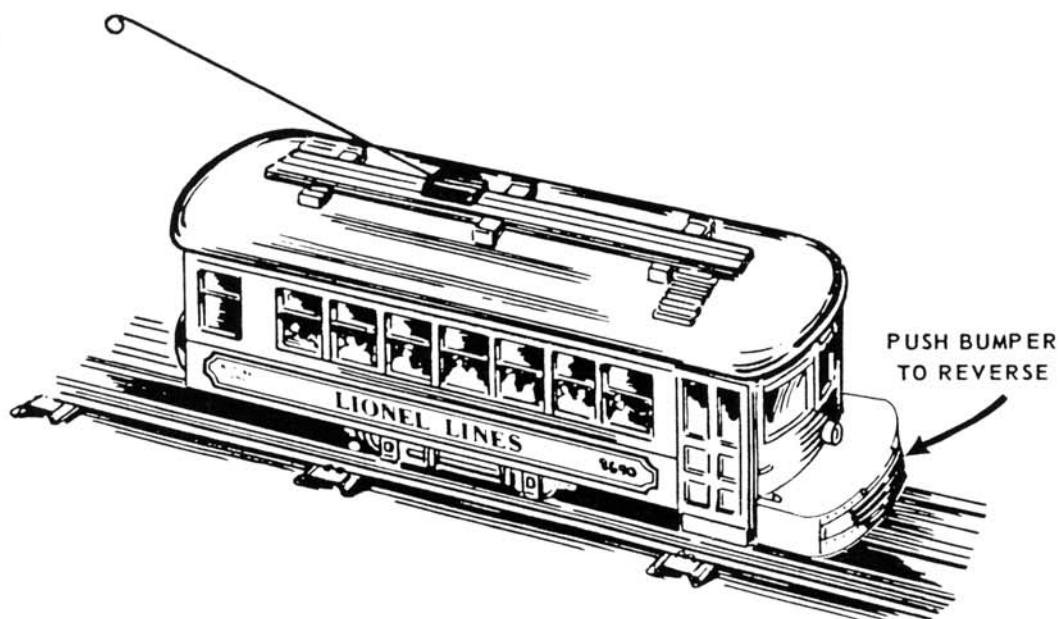


Figure 1 - Lionel Trolley

The Lionel Trolley is made to run on a regular "O27" or "O" track. It can be operated in conjunction with a Lionel train layout or on a separate line or siding as a town or interurban trolley. To maintain realism, the trolley is considerably slower than a regular Lionel locomotive.

The trolley is powered with an electric motor which operates on 8-16 volts using a regular Lionel transformer.

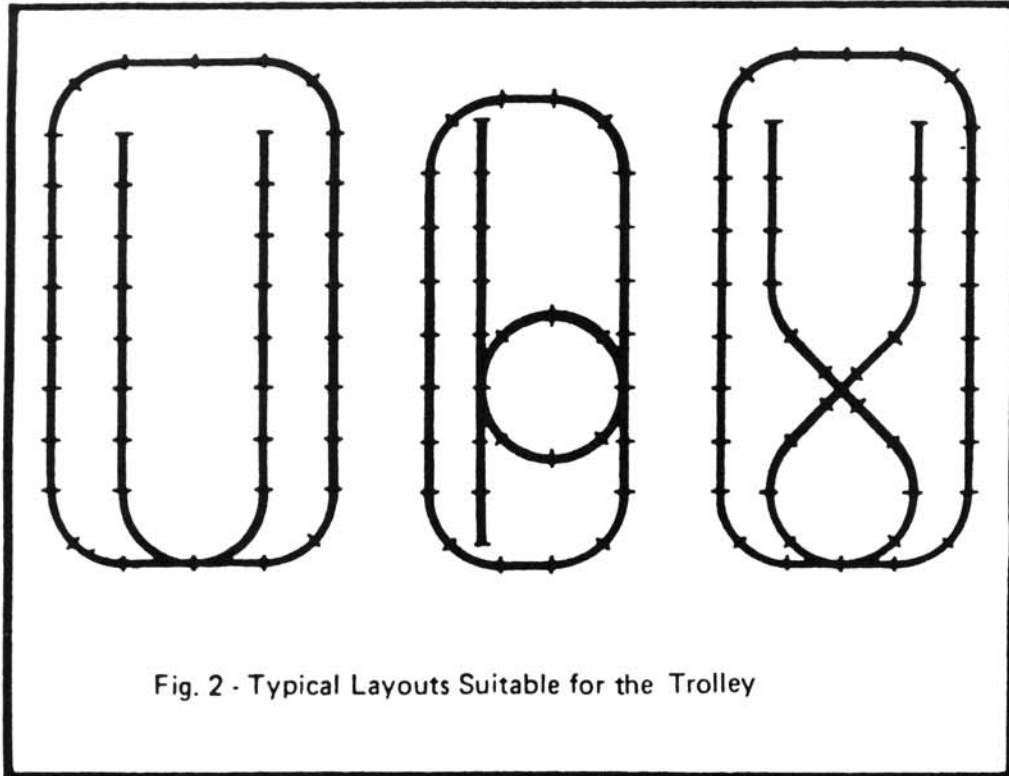


Fig. 2 - Typical Layouts Suitable for the Trolley

OPERATING INSTRUCTIONS

To operate the car simply place it on the track and turn on the track voltage. The direction of the cars motion is controlled by the position of its rubber bumpers. The car will continue running in one direction until its forward bumper is pushed to its opposite position, either by hand or by hitting an obstruction on the track, such as a locomotive, car or a track bumper. Then the car will change direction of its motion until the leading bumper plate strikes another obstruction and reverses the motor again. The reversing mechanism is connected to the trolley pole on top of the car causing it to swing in the opposite direction whenever the trolley changes direction. Because of the pick-up roller assembly it loses contact momentarily when crossing a switch or a crossing, and, if operated too slowly, may even stop on such a "dead" spot in the track.

Although the Trolley is very sturdy, head-on collisions between the car and a moving train should be avoided to prevent derailment. It is also inadvisable to use it for pulling or pushing a load continuously because its motor is not designed for this kind of operation and may overheat.

DISASSEMBLING TROLLEY

To disassemble the trolley for lubrication of the motor or for replacement of a burned out lamp, remove the body in the following manner.

1. Take off the trolley pole assembly by pulling the base straight up.
2. Remove the screw on the bottom of the car.
3. Lift the body up at the unscrewed end and slide it forward.

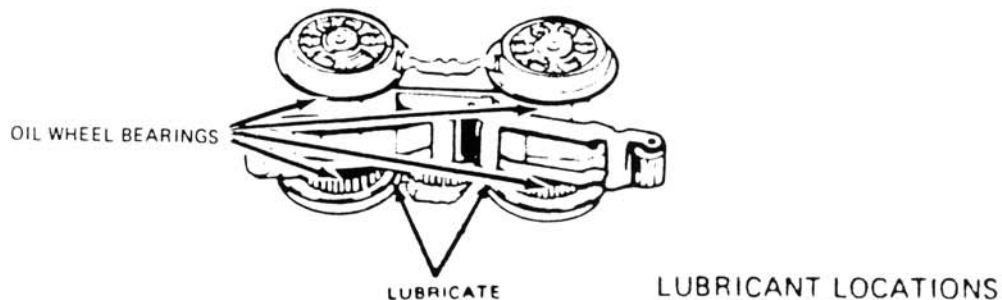
To replace the body reverse the procedure:

1. Line up the car body so that the vertical post holding the trolley pole assembly is in line with the hole in the roof.
2. Insert the front of the body first so that the projections on the frame fit into supports on the body.
3. Lower the other end of the body in place making sure that the vertical post projects through the hole.
4. Replace the screw on the bottom of the car.
5. Mount the trolley pole assembly on the vertical post.

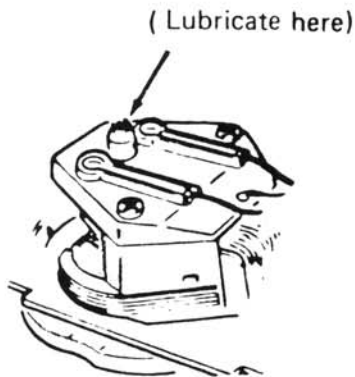
LUBRICATION AND MAINTENANCE

The life and performance of the locomotive depend, to a considerable extent, on proper care and lubrication of the motor and other moving parts. You may wish to see your LIONEL dealer about purchasing a 6-2927 LUBRICATION AND MAINTENANCE kit, use the point of a pin or a thin wire to apply a dab of OIL where indicated. Lubricate carefully but never to excess. A small amount of oil or lubricant properly applied, goes a long way. Be careful not to get any oil or lubricant on the running surfaces of the wheels or the rails, or your locomotive will lose traction.

The moving parts of your locomotive such as gears and axles, and on the steam locomotives the side rods and motor armature shaft, require periodic lubrication. When operating the train regularly, inspect these parts frequently, to make sure they are not dry. Remove accumulations of dust and dirt. Also, clean and lubricate the locomotive after storage. Use only small quantities of lubricant with each application. **DO NOT OVER LUBRICATE.** Keep lubricant off motor brushes, wheel rims, track rails, and contact points.



The armature bearing can be lubricated as follows: 1 Take off the locomotive cab by removing the cab screw (figure 1). 2 Apply a small amount of Lionel grease down the hole.



ARMATURE BEARING

HEADLAMP REPLACEMENT

Remove (1) cab screw from cab (figure 1). Lift off cab exposing headlamp assembly. Grasp bulb, and pull out. Replace with Lionel part number 8352-310. Replace cab and cab screw.

SERVICE

If service is required within the warranty period, bring the item to the nearest authorized Lionel Trains - Service Center along with the warranty card.

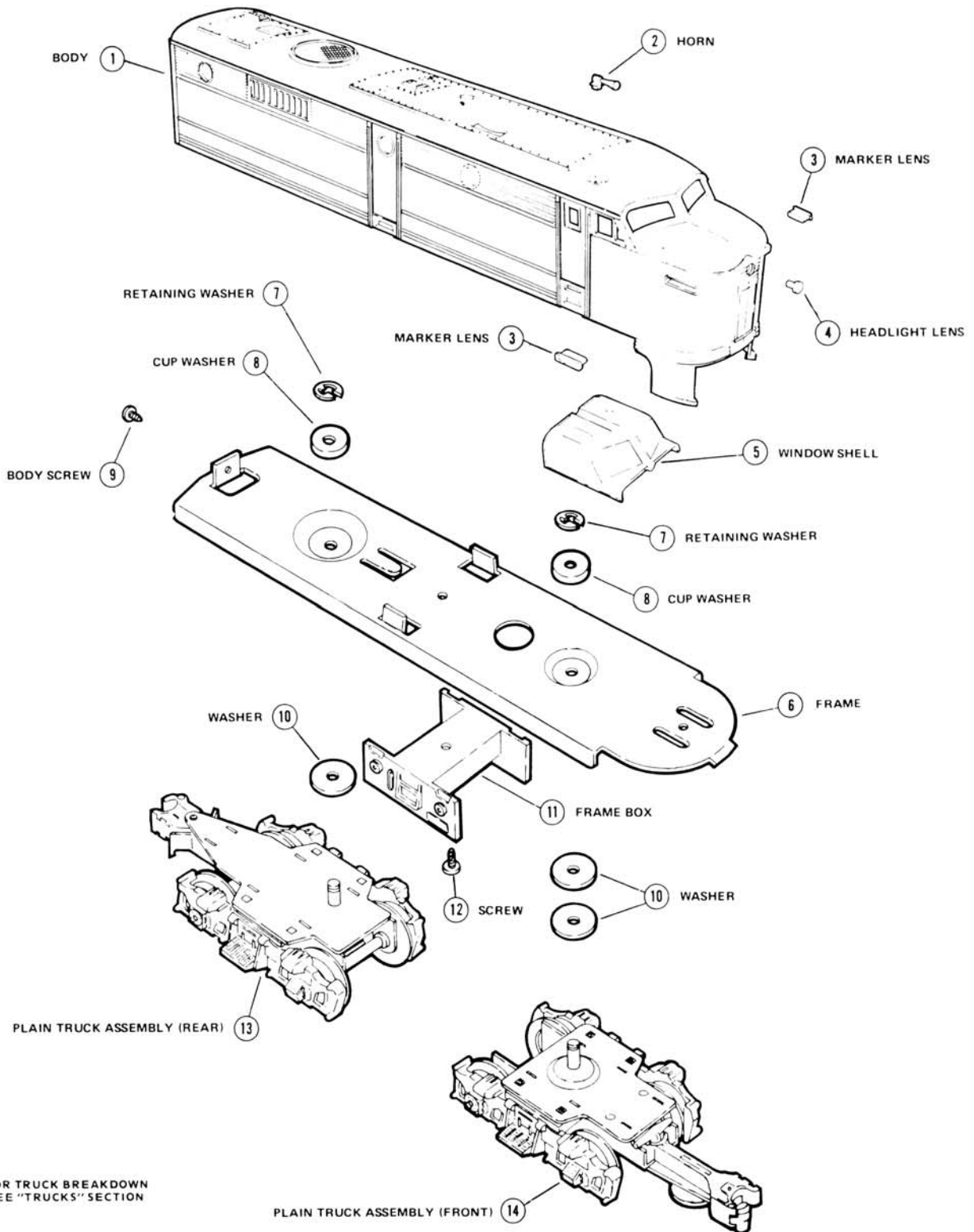
If you prefer to send it back to the factory, you must first write to Lionel Trains, Consumer Service Department, P.O. Box 748, Mt. Clemens, Michigan 48043, stating what the item is, when it was purchased and what seems to be the problem. You will be sent a return authorization and a label to assure your merchandise will be properly handled upon receipt.

CAUTION: Make sure the item is packed so as to prevent damage to the merchandise. The shipment must be prepaid and we recommend that it be insured.

Please make sure you have followed the instructions carefully before returning any merchandise for service.

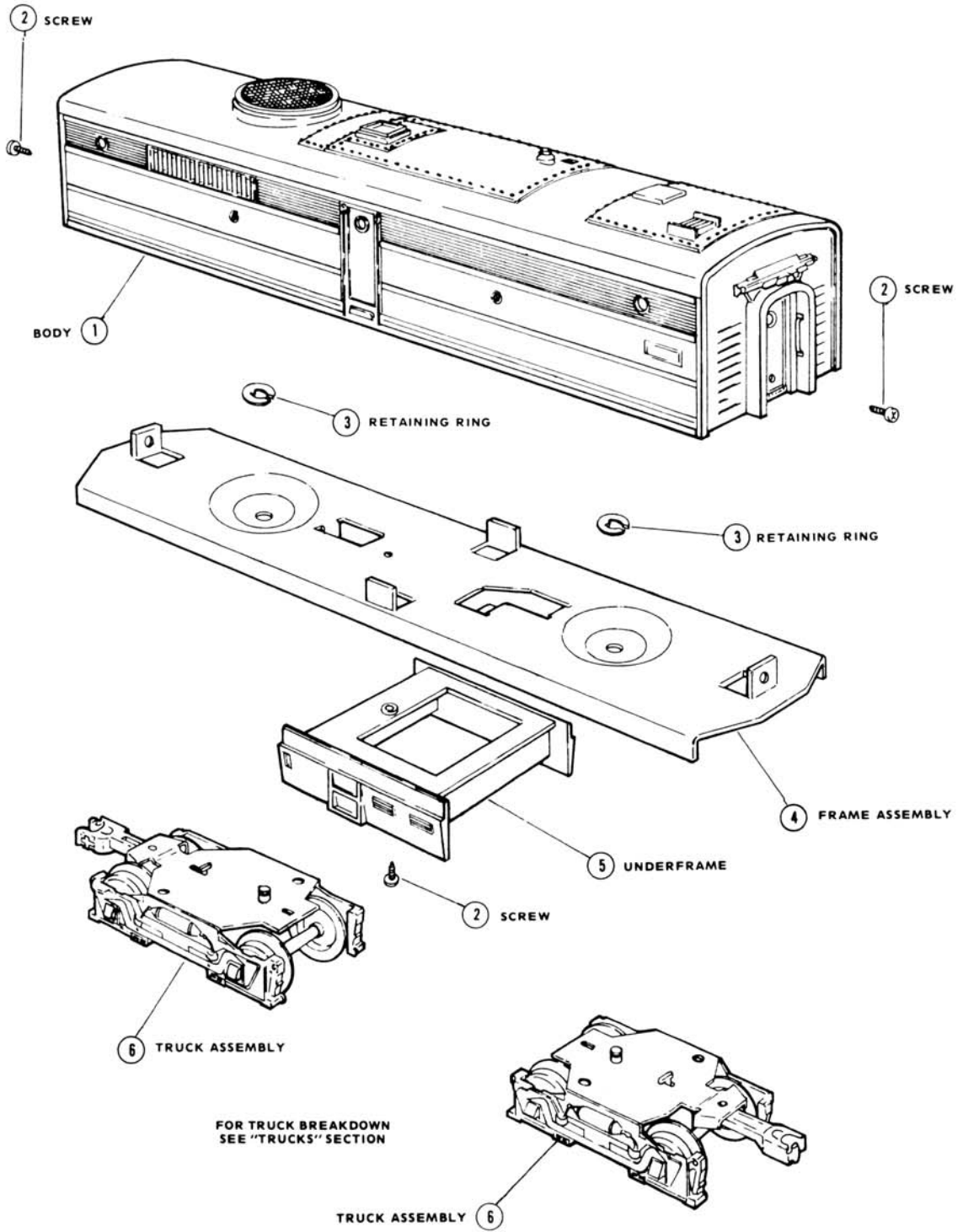
This warranty gives you special legal rights and you may have others that vary from State to State.

ALCO "A" DUMMY UNIT



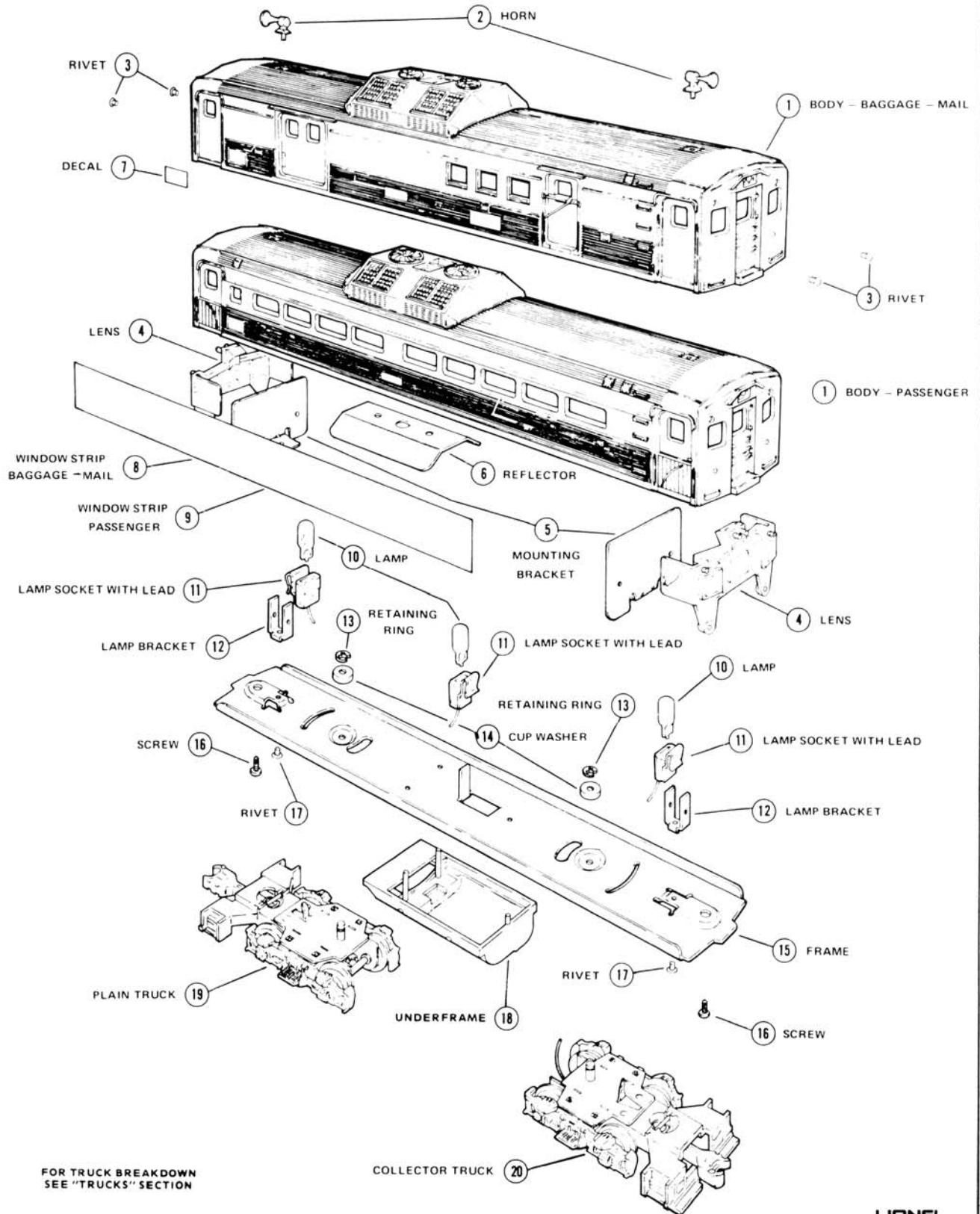
LIONEL

ALCO "B" UNIT



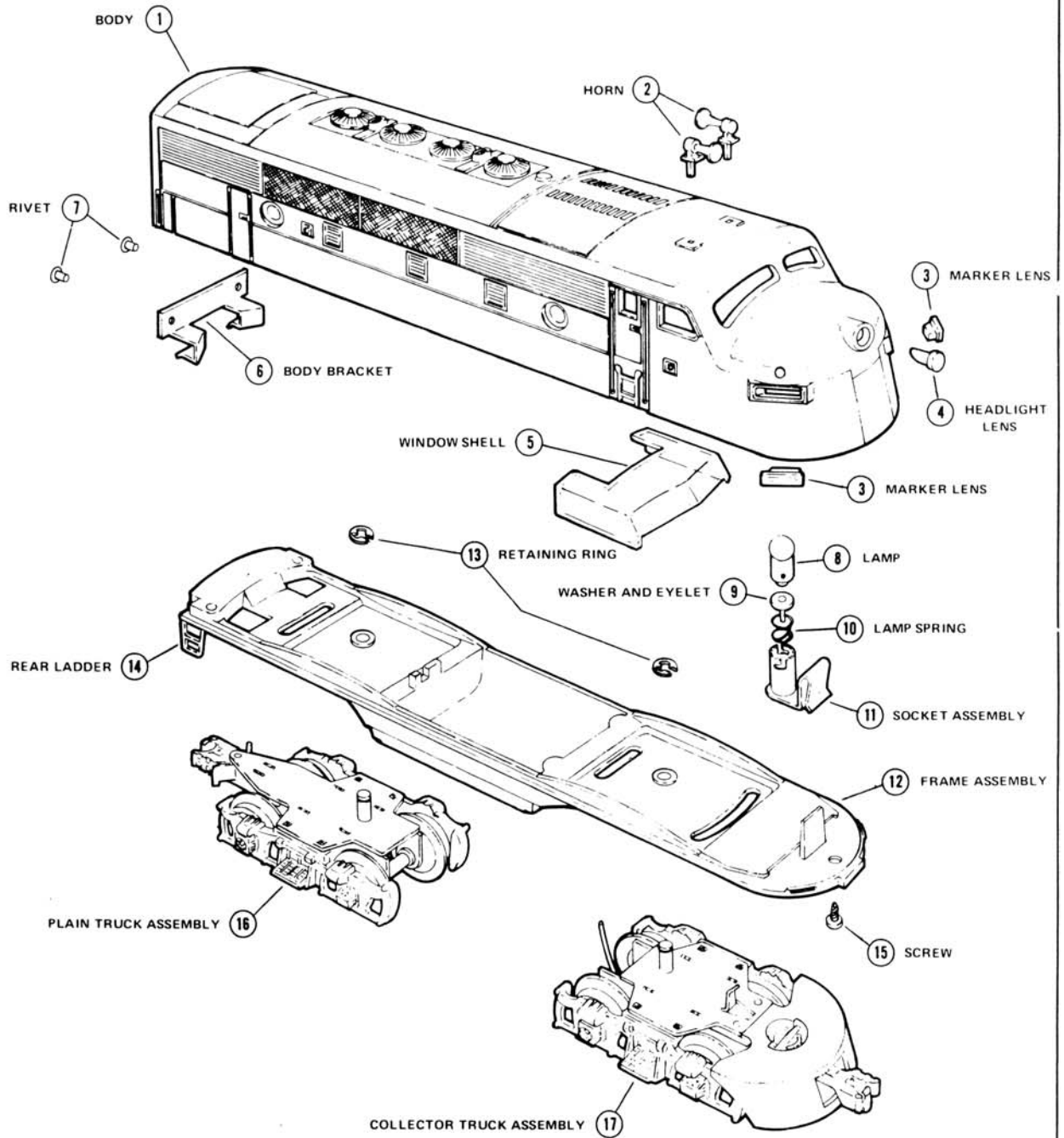
LIONEL

"BUDD" CARS – DUMMY



LIONEL

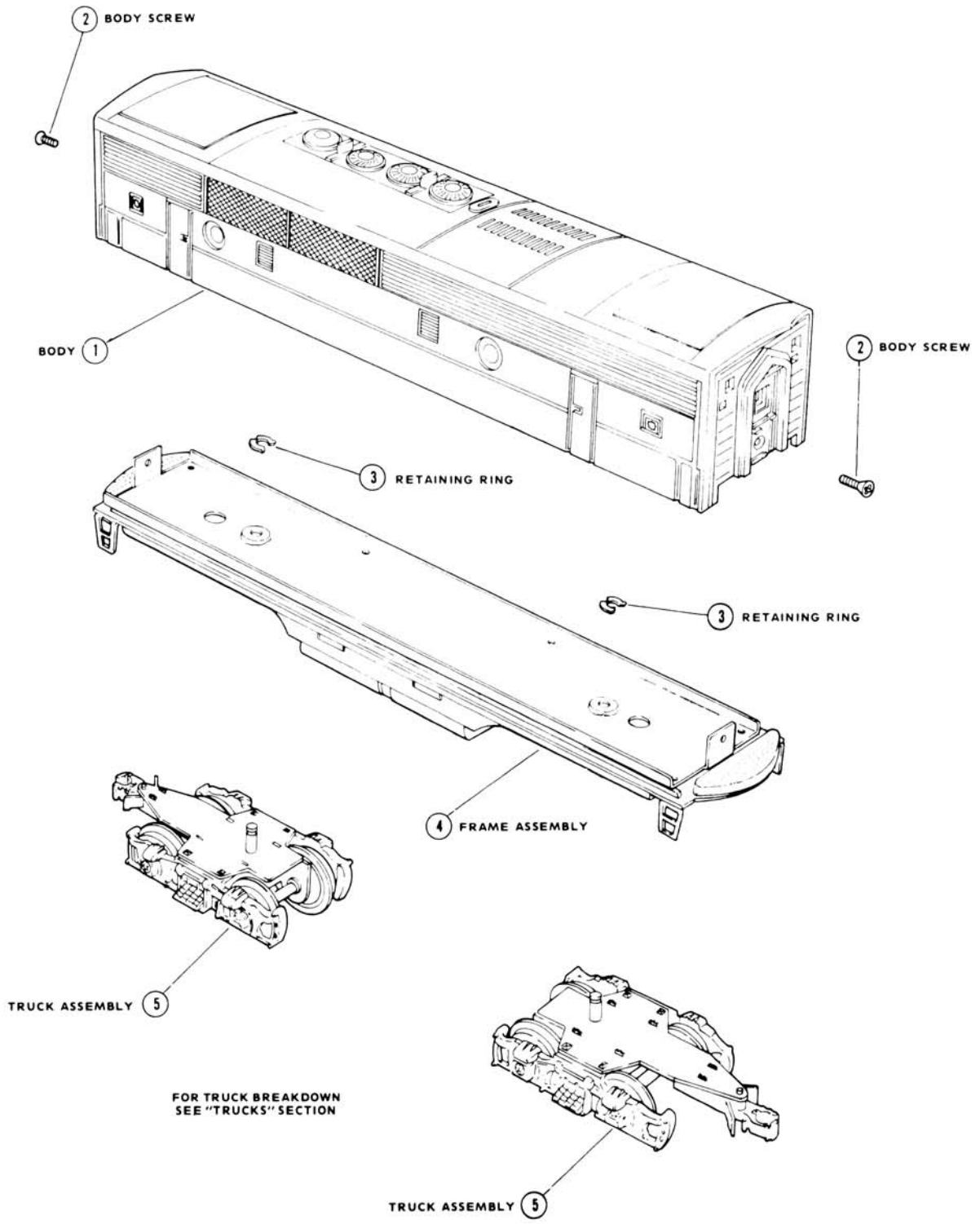
F-3 "A" DIESEL DUMMY UNIT



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

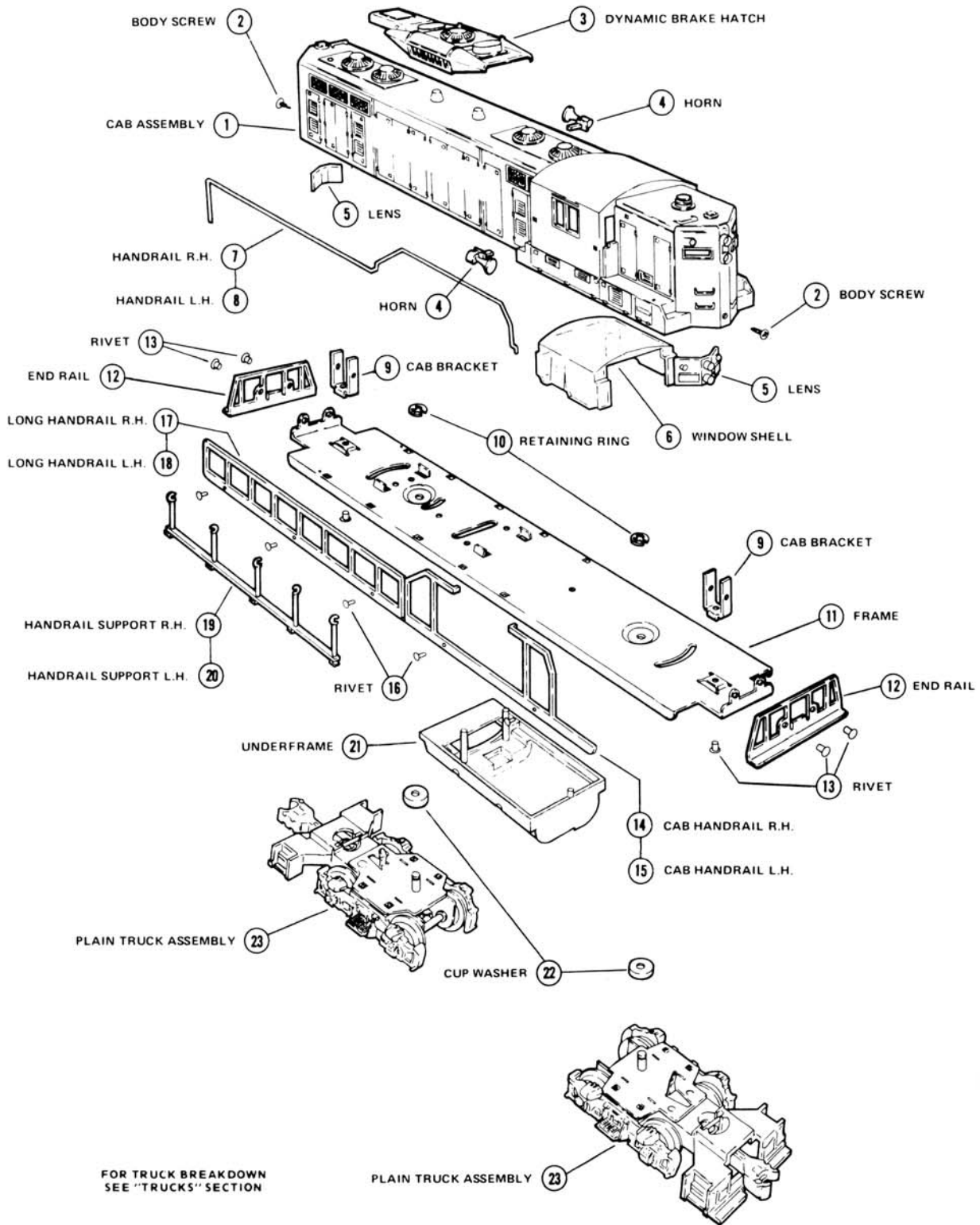
LIONEL

F-3 "B" UNIT



LIONEL

GP-7, GP-9 DIESEL DUMMY UNIT



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

GP-7, GP-9 DIESEL DUMMY UNIT

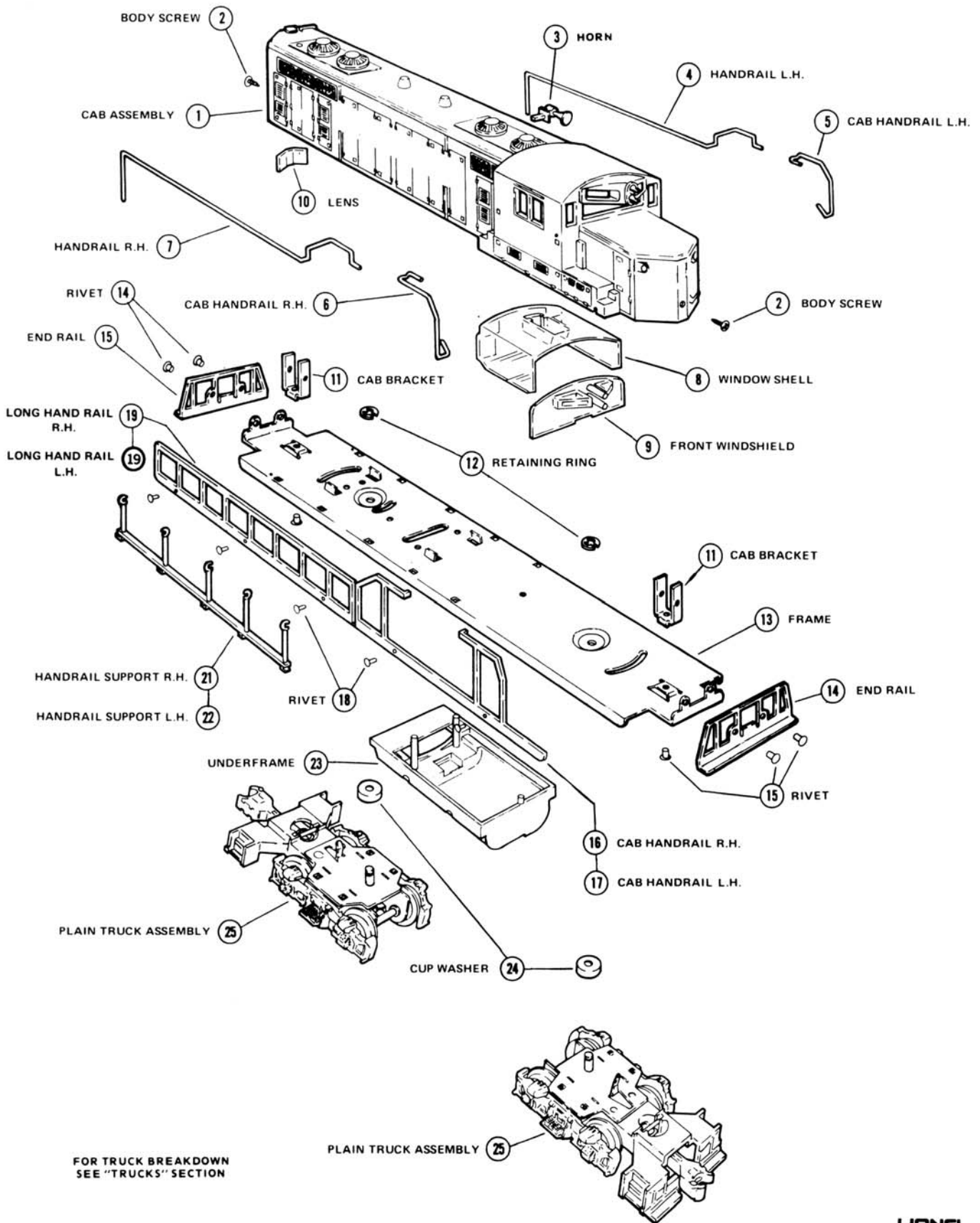
SECTION DUMMYS

DATE 2-78

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Body
2	8010-165	2	Body Screw
3	8XXX-25	1	Dynamic Brake Hatch
4	50-100	2	Ornamental Horn
5	2328-10	2	Marker Light & Lens
6	8030-56	1	Window Shell
7	8030-20	1	Handrail - R.H.- (wire)
8	8030-21	1	Handrail - L.H.- (Wire)
9	2328-178	2	Cab Bracket
10	671M-22	2	Retaining Ring
11	8130-11	1	Frame Assem. (Black)
11	8760-58	1	Frame Assem. (Yellow)
11	8655-58	1	Frame Assem. (White)
12	2328-25	2	End Rail (Black)
13	530-40	6	Rivet (End Rails & Cab Bracket)
14	8352-20	1	Cab Handrail - R.H. - (Stamped)
15	8352-21	1	Cab Handrail - L.H. - (Stamped)
16	1615-62	10	Rivet (Black Handrails)
17	8352-22	1	Long Handrail - R.H. (Black) - (Stamped)
18	8352-23	1	Long Handrail - L.H. (Black) - (Stamped)
19	8030-25	1	Plastic Handrail Support - R.H.
20	8030-30	1	Plastic Handrail Support - L.H.
21	8030-80	1	Underframe
22	601-131	2	Cup Washer
23	8030-15	2	Plain Truck (Black Sides)
23	8665-15	2	Plain Truck (Silver Sides)
*	8130-15	1	Collector Truck (Black Sides)
*	161-300	1	Lamp
*	8030-14	1	Lamp Socket W/Lead
			* Used on some early units
			NOTE: Frames will be sold with Side Rails. Black Side Rails will be available separate only.

GP-20 DIESEL DUMMY UNIT



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

SD-18 DIESEL DUMMY UNIT

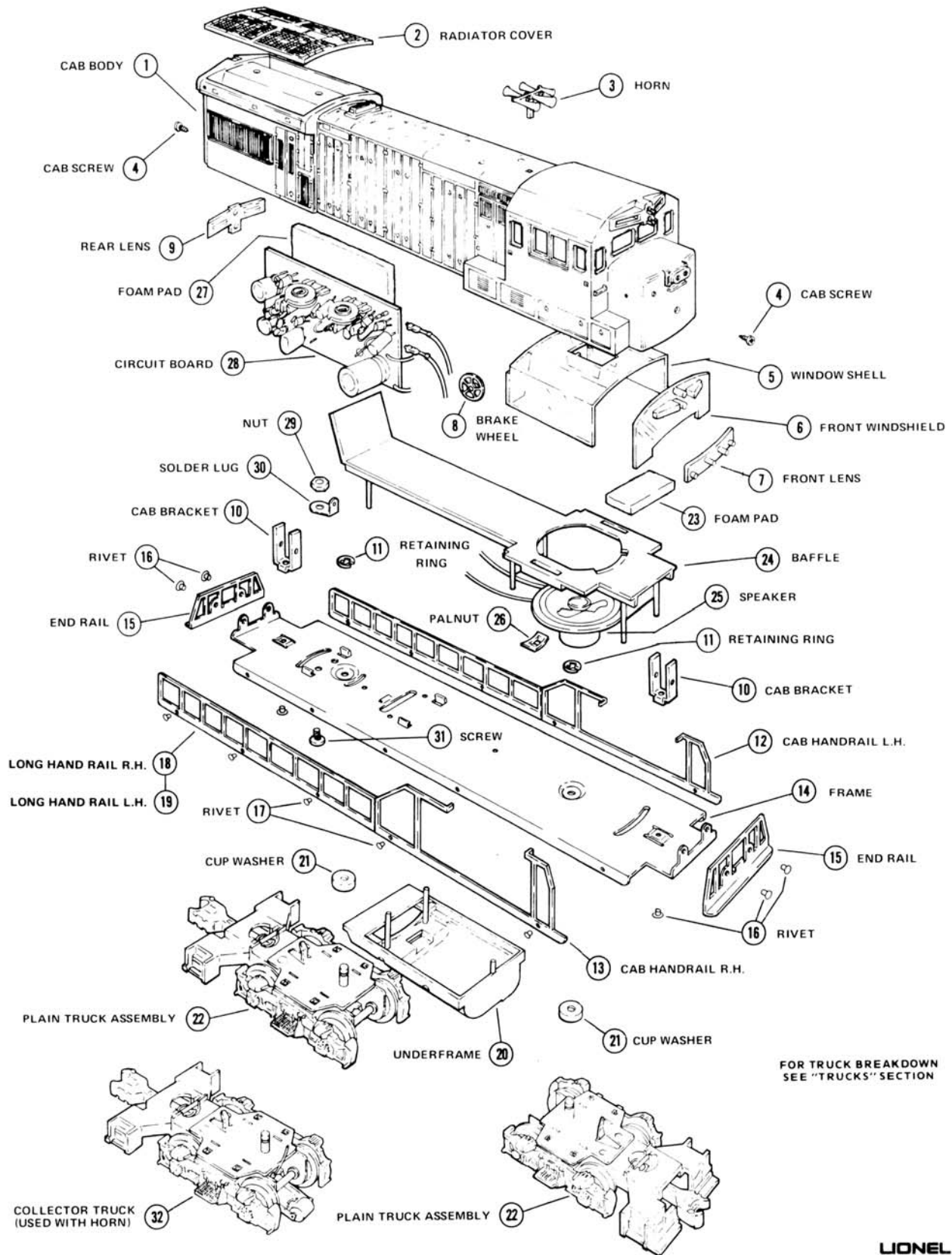
SECTION DUMMY

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Body
2	1776-13	1	Horn
3	675-31	1	Bell
4	8851-40	2	Body Screw (Cab mtg) 5-40x5/16" (also reported as 8304-155)
5	8352-55	1	Front windshield
6	8352-320	1	Lamp socket w/lead
7	8352-310	1	Lamp
8	8360-56	1	Window shell
9	2328-10	1	Lens
10	671M-22	1	Retaining ring
11	600-133	2	Speednut (motor truck)
12	601-131	2	Cup washer (motor truck)
13	8873-54	1	Frame assembly (yellow)
14	8152-80	1	Underframe (also reported as 8855-80)
15	8872-115	1	Collector truck assembly (silver sides)
16	8872-114	1	Plain truck assembly (silver sides)
17	8801-48	1	Screw 6/32x5/16" Pan Head (also reported as 4090-23)
18	WS-142	1	Solder lug
19	8355-202	1	Nut
20	8872-10	1	Nose decal - Santa Fe

U-36 "B" DIESEL DUMMY UNIT



LIONEL

U36B DIESEL DUMMY

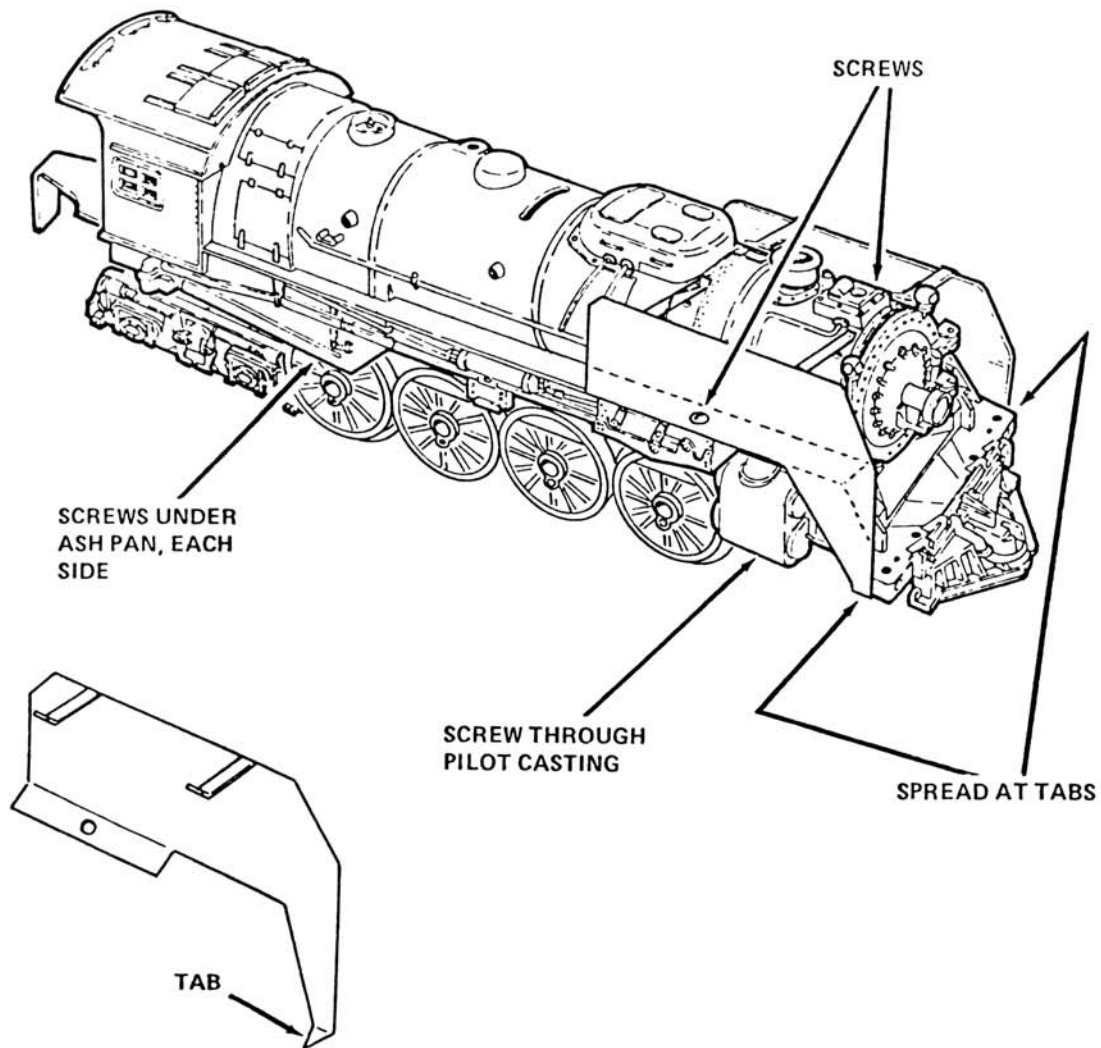
SECTION DUMMYS

DATE 2-78

REFERENCE
DRAWING

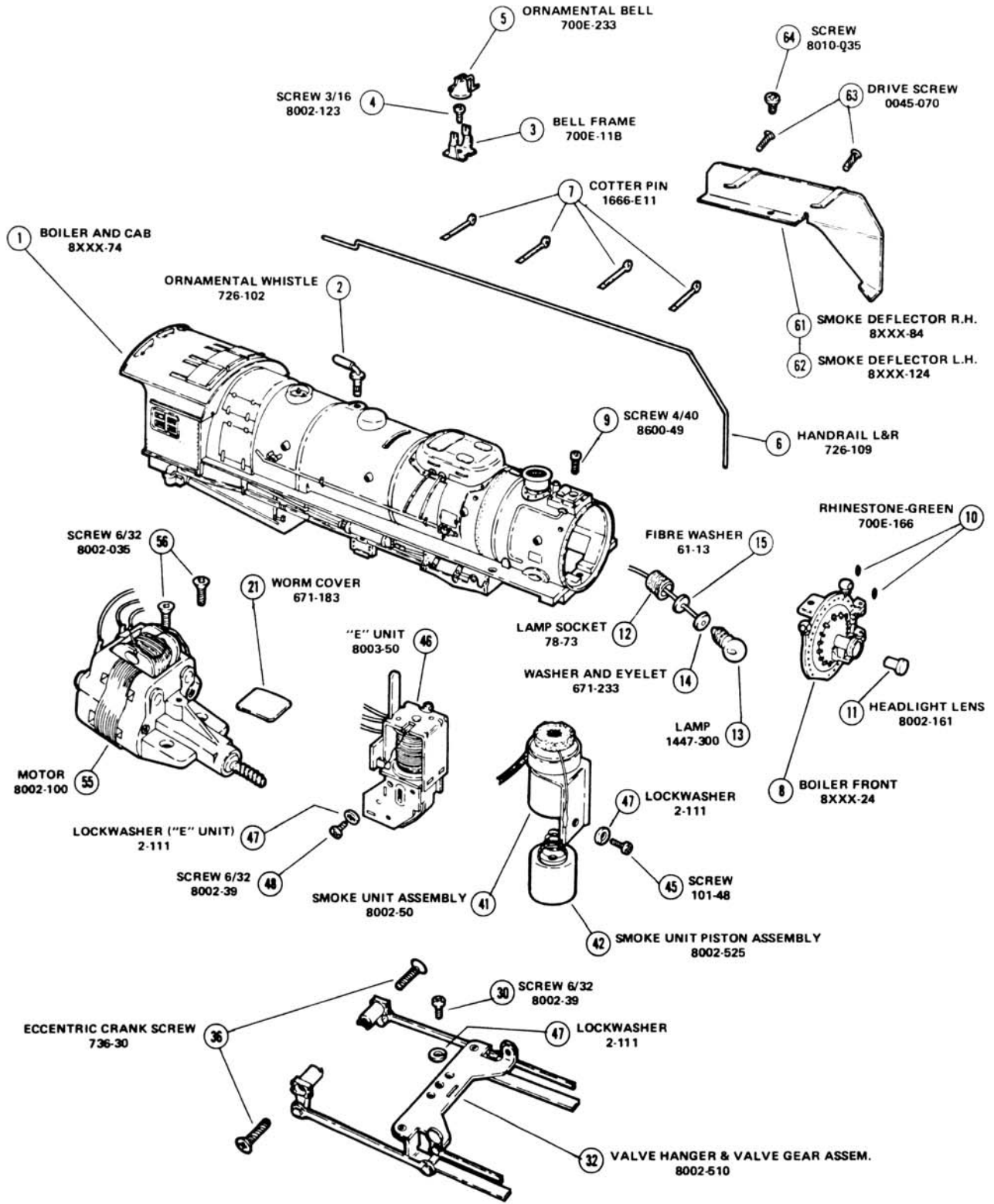
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Body (also reported as 8XXX-7 & 8961-2)
2	8XXX-25	1	Radiator Cover
3	1776-13	1	Ornamental Horn
4	8010-165	2	Screw (Body Mtg.)
5	1776-8	1	Window Shell
6	1776-16	1	Front Windshield
7	1776-18	1	Front Lens
8	1776-14	1	Brakewheel
9	1776-17	1	Rear Lens
10	2328-178	2	Cab Bracket
11	671M-22	2	Retaining Ring
12	1776-21	1	Short Side Rail - L.H. - Black
13	1776-20	1	Short Side Rail - R.H. - Black
14	8560-11	1	Frame
15	2328-25	2	End Rail - Black
16	530-40	6	Rivet (Lamp Bracket & End Rail)
17	1615-62	10	Rivet (Rail Mtg.)
18	2328-29	2	Long Hand Rail - R & L
19	8030-15	2	Plain Truck
20	8030-80	1	Underframe
21	8030-23	2	Cup Washer
22	8130-15	1	Collector Truck *
23		1	Foam Pad *
24	8573-29	1	Baffle *
25	8204-T-36	1	Speaker * 2" *
26	8204-T-38	1	Baffle Clip *
27	8251-035	1	Adhesive Pad *
28	8251-24	1	Circuit Board *
29	8355-202	1	Nut * (6-32) *
30	WS-142	1	Solder Lug *
31	8142-49	1	Screw *

CAB REMOVAL—SMOKE DEFLECTOR EQUIPPED LOCOMOTIVE



1. WITH LOCOMOTIVE UPSIDE DOWN, REMOVE 2 SCREWS FROM ASH PAN, AND 1 SCREW FROM PILOT CASTING.
2. TURN LOCOMOTIVE RIGHT SIDE UP, REMOVE 2 SCREWS BETWEEN SMOKELIFTER AND BOILER AS SHOWN.
3. GENTLY SPREAD SMOKELIFTERS AWAY FROM THE LOCOMOTIVE AT THE TAB AREA.
4. LIFT OFF CAB.

BERKSHIRE TYPE LOCOMOTIVE

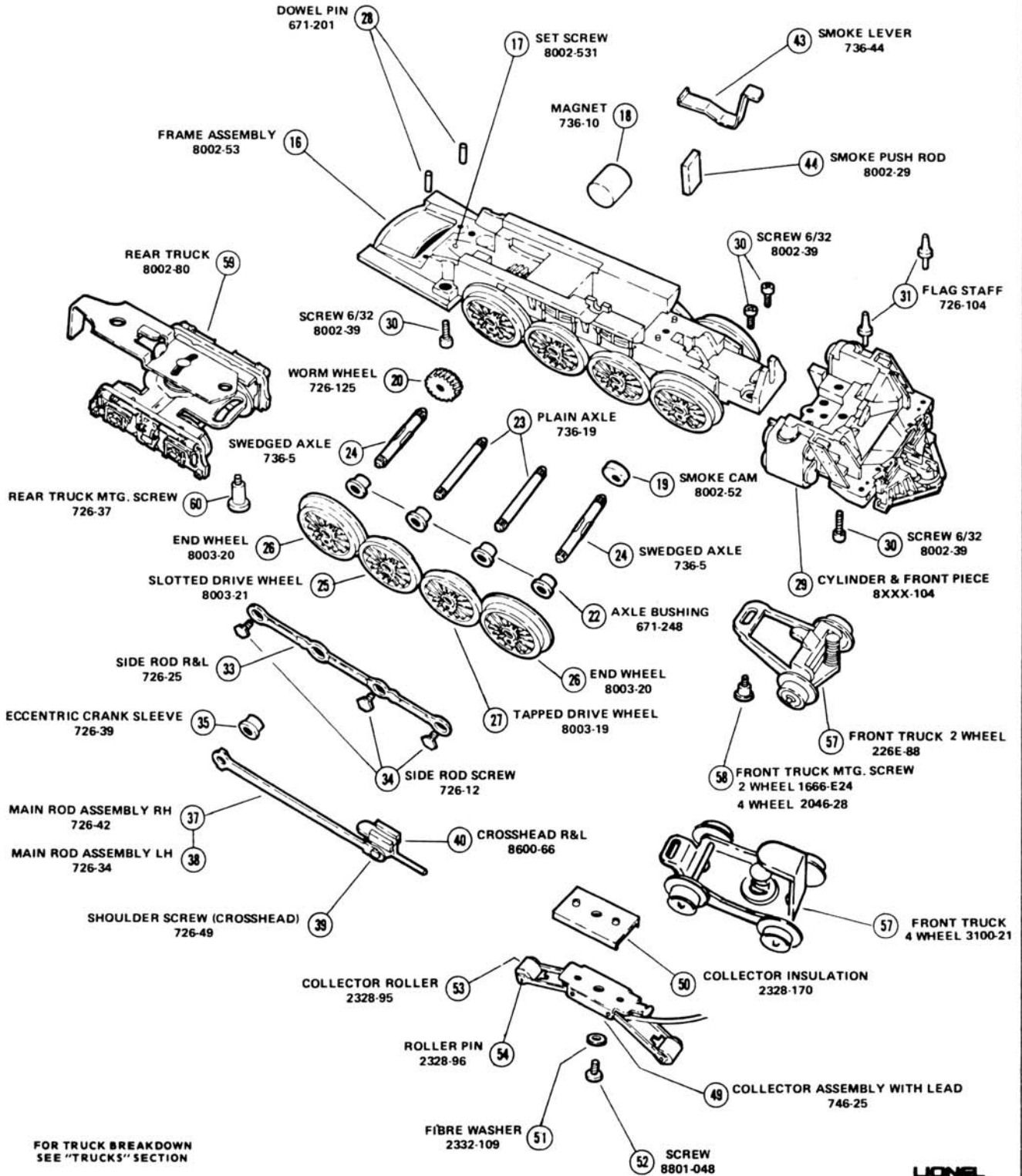


FOR MOTOR BREAKDOWN
SEE "MOTORS" SECTION

Continued on following page

LIONEL

BERKSHIRE TYPE LOCOMOTIVE (continued)



LIONEL

BERKSHIRE TYPE LOCOMOTIVE

SECTION STEAM LOCOMOTIVES

DATE 11/81

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION	REFERENCE DRAWING
1	8XXX-74	1	Boiler & Cab (8003-7 Chessie Only)	
2	726-102	1	Ornamental Whistle	
3	700E-118	1	Bell Frame	
4	8002-123	1	Screw #2x3/16 (Bell Frame)	
5	700E-233	1	Ornamental Bell	
6	726-109	2	Handrail R & L	
7	1666-E11	8	Cotter Pin	
8	8XXX-24	1	Boiler Front Assembly	
9	8600-49	1	Screw 4/40x3/8 Fillister Head (Boiler Front)	
10	700E-166	4	Rhinestone - Green	
11	8002-161	1	Headlight Lens	
12	78-73	1	Lamp Socket	
13	1447-300	1	Lamp	
14	671-233	1	Washer & Eyelet	
15	61-13	1	Fibre Washer	
16	8002-53	1	Frame Assembly (w/wheels & axles)	
17	8002-531	1	Set Screw	
18	736-10	1	Magnet	
19	8002-52	1	Smoke Cam	
20	726-125	1	Worm Wheel	
21	671-183	1	Worm Cover	
22	671-248	8	Axle Bushing	
23	736-19	2	Plain Axle	
24	736-5	2	Swedged Axle	
25	8003-21	2	Slotted Drive Wheel	
26	8003-20	4	End Wheel	
27	8003-19	2	Tapped Drive Wheel	
28	671-201	2	Dowel Pin	
29	8XXX-104	1	Cylinder & Front Piece (8003-111 Chessie Only)	
30	8002-39	6	Screw 6/32x7/16 Fillister Head	
31	726-104	2	Flag Staff	
32	8002-510	1	Valve Hanger & Valve Gear Assembly	
33	726-25	2	Side Rod R & L	
34	726-12	6	Side Rod Screw	
35	726-39	2	Eccentric Crank Sleeve	
36	726-30	2	Eccentric Crank Screw	
37	726-42	1	Main Rod Assembly RH	
38	726-34	1	Main Rod Assembly LH	
39	726-49	2	Shoulder Screw (Crosshead)	
40	8600-66	2	Crosshead R & L	
41	8002-50	1	Smoke Unit Assembly	
42	8002-525	1	Smoke Unit Piston Assembly (8002-41 Chessie Only)	
43	736-44	1	Smoke Lever	
44	8002-29	1	Smoke Push Rod	
45	101-48	1	Screw 4/40x3/16 Pan Head	
46	8003-50	1	E-Unit	
47	2-111	1	Lockwasher (E-Unit - Smoke Unit - Hanger Assembly)	
48	8304-165	1	Screw 4/40x1/4RH (E-Unit mtg.)	
49	746-25	1	Collector Assembly w/Lead	
50	2328-170	1	Collector Insulation	

BERKSHIRE TYPE LOCOMOTIVE CONT'D

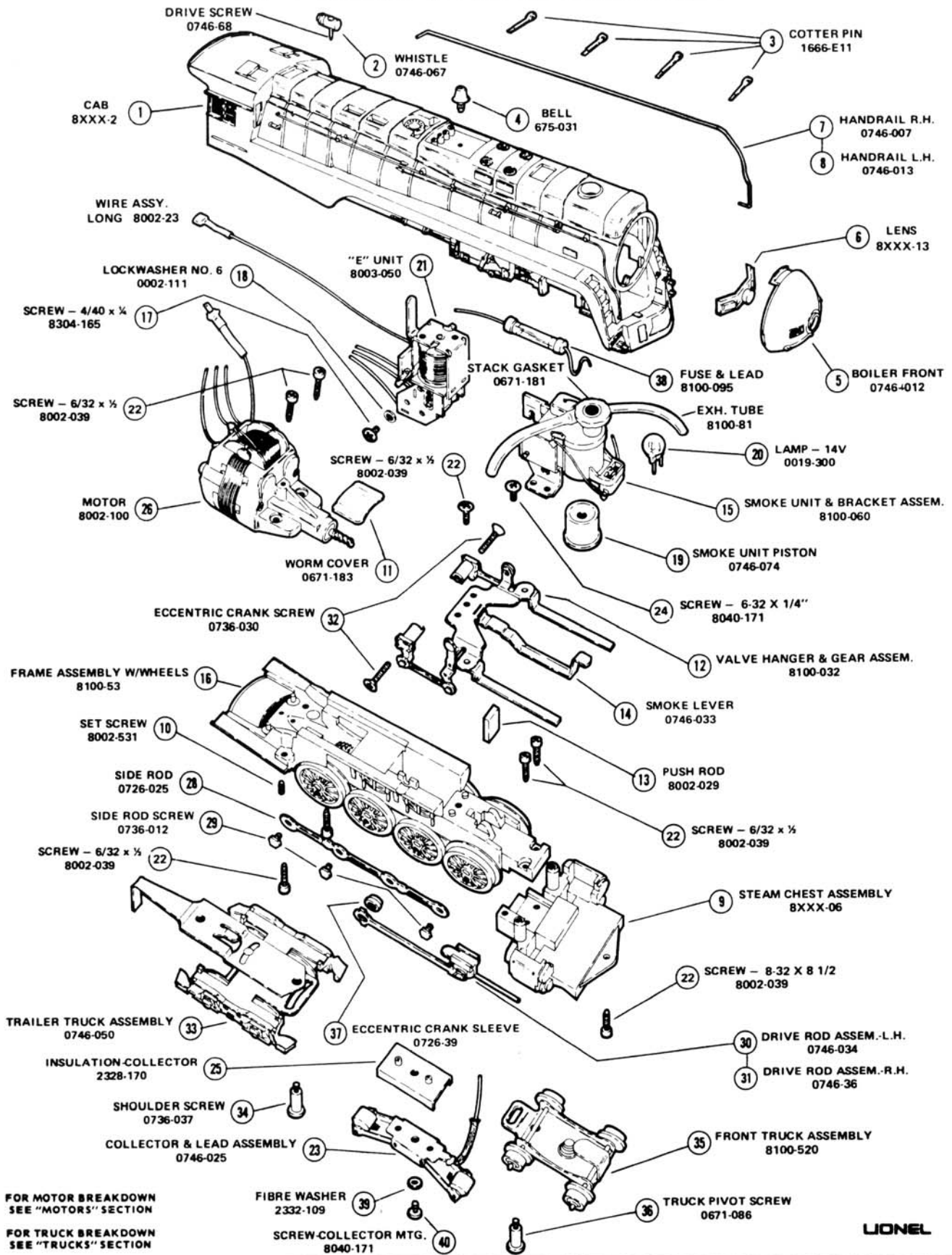
SECTION STEAM LOCOMOTIVES

DATE 11/81

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
51	2332-109	1	Fibre Washer
52	8801-048	1	Screw 6/32x1/4 RH (Collector mtg.)
53	2328-95	2	Collector Roller
54	2328-96	2	Roller Pin
55	8002-100	1	Motor
56	8002-035	2	Screw 6/32x7/16 Fillister Head
57	226E-88	1	Front Truck - 2 Wheel
57	3100-21	1	Front Truck - 4 Wheel
58	1668-E24	1	Front Truck mtg. screw - 2 Wheel
58	2046-28	1	Front Truck mtg. screw - 4 Wheel
59	8002-80	1	Rear Truck
60	736-37	1	Rear Truck mtg. screw
61	8XXX-84	1	Smoke Deflector RH (Top Coat)
62	8XXX-124	1	Smoke Deflector LH (Top Coat)
63	0045-070	4	Drive Screw
64	8010-035	2	Screw
	8003-26	1	Plaque, Chessie Only

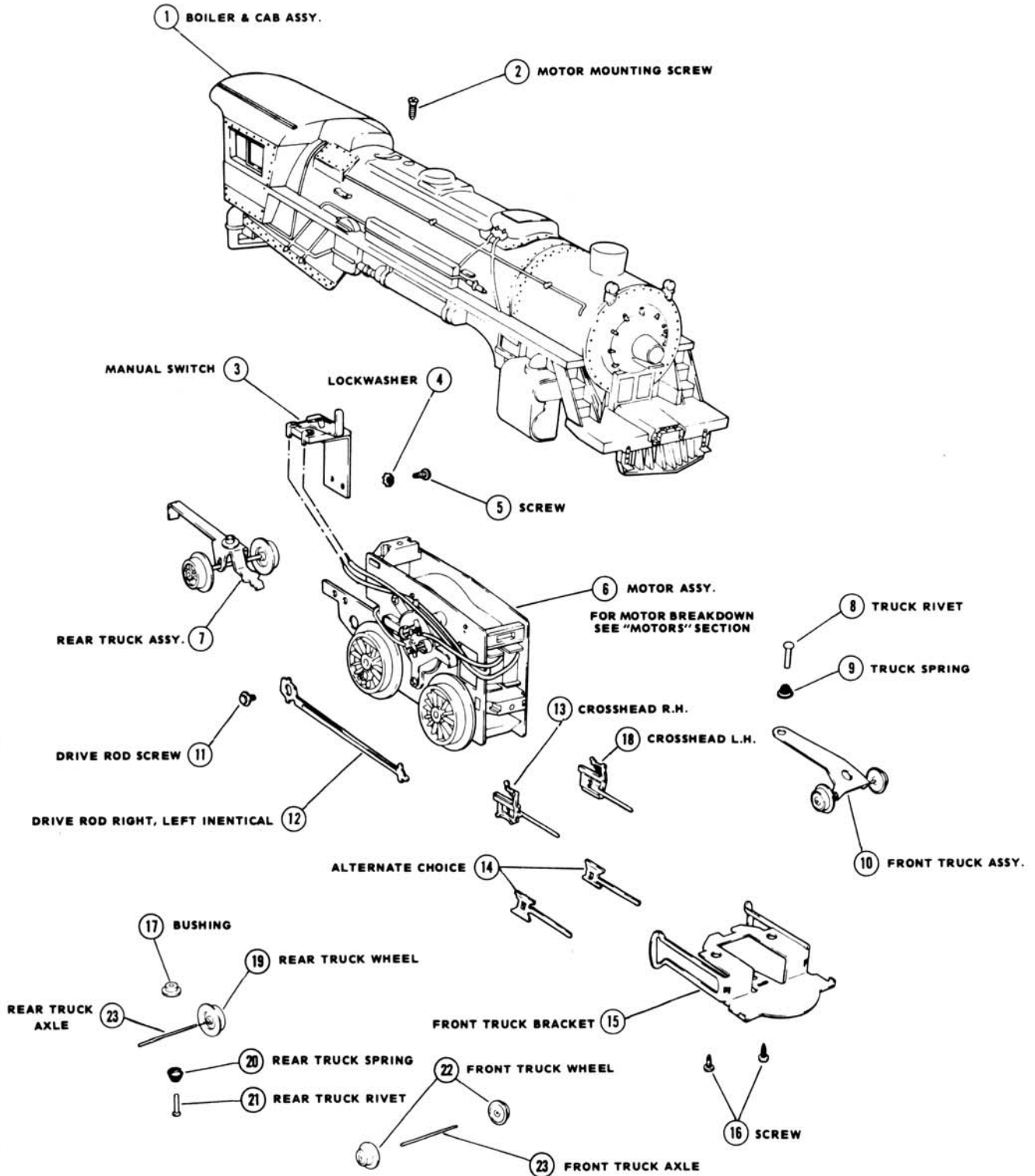
4-8-4 BULLET NOSE LOCOMOTIVE



FOR MOTOR BREAKDOWN
 SEE "MOTORS" SECTION
 FOR TRUCK BREAKDOWN
 SEE "TRUCKS" SECTION

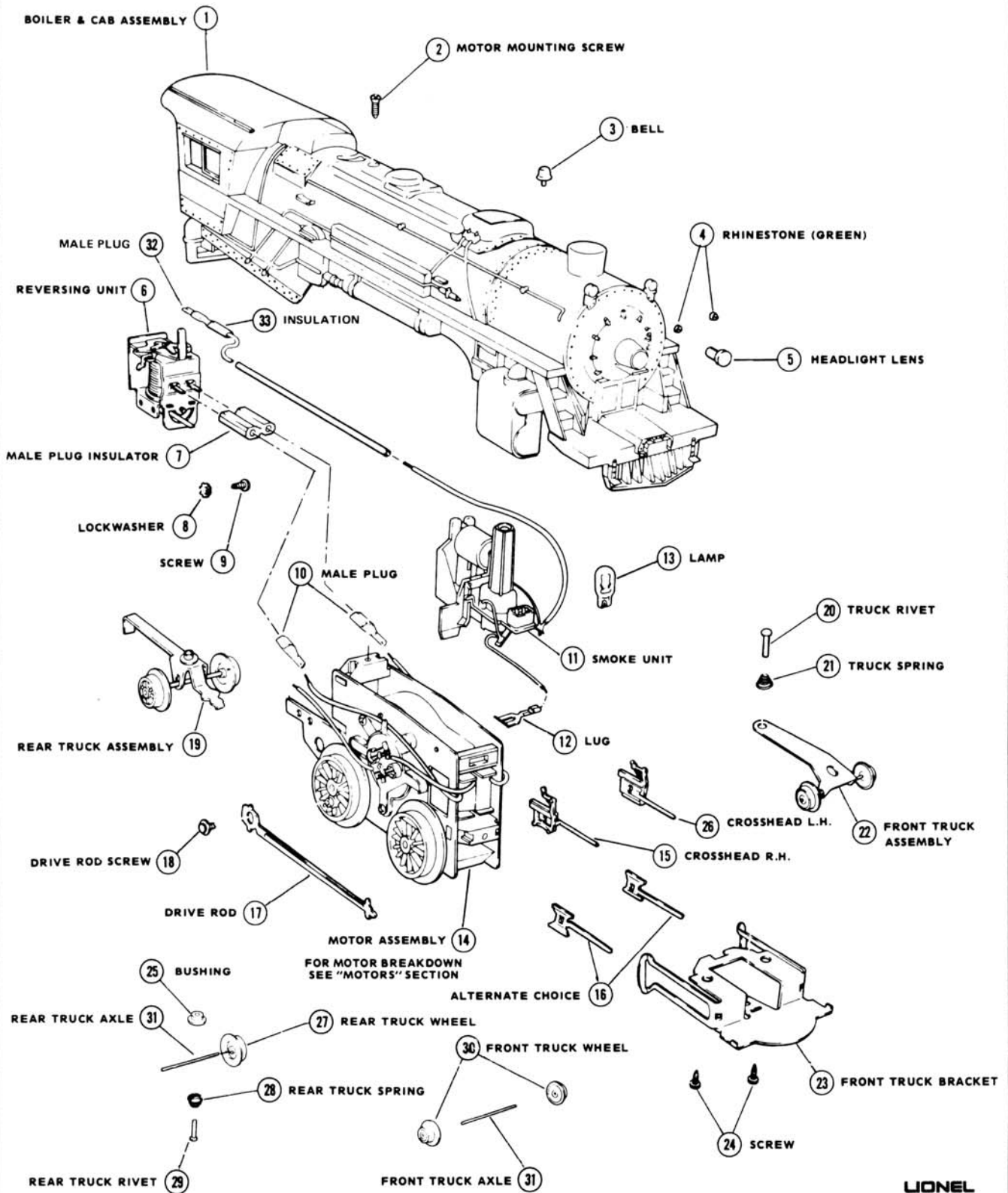
LIONEL

8040-8043 STEAM LOCOMOTIVE WITH MANUAL REVERSE



LIONEL

8042, 8141, 8203, 8303, STEAM LOCOMOTIVE WITH 2-POSITION REVERSING AND SMOKE



LIONEL

8042 8141

8203 8303

SECTION

Loco, Steam

DATE

2-78

Drawing

Reference

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8042-3	1	Boiler & Cab - Die Cast
1	8141-3	1	Boiler & Cab - Plastic
1	8203-3	1	Boiler & Cab - Plastic
1	8303-3	1	Boiler & Cab
2	8142-65	1	Screw (Motor Mtg.)
3	8142-16	1	Ornamental Bell (8042 only)
4	700E-166	2	Rhinestone (Green - 8042 only)
5	8040-151	1	Headlight Lens
6	101-1	1	2 Position Reverse Unit
7	8040-162	1	Male Plug Insulator
8	8142-63	1	Lockwasher (Rev. Unit Mtg.)
9	8142-62	1	Screw (Rev. Unit Mtg.)
10	8040-161	2	Male Plug
11	8141-50	1	Smoke Unit
12	8141-58	1	Lug (Smoke Unit)
13	161-300	1	Lamp
14	8240-100	1	Motor - Less Rev. Unit
15	8040-12	1	Crosshead R.H.
16	1001-21	2	Crosshead R & L - (Alternate)
17	1110-8	2	Drive Rod R & L
18	8141-20	2	Drive Rod Screw
19	8040-15	1	Rear Truck (8042 & 8141)
20	1120-10	1	Front Truck Rivet
21	1120-11	1	Front Truck Spring
22	8040-20	1	Front Truck
23	1120-9	1	Front Truck Bracket
24	8141-22	2	Screw (Front Trk. Brkt.)
25	221-22	1	Bushing (Rear Trk. Rivet)
26	8040-13	1	Crosshead LH
27	8040-11	2	Rear Truck Wheel (8042 & 8141)
28	2046-27	1	Rear Truck Spring (8042 & 8141)
29	2660-25	1	Rear Truck Rivet (8042 & 8141)
30	8040-10	2	Front Truck Wheel
31	1661-8	2	Front & Rear Truck Axle
32	8141-59	2	Plug (Sound Of Steam)
33	8141-61	2	Plug Insulation

SECTION LOCO, STEAM
DATE 3/79

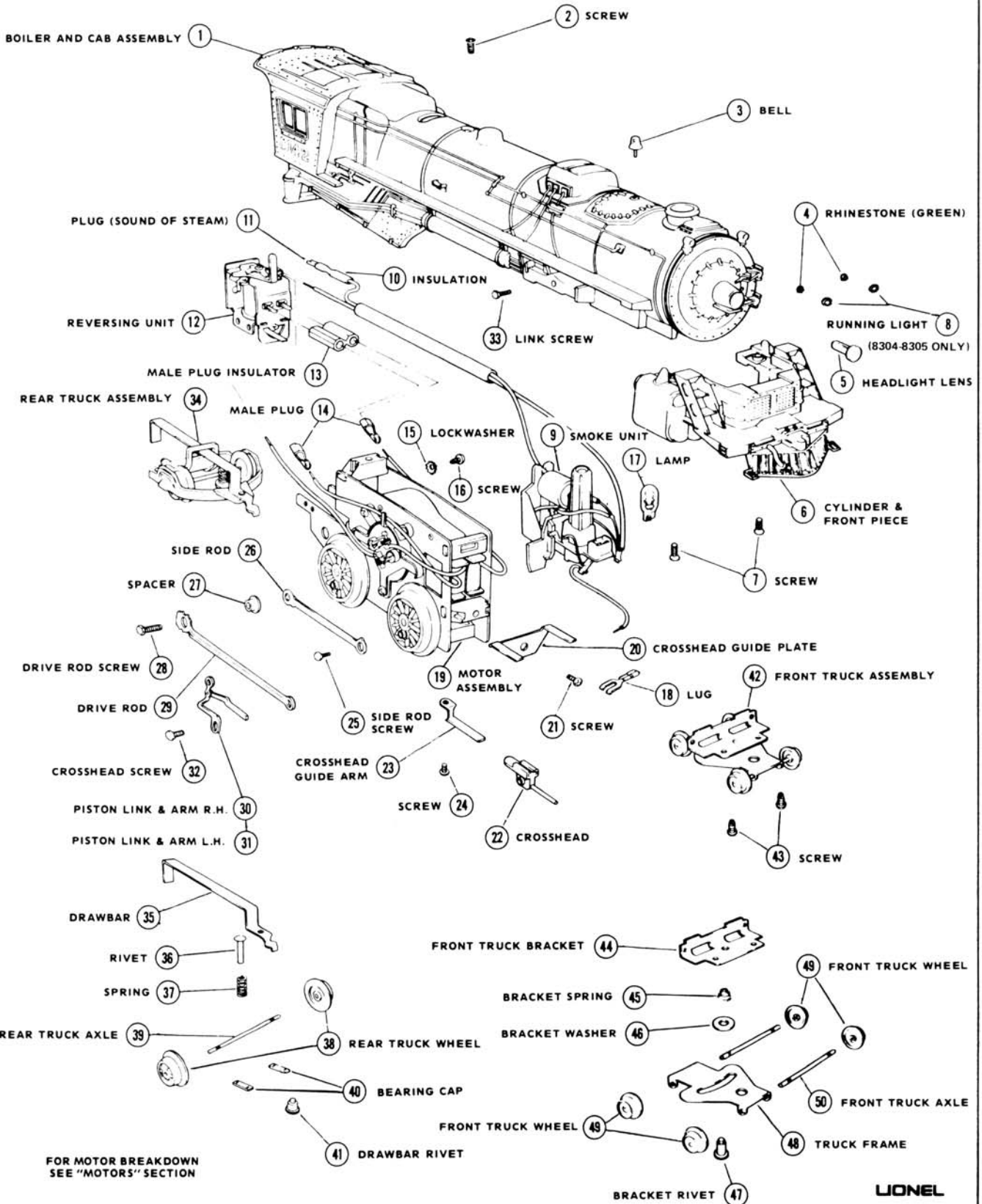
8094

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QTY. PER UNIT	DESCRIPTION
1	8XXX-3	1	Boiler & Cab
2	8142-65	1	Screw 6/32 x 7/16 Oval Head
3	101-1	1	2 Position Reverse Switch
4	8142-63	1	Lockwasher
5	8142-62	1	Screw
6	8240-100	1	Motor Less Reverse Switch
7	8040-15	1	Rear Truck Assembly
8	1120-10	1	Rivet
9	1120-11	1	Spring
10	8040-20	1	Front Truck
11	8141-20	2	Screw - Side Rod
12	1110-8	2	Side Rod
13	NONE		
14	1001-21	2	Crosshead
15	1120-9	1	Front Truck Bracket
16	8141-22	2	Screw Pan Head
17	221-22	1	Bushing
18	NONE		
			NOTE:
			FOR TRUCK BREAKDOWN
			SEE TRUCKS SECTION
*20	8030-13	1	Lamp Socket
*21	161-300	1	Lamp
*22	8600-52	1	Screw 4/40 x 3/16 Pan Head
			* No drawing available.

Rev. 6/92

8142-8204-8304-8305 STEAM LOCOMOTIVE WITH 2-POSITION REVERSING UNIT AND SMOKE



LIONEL

8142 8204
8304 8305

SECTION Loco, Steam
DATE 2-78

Drawing
Reference

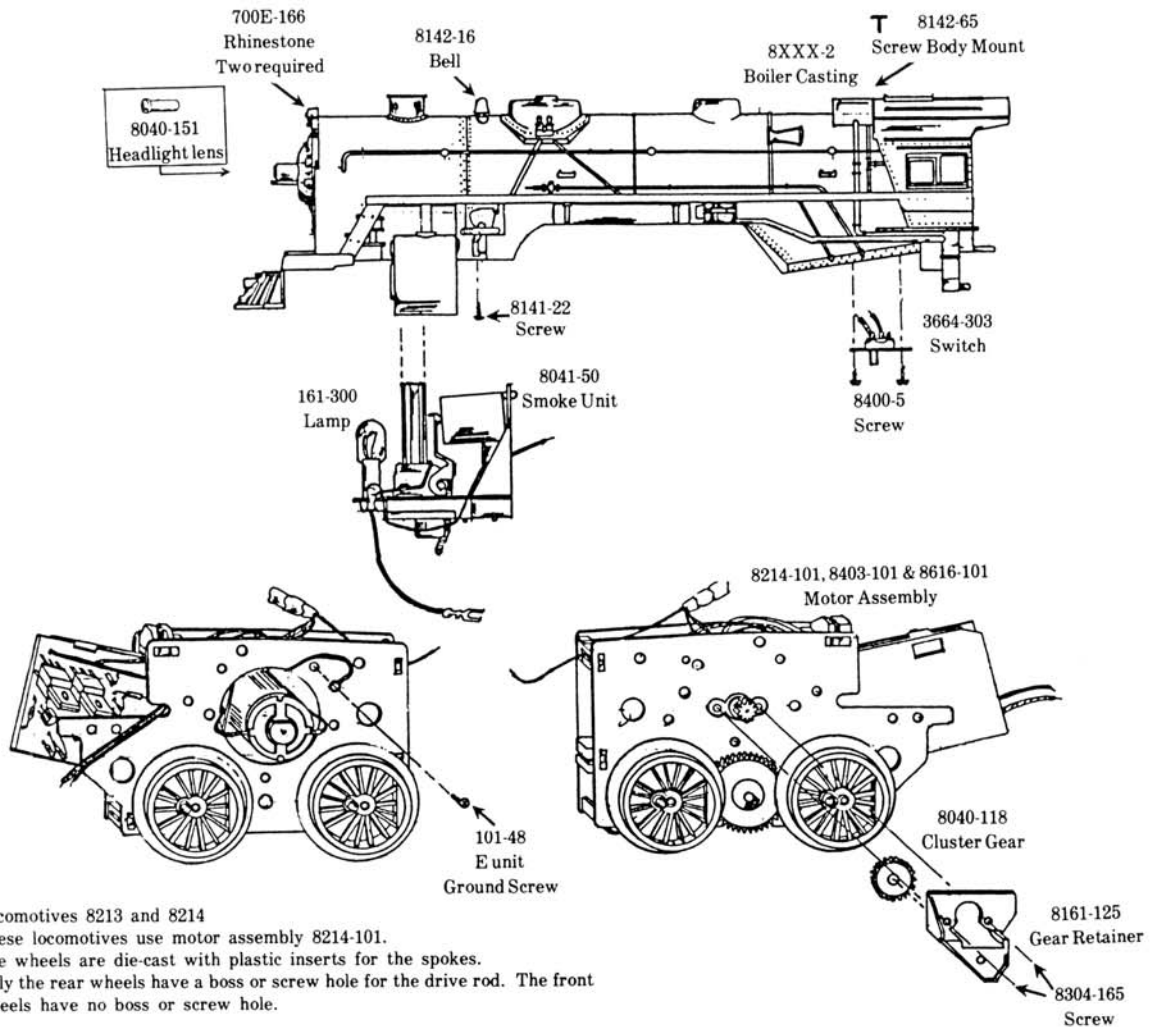
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8142-13	1	Boiler & Cab - Die Cast
1	8204-3	1	Boiler & Cab - Die Cast
1	8304-3	1	Boiler & Cab - Die Cast
1	8305-3	1	Boiler & Cab - Die Cast
2	8142-65	1	Motor Mounting Screw
3	8142-16	1	Ornamental Bell
4	700F-166	2	Rhinestone (Green)
5	8040-151	1	Headlight Lens
6	8142-15	1	Cylinder & Front Pc.
7	8142-49	2	Screw (Cylinder & Frt. Pc.)
8	8304-18	2	Running Light (8304 & 8305)
9	8141-50	1	Smoke Unit (8142 & 8304)
9	8204-50	1	Smoke Unit (8204 & 8305)
10	8141-61	2	Plug Insulation
11	8141-59	2	Plug (Sound Of Steam)
12	101-1	1	2 Position Reverse Unit
13	8040-162	1	Male Plug Insulator
14	8040-161	2	Male Plug
15	8142-63	1	Lockwasher (Rev. Unit Mtg.)
16	8142-62	1	Screw (Rev. Unit Mtg.)
17	161-300	1	Lamp
18	8141-58	1	Lug (Smoke Unit)
19	8040-100	1	Motor (Less Rev. Unit)
20	8142-40	1	Crosshead Guide Plate
21	8142-52	1	Screw (Crosshead Guide Plate)
22	726-66	2	Crosshead
23	8142-95	2	Crosshead Guide
24	8142-51	2	Screw (Crosshead Guide)
25	8142-44	2	Side Rod Screw
26	1666E-16	2	Side Rod
27	8142-41	2	Rod Spacer
28	8142-45	2	Screw (Drive Rod)
29	8142-38	2	Drive Rod
30	8142-85	1	Piston Link & Arm RH
31	8142-86	1	Piston Link & Arm LH
32	8142-48	2	Crosshead Screw

8800
8805

SECTION LOCO, STEAM
DATE 3/79
REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Boiler & Cab
2	8142-65	1	Motor Mounting Screw
3	8142-16	1	Ornamental Bell
4	700E-166	2	Rhinestone (Green)
5	8040-151	1	Headlight Lens
6	8142-15	1	Cylinder & Front Pc.
7	8142-49	2	Screw (Cylinder & Frt. Pc.)
8	8304-18	2	Running Light
9	8141-50	1	Smoke Unit
10	8141-61	2	Plug Insulation
11	8141-59	2	Plug (Sound of Steam)
12	101-1	1	2 Position Reverse Unit
13	8040-162	1	Male Plug Insulator
14	8040-161	2	Male Plug
15	8142-63	1	Lockwasher (Rev. Unit Mtg.)
16	8142-62	1	Screw (Rev. Unit Mtg.)
17	161-300	1	Lamp
18	8141-58	1	Lug (Smoke Unit)
19	8040-100	1	Motor (Less Rev. Unit)
20	8142-40	1	Crosshead Guide Plate
21	8142-52	1	Screw (Crosshead Guide Plate)
22	726-66	2	Crosshead
23	8142-95	2	Crosshead Guide
24	8142-51	2	Screw (Crosshead Guide)
25	8142-44	2	Side Rod Screw
26	1666E-16	2	Side Rod
27	8142-41	2	Rod Spacer
28	8142-45	2	Screw (Drive Rod)
29	8142-38	2	Drive Rod
30	8142-85	1	Piston Link & Arm RH
31	8142-86	1	Piston Link & Arm LH
32	8142-48	2	Crosshead Screw

**8213, 8214, 8402, 8403, 8616, 8617:
Lionel Steam Locomotives With DC Motor And Electronic E-Unit**

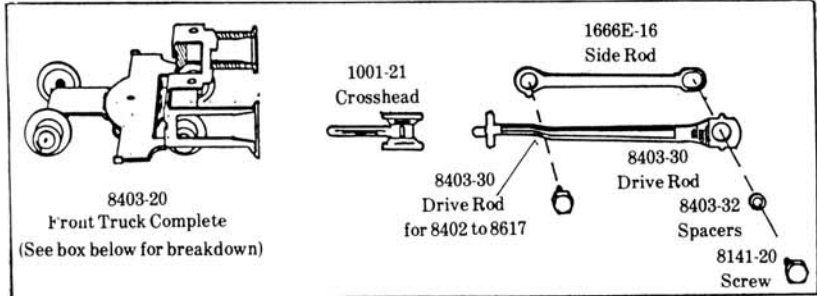


Locomotives 8213 and 8214
These locomotives use motor assembly 8214-101.
The wheels are die-cast with plastic inserts for the spokes.
Only the rear wheels have a boss or screw hole for the drive rod. The front wheels have no boss or screw hole.

Locomotives 8402 and 8403
These locomotives use motor assembly 8403-101.
These locomotives have die-cast wheels without plastic inserts and all four wheels have the boss.

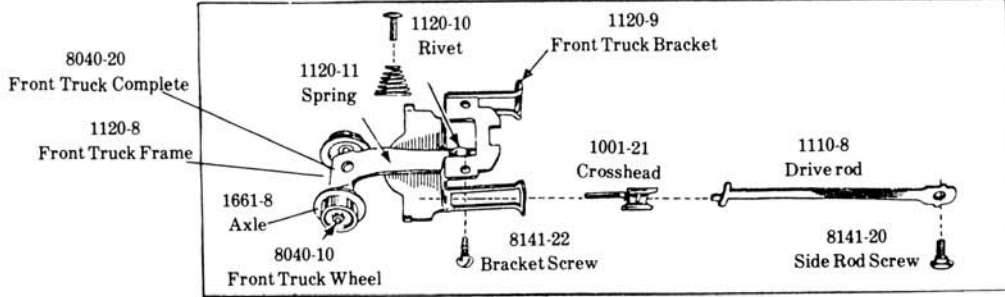
Locomotives 8616 and 8617
The locomotives are similar to the 8403 except that the die-cast wheels have plastic spoke inserts and all four wheels have bosses for screws. Consequently the motor for the 8616 and 8617 is numbered 8616-101.

**8213, 8214, 8402, 8403, 8616, 8617:
Lionel Steam Locomotives With DC Motor And Electronic E-Unit**

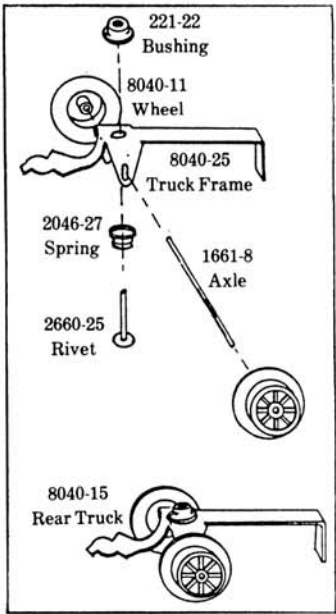
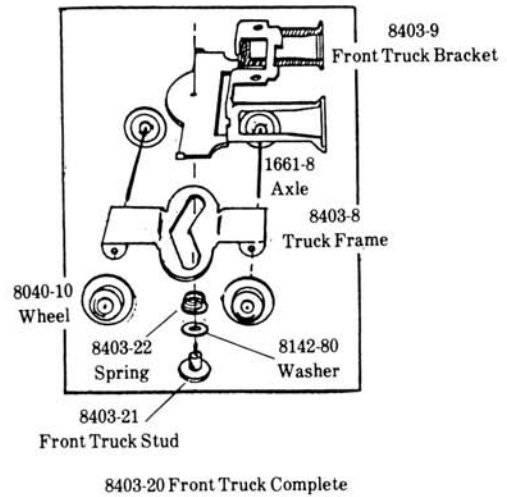


Side and drive rods for 8402, 8403, 8616, 8617.

8403-20 Four-wheel Front Truck For 8402, 8403, 8616, 8617.



Front truck and drive rods shown above for 8213 and 8214 type locos

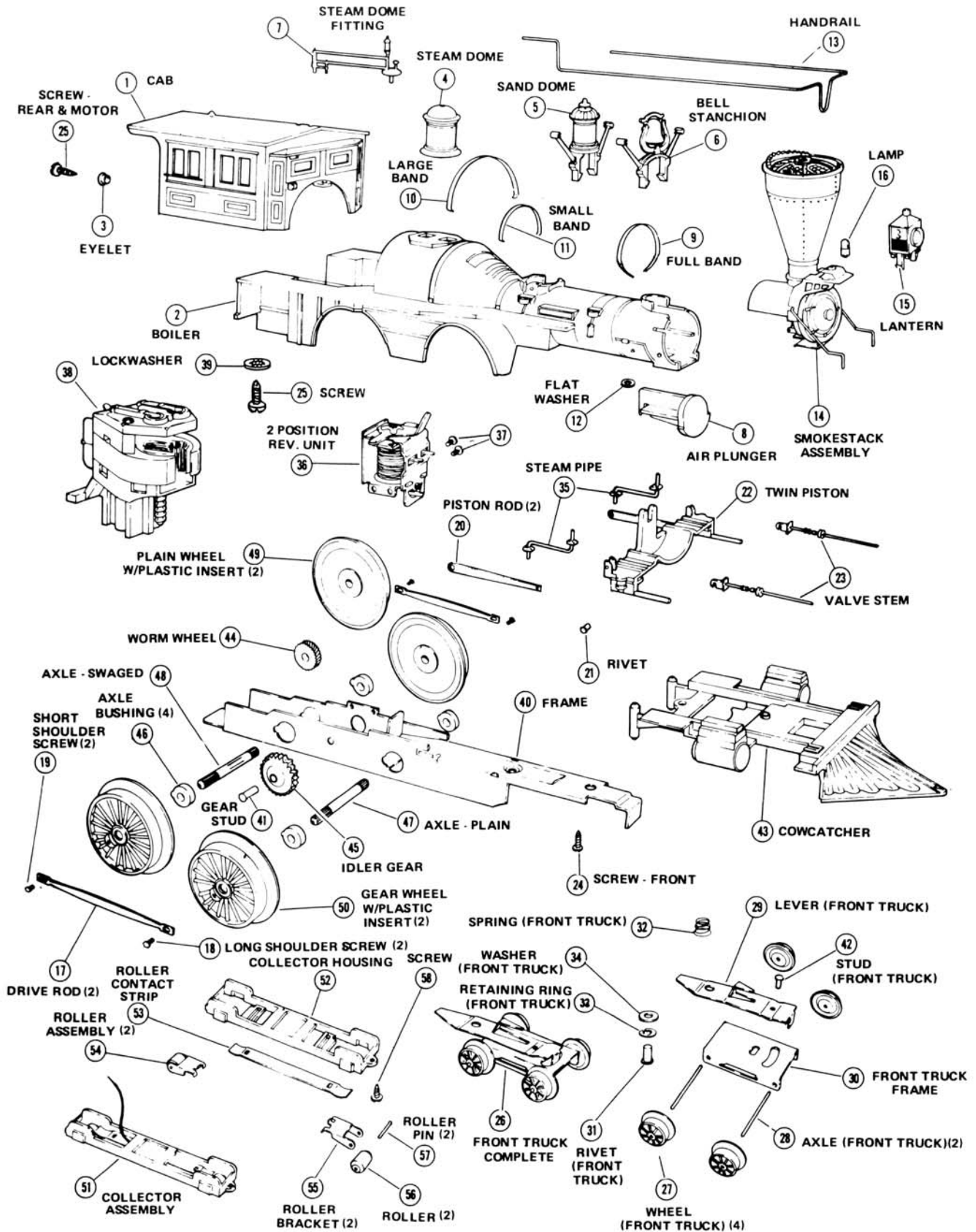


LIONEL STEAM LOCOMOTIVES WITH
DC MOTOR & ELECTRONIC E-UNIT
8213, 8214, 8402, 8403, 8616, 8617

SECTION STEAM LOCOMOTIVES
DATE 4/86
Reference Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-2	1	Boiler & Cab
2	8040-151	1	Lens
3	8142-16	1	Bell
4	700E-166	2	Rhinestone
5	8403-101	1	Motor assembly 8402, 8403
6	8214-101	1	Motor assembly 8213, 8214
7	8616-101	1	Motor assembly 8616, 8617
8	8403-20	1	Front truck assembly 8402, 8403, 8616, 8617
9	8040-20	1	Front truck assembly 8213, 8214
10	8040-15	1	Rear truck
11	1001-21	2	Crosshead
12	1666-E16	2	Side rod 8402, 8403, 8616, 8617
13	8403-30	2	Drive rod 8402, 8403, 8616, 8617
14	8403-32	2	Drive rod (spacers) 8402, 8403, 8616, 8617
15	1110-8	2	Drive rod 8213, 8214
16	8141-20	4	Screw (hex head side rod)
17	8141-22	2	Screw (front truck bracket)
18	8142-65	1	Screw (body mounting)
19	8400-5	2	Screw (E-Unit switch)
20	3664-303	1	Miniature switch
21	8041-50	1	Smoke unit
22	161-300	1	Lamp

8701 GENERAL LOCOMOTIVE



8004 GENERAL

SECTION LOCO, STEAM

DATE 11/80

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION	REFERENCE DRAWING
1	8004-3	1	Cab	
2	8004-24	1	Boiler	
3	SE-69	1	Eyelet	
4	8004-64	1	Steam Dome	
5	8004-54	1	Sand Dome	
6	8004-47	1	Bell Stanchion	
7	1862-42	1	Steam Dome Fitting	
8	1872-66	1	Air Plunger	
9	8004-28	1	Full Band	
10	8004-30	1	Large Band	
11	8004-29	1	Small Band	
12	2333-42	1	Flat Washer	
13	8701-267	1	Handrail	
14	8701-30	1	Smokestack Assembly	
15	8004-150	1	Lantern	
16	191-300	1	Lamp	
17	1862-17	2	Drive Rod	
18	1862-113	2	Long Shoulder Screw	
19	1862-114	2	Short Shoulder Screw	
20	1862-18	2	Piston Rod	
21	2343-66	2	Rivet (Piston Rod)	
22	8004-48	1	Twin Piston	
23	1872-49	2	Valve Stem	
24	8701-104	1	Screw - Front	
25	4090-23	2	Screw - Rear & Motor	
26	8701-23	1	Front Truck	
27	1862-8	4	Wheel (Front Truck)	
28	1661-8	2	Axle (Front Truck)	
29	1862-7	1	Lever (Front Truck)	
30	1862-6	1	Front Truck Frame	
31	530-44	1	Rivet (Front Truck)	
32	1862-9	1	Spring (Front Truck)	
33	671M-22	1	Retaining Ring (Front Truck)	
34	9160-500	1	Washer (Front Truck)	
35	1872-42	2	Steam Pipe	
36	8701-55	1	2 Position Rev Unit	
37	101-48	2	Screw - Rev Unit Mtg	
38	8701-100	1	Motor - See Motor Section for breakdown	
39	2-111	1	Lockwasher	
40	8701-12	1	Frame	
41	2035-135	1	Gear Stud	
42	1862-4	1	Stud (Front Truck)	
43	8004-34	1	Cowcatcher	
44	1862-19	1	Worm Wheel	
45	8701-i17	1	Idler Gear	
46	1862-37	4	Axle Bushing	
47	8701-8	1	Axle - Plain	
48	8701-29	1	Axle - Swedged	
49	8004-65	2	Plain w/Insert	
50	8004-66	2	Gear Wheel w/Insert	

8004 GENERAL

CONTINUED

SECTION LOCO, STEAM

DATE 11/80

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
51	8701-32	1	Collector Assembly
52	8701-31	1	Collector Housing
53	8209-120	1	Roller Contact Strip
54	8209-165	2	Contact Roller Assembly
55	8209-130	2	Roller Bracket
56	2328-95	2	Roller
57	2328-96	2	Roller Pin
58	8010-165	1	Screw - Collector Mtg

8701 GENERAL

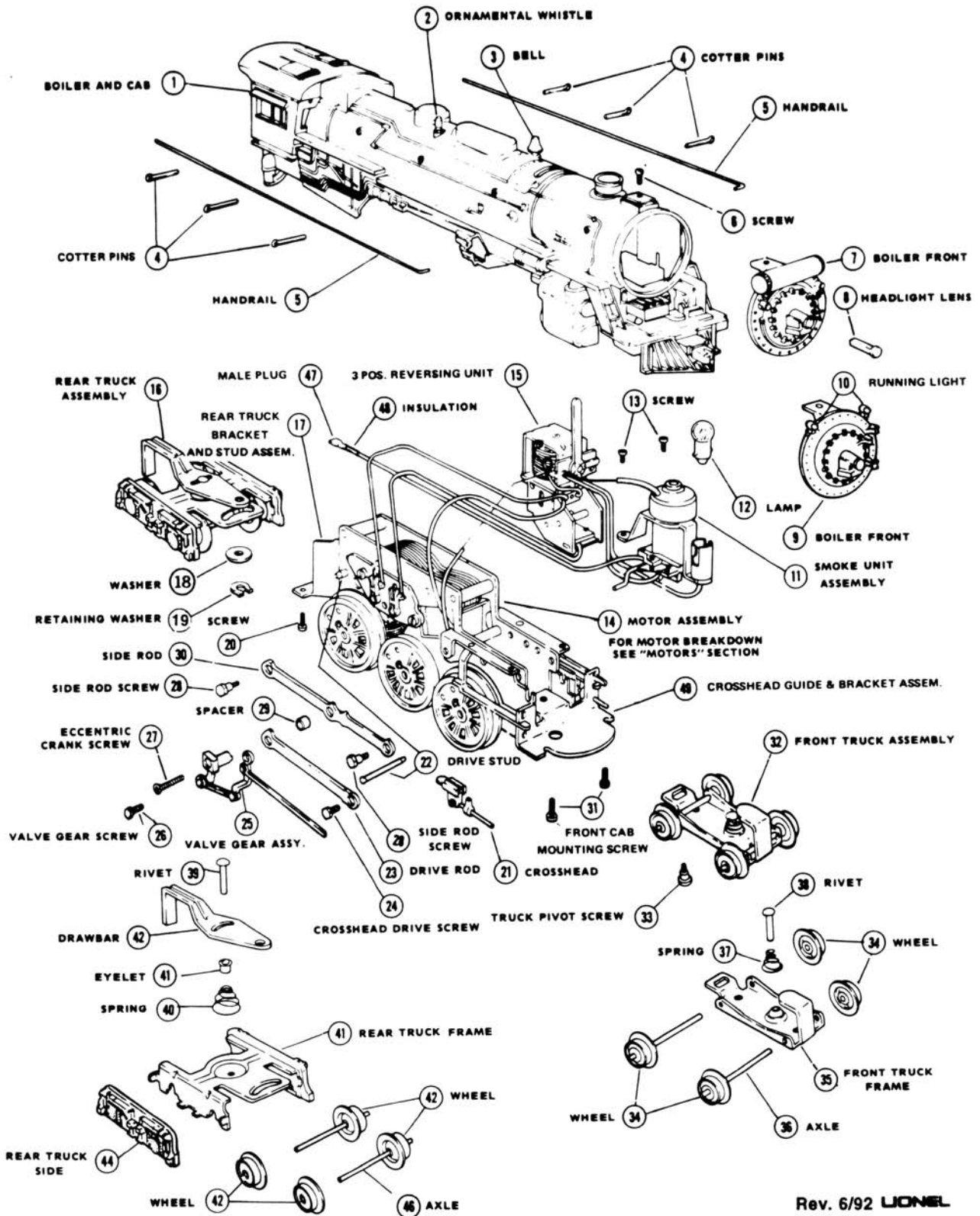
SECTION LOCO, STEAM

DATE 2-78

DRAWING
REFERENCE -

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8701-3	1	Cab
2	8701-20	1	Boiler
3	SE-69	1	Eyelet
4	8701-64	1	Steam Dome
5	8701-54	1	Sand Dome
6	8701-44	1	Bell Stanchion
7	1862-42	1	Steam Dome Fitting
8	1872-66	1	Air Plunger
9	1872-28	1	Full Band
10	1872-30	1	Large Band
11	1872-29	1	Small Band
12	350-122	1	Flat Washer
13	1862-67	1	Handrail
14	8701-30	1	Smokestack Assembly
15	8701-150	1	Lantern
16	191-300	1	Lamp
17	1862-17	2	Drive Rod
18	1862-113	2	Long Shoulder Screw
19	1862-114	2	Short Shoulder Screw
20	1862-18	2	Piston Rod
21	2343-66	2	Rivet
22	8701-74	1	Twin Piston
23	1872-49	2	Valve Stem
24	8701-104	1	Screw - Front
25	4090-23	2	Screw - Rear & Motor
26	8701-23	1	Front Truck Complete
27	1862-8	4	Wheel (Front Truck)
28	1661-8	2	Axle (Front Truck)
29	1862-7	1	Lever (Front Truck)
30	1862-6	1	Front Truck Frame
31	530-44	1	Rivet (Front Truck)
32	1862-9	1	Spring (Front Truck)
33	671M-22	1	Retaining Ring (Front Truck)
34	9160-500	1	Washer (Front Truck)
35	1872-42	2	Steam Pipe
36	8701-55	1	2 Position Rev. Unit

8206 8603 HUDSON STEAM LOCOMOTIVE



Rev. 6/92 LIONEL

8206 HUDSON

8603

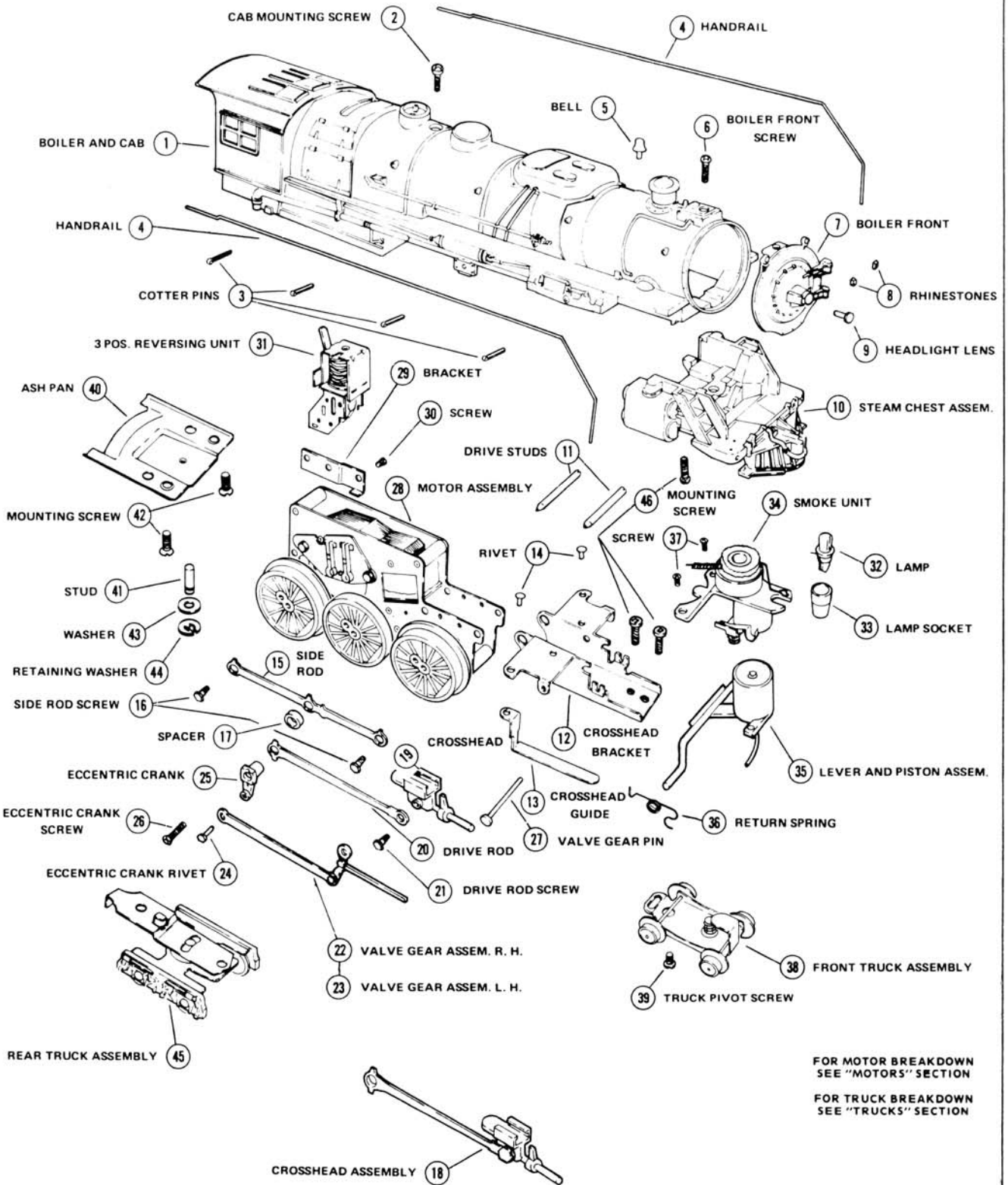
SECTION Loco, Steam

DATE 2-78

Drawing
Reference

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8206-2	1	Boiler & Cab - Die Cast
1	8603-3	1	Boiler & Cab - Die Cast
2	1666E-2	1	Ornamental Whistle
3	675-31	1	Ornamental Bell
4	1666E-11	6	Cotter Pin (Handrail)
5	2055-10	2	Handrail
6	8600-49	1	Screw (Boilerfront Mtg.)
7	2065-13	1	Boilerfront (8206) - Black
8	8040-151	1	Headlight Lens
9	8600-13	1	Boilerfront (8603) - Silver
10	2065-16	2	Running Lights
11	8206-42	1	Smoke Unit - See Smoke Unit Section For Breakdown
12	57-300	1	Lamp
13	8010-165	2	Screw (Smoke Unit Mtg.)
14	8206-100	1	Motor (Less Rev. Unit) - See Motor Section For Breakdown
14	8603-100	1	Motor (Less Rev. Unit) - See Motor Section For Breakdown
15	8603-50	1	3 Position Reverse Unit - See "E" Unit Section For Breakdown
16	2055-42	1	Rear Truck Assm.
17	2055-55	1	Rear Truck Bracket & Stud Assem.
18	2332-107	1	Washer (Rear Trk.)
19	671M-22	1	Retaining Ring (Rear Trk.)
20	8142-46	2	Screw (Rear Cab Mtg.)
21	8206-45	2	Crosshead W/Finger
22	2055-92	3	Headless Drive Stud
23	2046-35	2	Drive Rod R & L
24	746-49	2	Drive Screw (Crosshead)
25	8206-41	2	Valve Gear Assem. R & L
26	2055-37	2	Valve Gear Screw
27	2055-93	2	Eccentric Crank Screw
	2055-32	2	Eccentric Crank * Not Shown Separately
	700E-53	2	Rivet (Eccentric Crank) * Not Shown Separately
28	2035-106	2	Side Rod Screw
29	2055-67	2	Spacer
30	226E-73	2	Side Rod
31	8040-172	2	Screw (Front Cab. Mtg.)
32	2046-22	1	Front Truck Assm.

8600-8702-8801 HUDSON



FOR MOTOR BREAKDOWN
 SEE "MOTORS" SECTION
 FOR TRUCK BREAKDOWN
 SEE "TRUCKS" SECTION

LIONEL

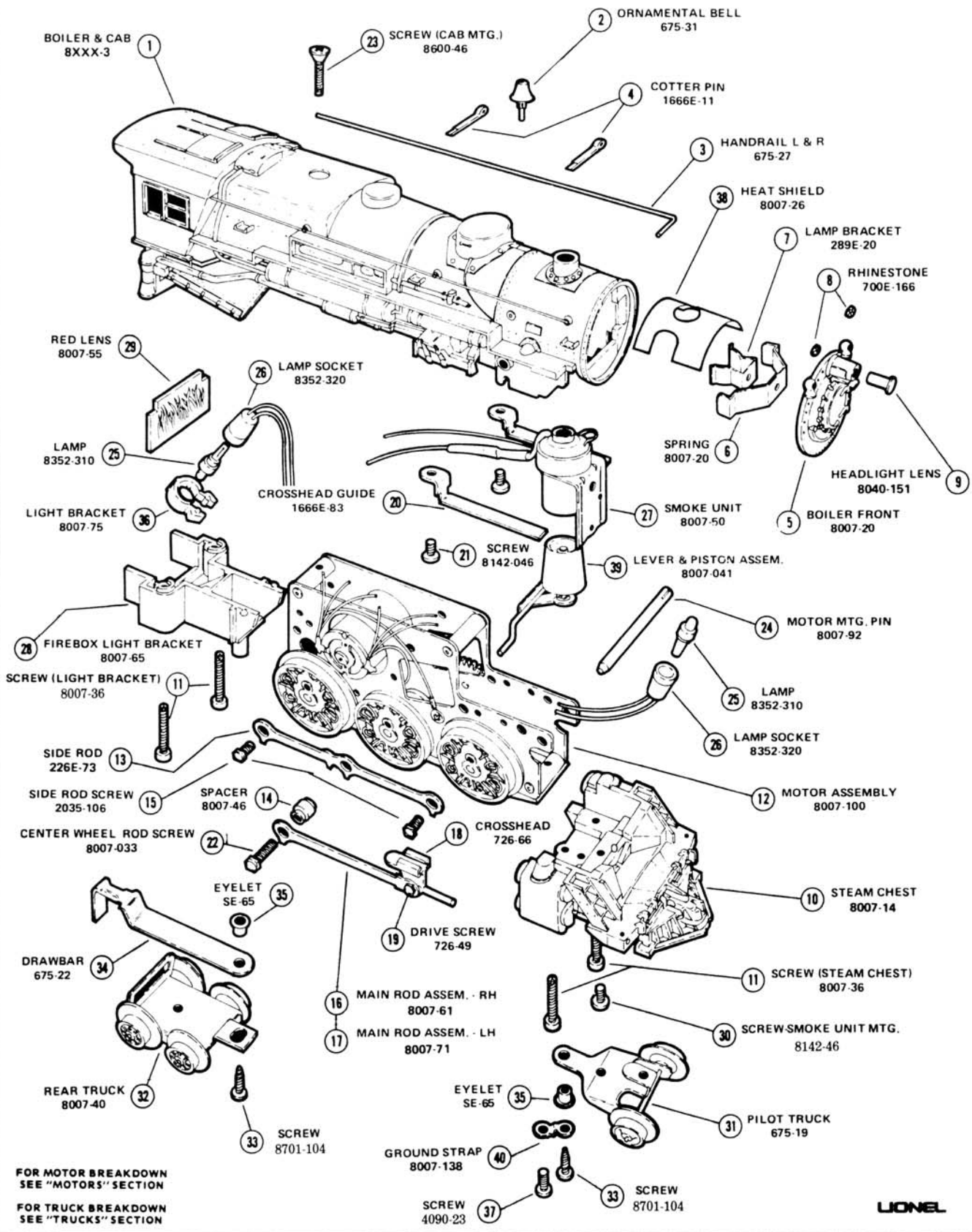
8600
8702
8801

SECTION LOCO-STEAM
DATE 10-78 Rev.

DRAWING
REFERENCE

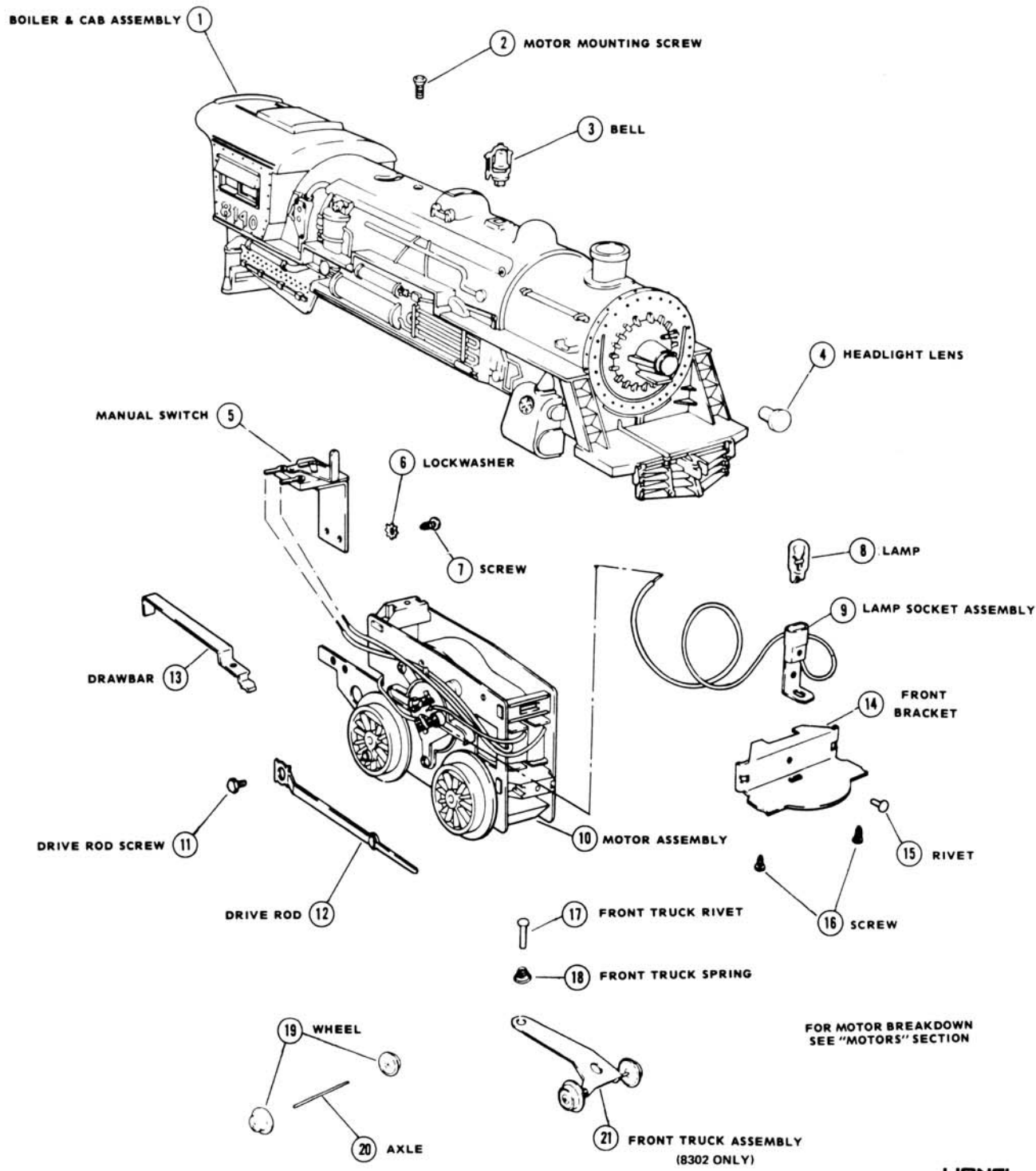
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8600-3	1	Boiler & Cab (Not Sold Separate)
1	8702-3	1	Boiler & Cab (Not Sold Separate)
1	8801-7	1	Boiler & Cab (Not Sold Separate)
2	8600-46	1	Cab Mounting Screw (Top)
3	1666E-11	8	Cotter Pin (Handrail)
4	726-109	2	Handrail
5	675-31	1	Ornamental Bell
6	8600-49	1	Screw (Boiler Front Mtg.)
7	8600-13	1	Boiler Front (8600-8702)
	8801-14	1	Boiler Front (8801)
8	700E-166	2	Rhinestone - Green (8600-8702)
	2065-16	2	Running lite - clear - (8801)
9	8040-151	1	Headlight Lens
10	8600-6	1	Steamchest
	8702-6	1	Steamchest
	8801-81	1	Steamchest
11	8600-92	2	Headless Drive Stud (Cross Hd Guide Brkt)
12	2046-20	1	Crosshead Guide Bracket
13	2046-66	1	Crosshead Guide
14	711-207	2	Rivet (Cross Hd. Guide)
15	226E-73	2	Side Rod R&L
16	2035-106	4	Side Rod Screw
17	2055-67	2	Spacer (Rods)
18	8702-65	1	Crosshead Assem. RH
18	2046-71	1	Crosshead Assem. LH
19	8702-45	1	Crosshead RH
19	8600-66	1	Crosshead LH
20	2046-35	2	Main Rod R&L
21	726-49	2	Drive Screw (Crosshead)
22	2046-63	1	Valve Gear Assm. RH
23	2046-64	1	Valve Gear Assm. LH
24	700E-53	2	Ecc. Crank Rivet
	700E-54	2	Ecc. Rod Rivet (Not Shown)
	700E-55	2	Valve Stem Rivet (Not Shown)
25	2055-32	2	Ecc. Crank R&L
26	2055-93	2	Ecc. Crank Screw

2-6-4 STEAM LOCOMOTIVE



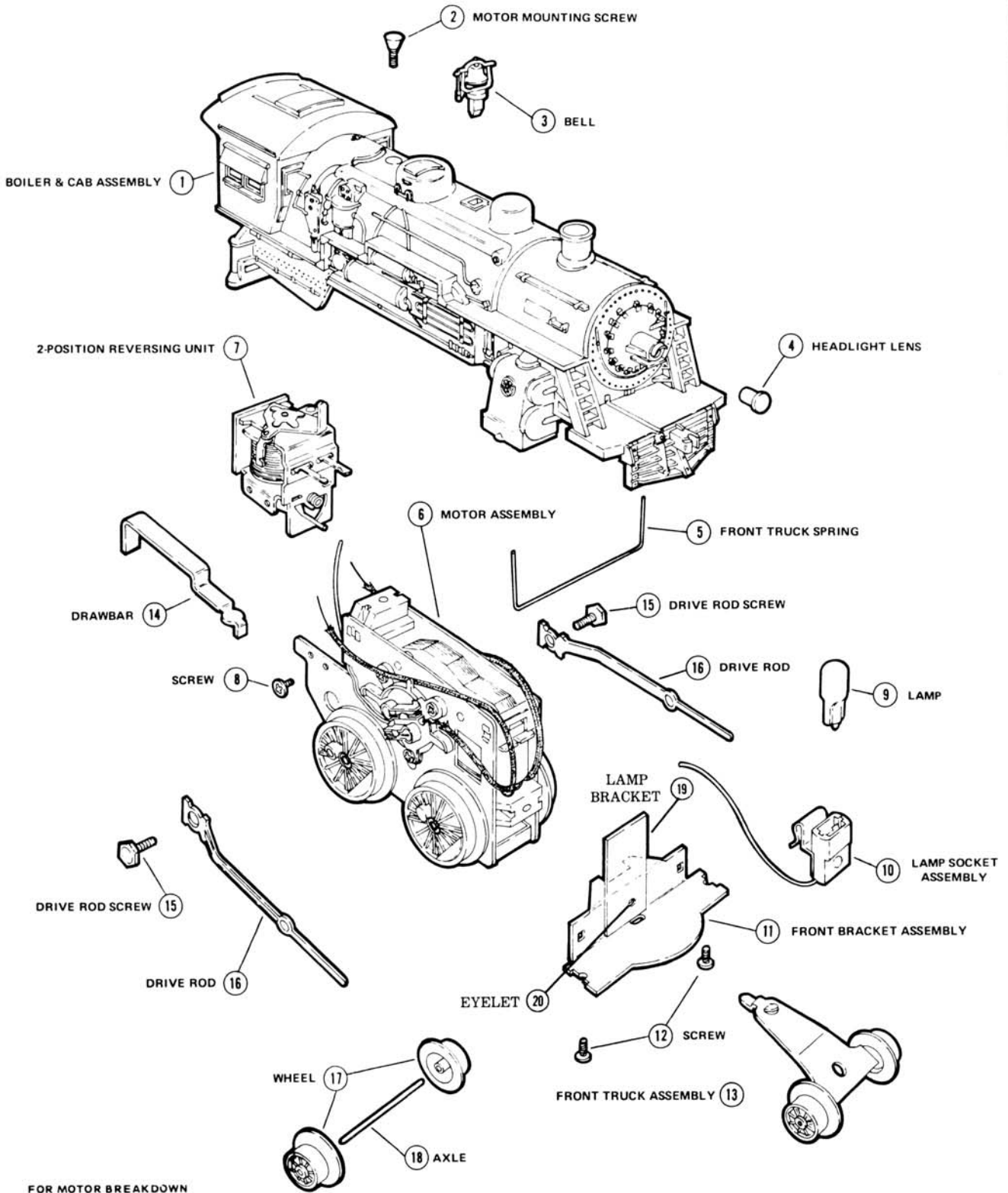
LIONEL

8140, 8302 STEAM LOCOMOTIVE WITH MANUAL REVERSE



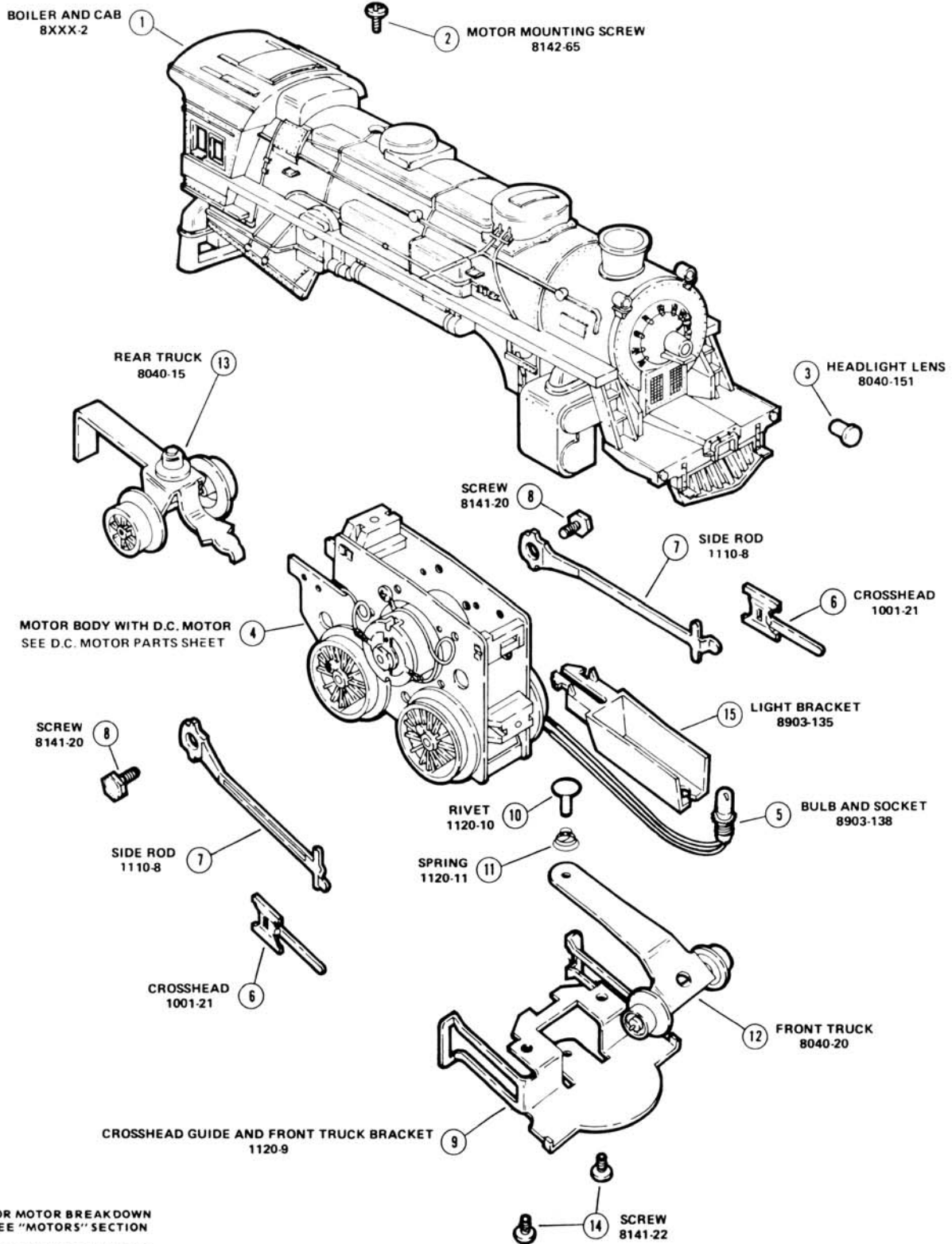
LIONEL

8602 STEAM LOCOMOTIVE (with 2-position reversing unit)



LIONEL

STEAM LOCOMOTIVE - D.C.



FOR MOTOR BREAKDOWN
SEE "MOTORS" SECTION

FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

8903 2-4-2 "COLUMBIA" TYPE - D.C.

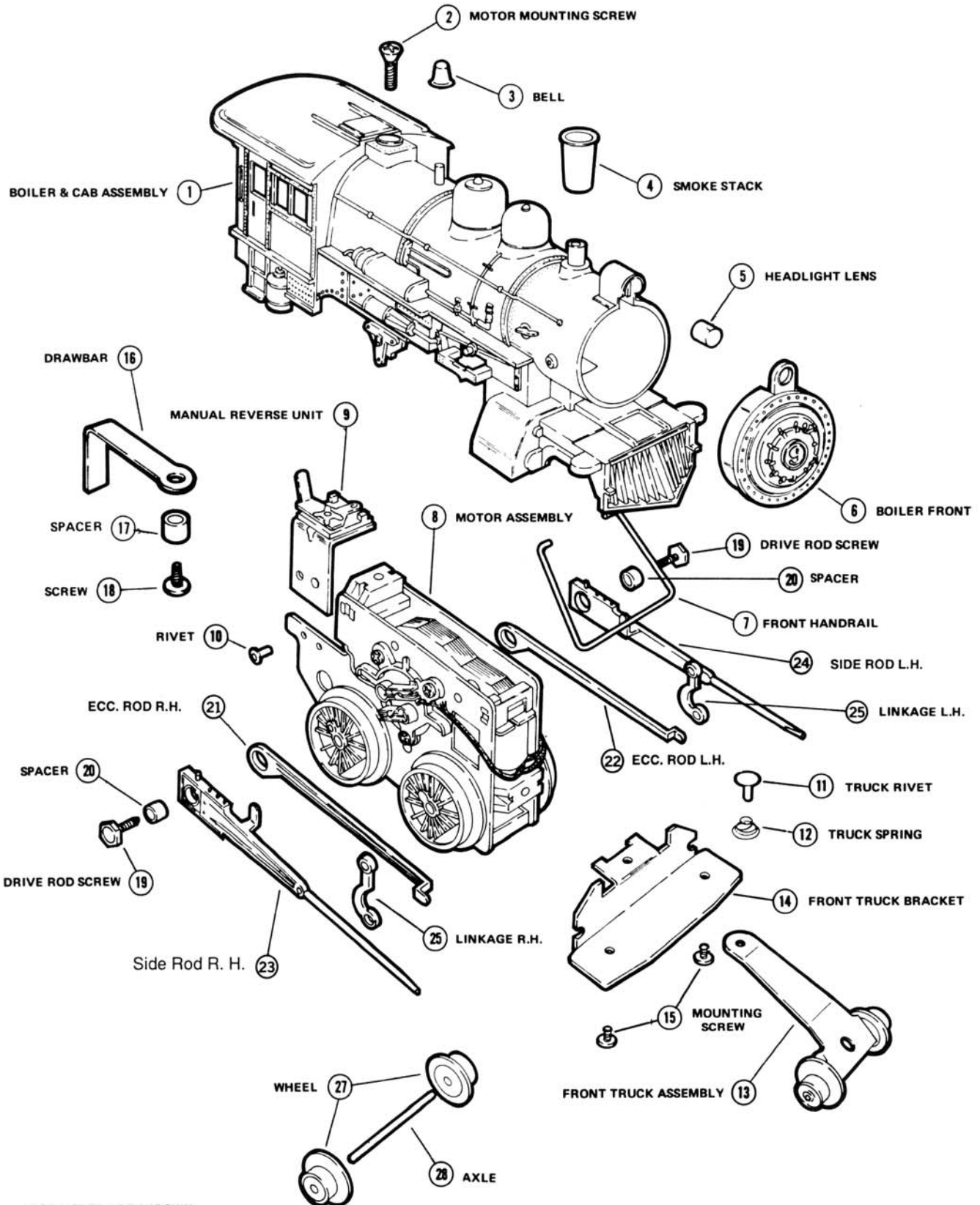
SECTION LOCO, STEAM-DC

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Boiler & Cab
2	8142-65	1	Screw 6/32x7/16 Oval Hd.
3	8040-151	1	Headlight Lens
4	8214-101	1	Motor Body (also see 4A and 4B below)
5	8903-138	1	Bulb & Socket
6	1001-21	2	Crosshead
7	1110-8	2	Side Rod
8	8141-20	2	Screw 6/32x1/4 Hex Head
9	1120-9	1	Crosshead Guide & Front Truck Bracket
10	1120-10	1	Rivet
11	1120-11	1	Spring
12	8040-20	1	Front Truck
13	8040-15	1	Rear Truck
14	8141-22	2	Screw 6/32x3/8 Pan Hd.
15	8903-135	1	Light Bracket
4A	8903-120	1	DC Motor
4B	8304-165	2	Screws

8300, 8500, 8502 STEAM LOCOMOTIVE (with manual reverse)



FOR MOTOR BREAKDOWN
SEE "MOTORS" SECTION

LIONEL
Rev. 6/92

8502
 8300-8500 STEAM LOCOMOTIVE
 (WITH MANUAL REVERSE)

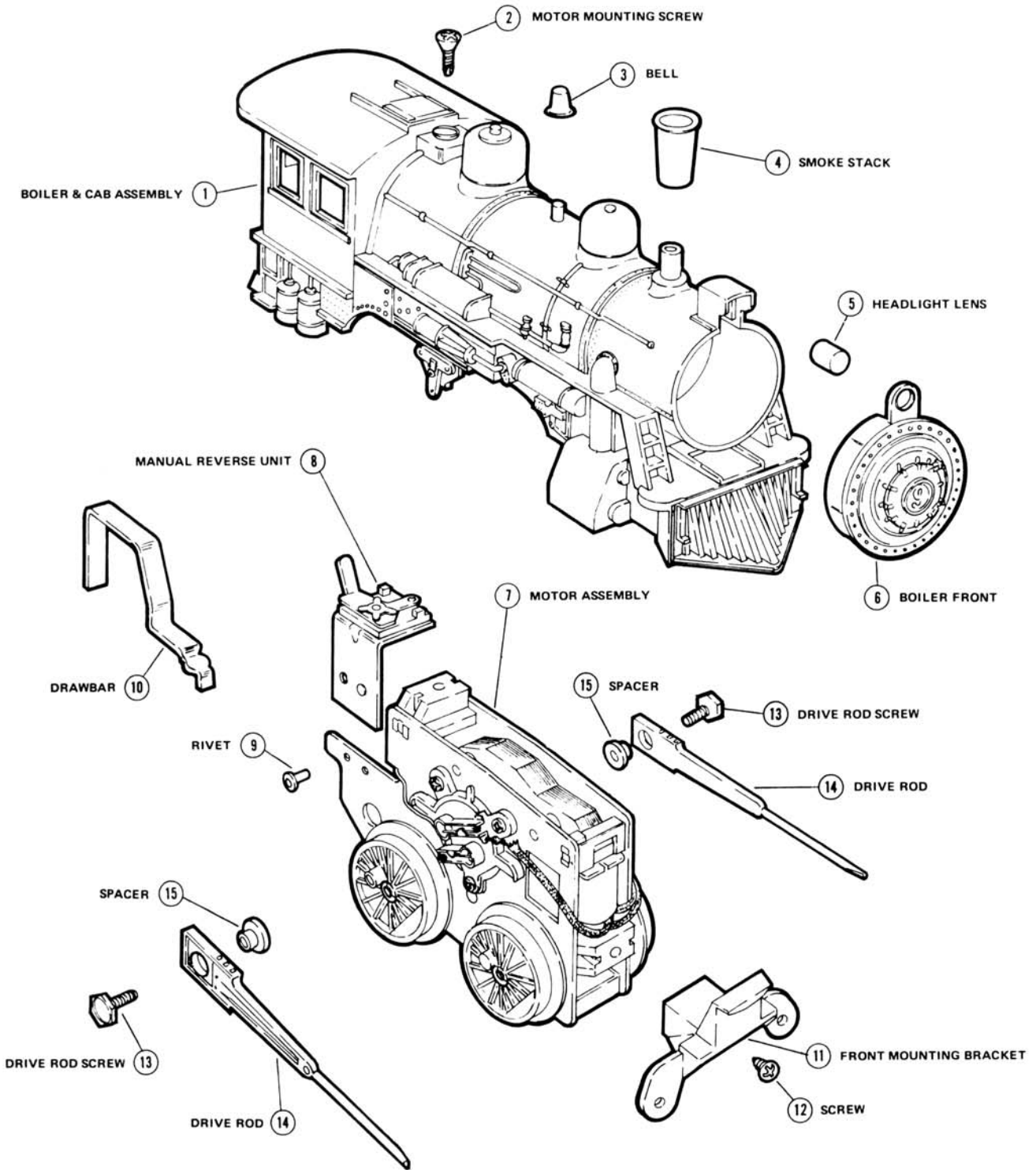
SECTION STEAM LOCOMOTIVES

DATE 7-78

REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Boiler & Cab Assembly
2	8240-70	1	Motor Mounting Screw
3	8300-21	1	Ornamental Bell
4	8300-20	1	Smoke Stack
5	8240-35	1	Headlight Lens
6	8300-40	1	Boiler Front
7	8300-43	1	Front Handrail
8	8500-600	1	Motor Assembly
9	8209-7	1	Manual Reverse Unit
10	8142-62 Screw 8142-63 Washer	1	Rivet (Reverse Unit Mtg.) Screw & Washer
11	1120-10	1	Truck Rivet
12	2046-27	1	Truck Spring
13	8300-45	1	Front Truck Assembly
14	8300-47	1	Front Truck Bracket
15	8240-71	2	Screw (Front Bracket Mtg)
16	8300-35	1	Drawbar
17	8300-36	1	Spacer Drawbar
18	8300-37	1	Screw (Drawbar Mtg)
19	8142-45	2	Drive Rod Screw (for 8300 & 8500)
20	8300-65	2	Spacer (Drive Rod)
21	8300-58	1	Drive Rod RH
22	8300-59	1	Drive Rod LH
23	8300-55	1	Side Rod RH
24	8300-56	1	Side Rod LH
25	8300-60	1	Linkage RH & LH
27	8040-10	2	Wheel (Truck)
28	1661-8	1	Axle (Truck)
19A	8500-45	2	Alternate Drive Rod Screw (for #8502)
			Replaces page 1-8 & 1-13

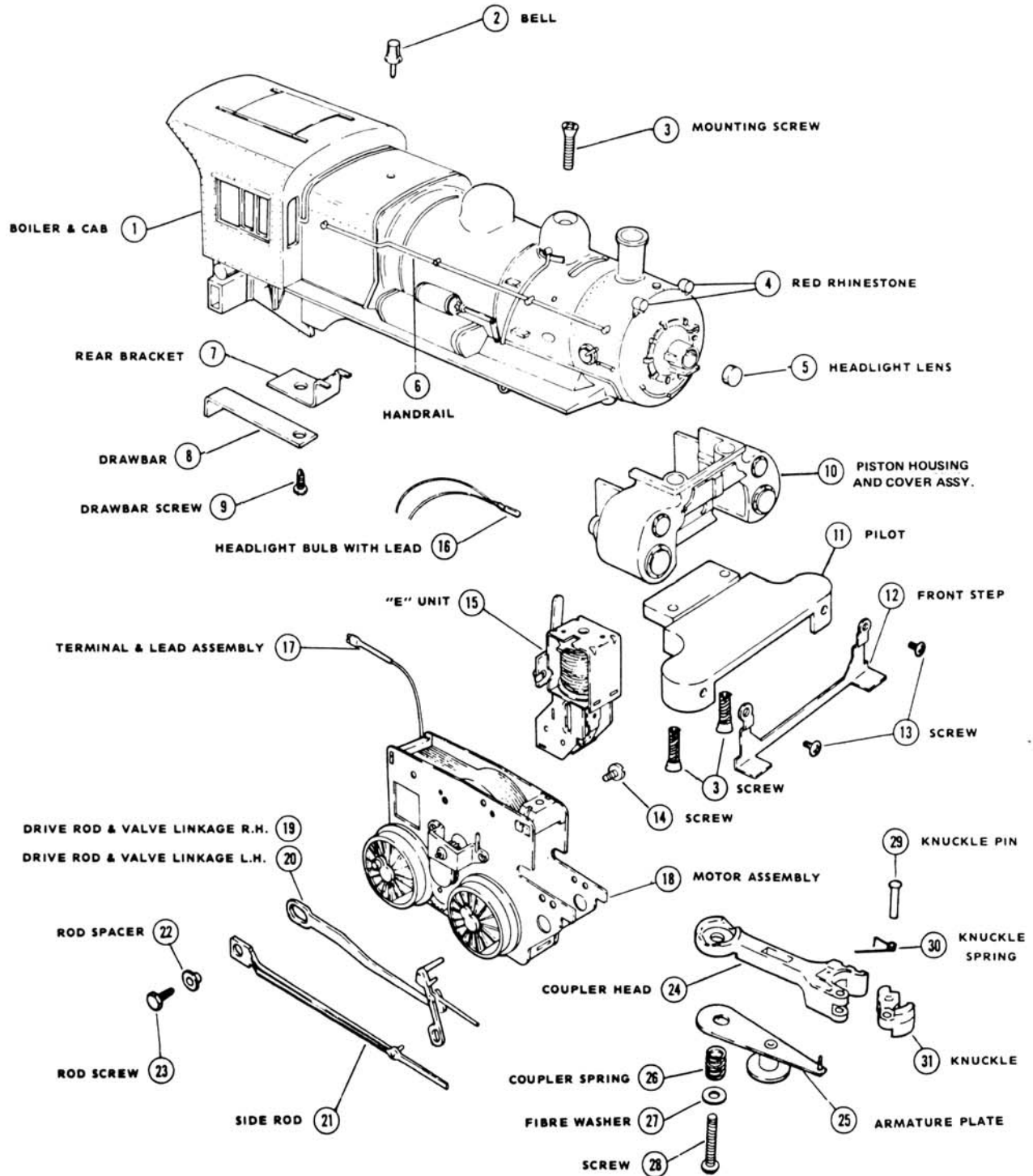
8601 STEAM LOCOMOTIVE (with manual reverse)



FOR MOTOR BREAKDOWN
SEE "MOTORS" SECTION

LIONEL

8506 STEAM SWITCHER LOCOMOTIVE



FOR MOTOR BREAKDOWN
SEE "MOTORS" SECTION

LIONEL

8506

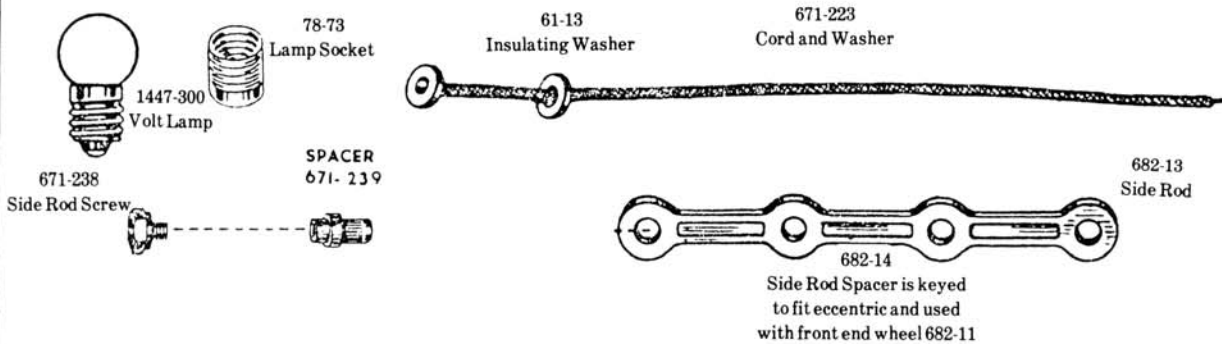
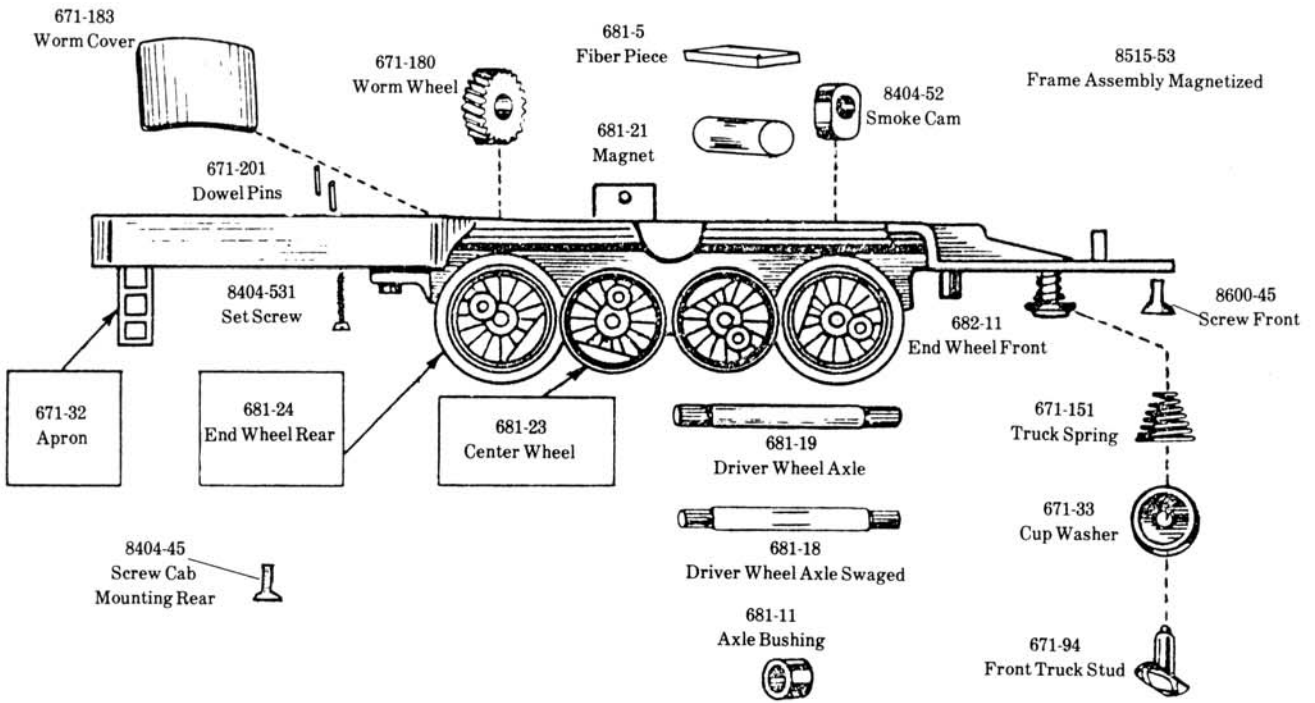
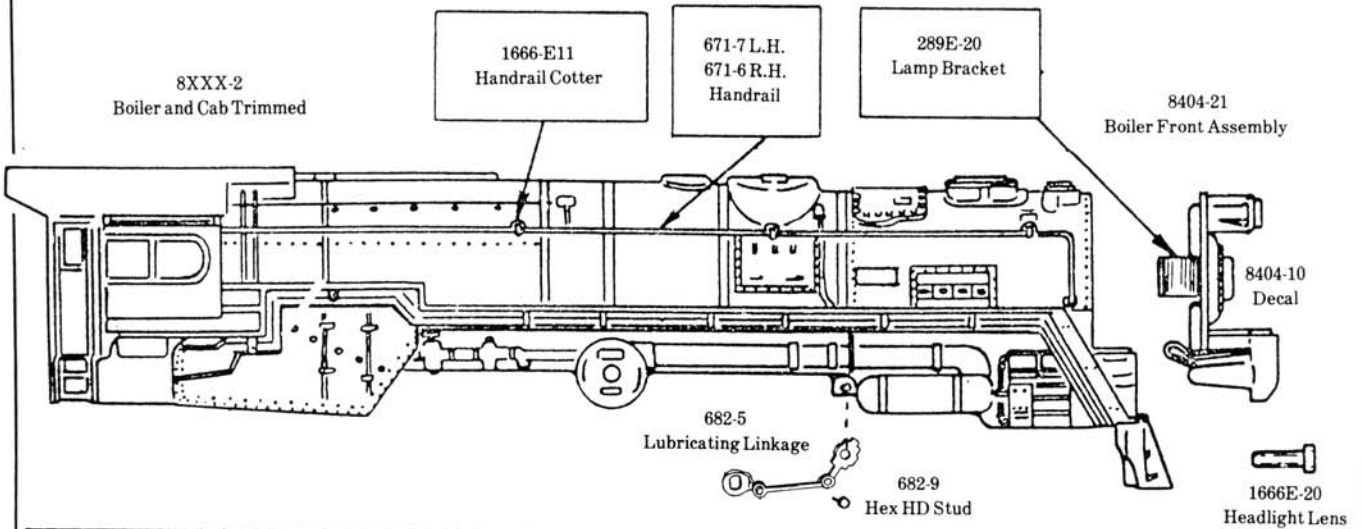
SECTION Loco, Steam

DATE 2-78

Drawing
Reference

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8506-3	1	Boiler & Cab - Die Cast
2	8142-16	1	Ornamental Bell
3	8240-70	1	Flat Phil. Hd. Screw (Motor Mtg. & Pilot)
4	700E-165	2	Red Rhinestone
5	8240-35	1	Headlight Lens
6	8506-25	2	Handrail
7	8310-24	1	Rear Bracket
8	8310-22	1	Drawbar
9	#6x3/8	1	RH Phil. (Drawbar)
10	8310-21	1	Piston Housing
11	8506-15	1	Pilot
12	403-8	1	Front Step
13	8240-71	2	Screw (Front Step)
14	8142-62	1	Screw ("E" Unit Mtg.)
15	8506-50	1	"E" Unit
16	2312-9	1	Headlight Bulb W/Leads
17	8506-60	1	Terminal & Lead Assem.
18	8506-601	1	Motor Less "E" Unit
19	8310-32	1	Drive Rod & Valve Linkage RH
20	8310-34	1	Drive Rod & Valve Linkage LH
21	8310-8	2	Side Rod
22	8209-27	2	Side Rod Spacer
23	8142-45	2	Rod Screw
24	8030-120	1	Coupler Head Assem.
25	2321-156	1	Armature Plate
26	1615-93	1	Coupler Spring
27	8250-35	1	Fibre Washer
28	8506-55	1	Screw, Coupler Mtg.
29	TC-23	1	Knuckle Pin
30	480-16	1	Knuckle Spring
31	480-8	1	Knuckle
32	8506-55	1	Screw (Washer & Spring)

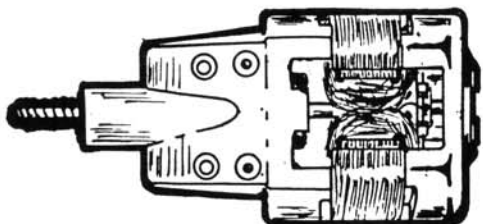
8404 Steam Turbine



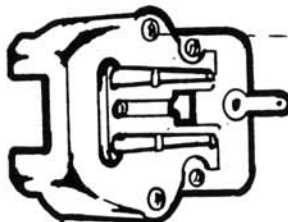
8404 Steam Turbine

(Continued from page 1)

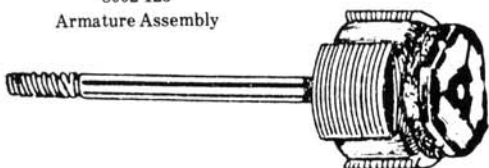
8002-100
Motor Complete



8002-22
Brush Plate Assembly



8002-125
Armature Assembly



8040-150
Carbon Brush



8551-31
Fillister-head screw



2-111
Lockwasher



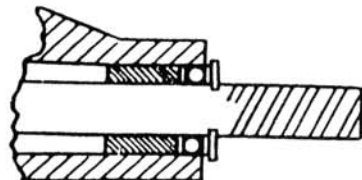
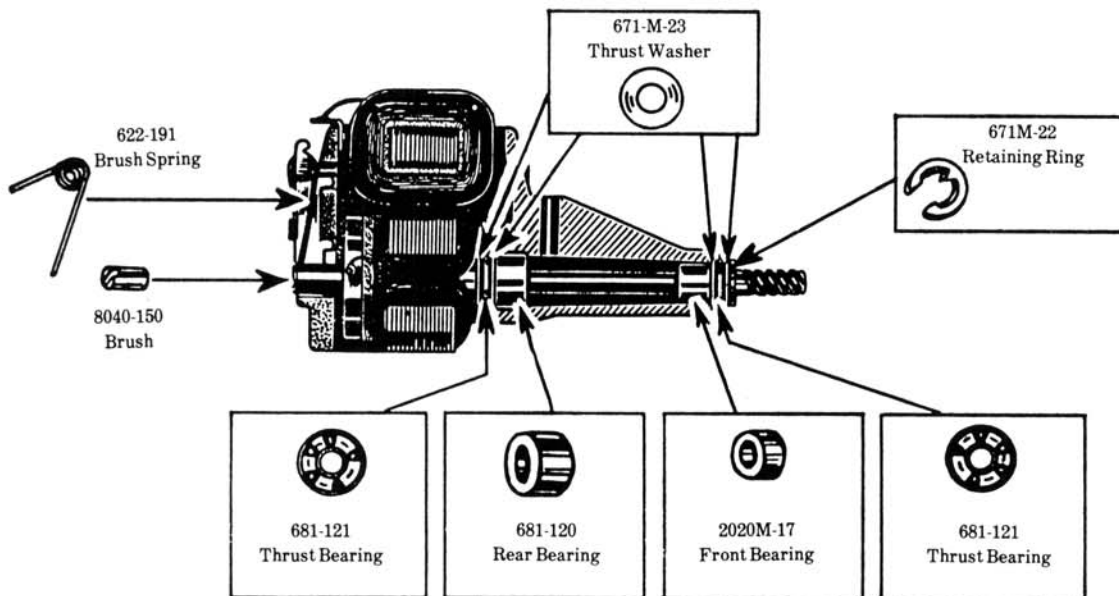
2036-164
Round Head Screw



8307-61
Plug Assembly
Three-Pin

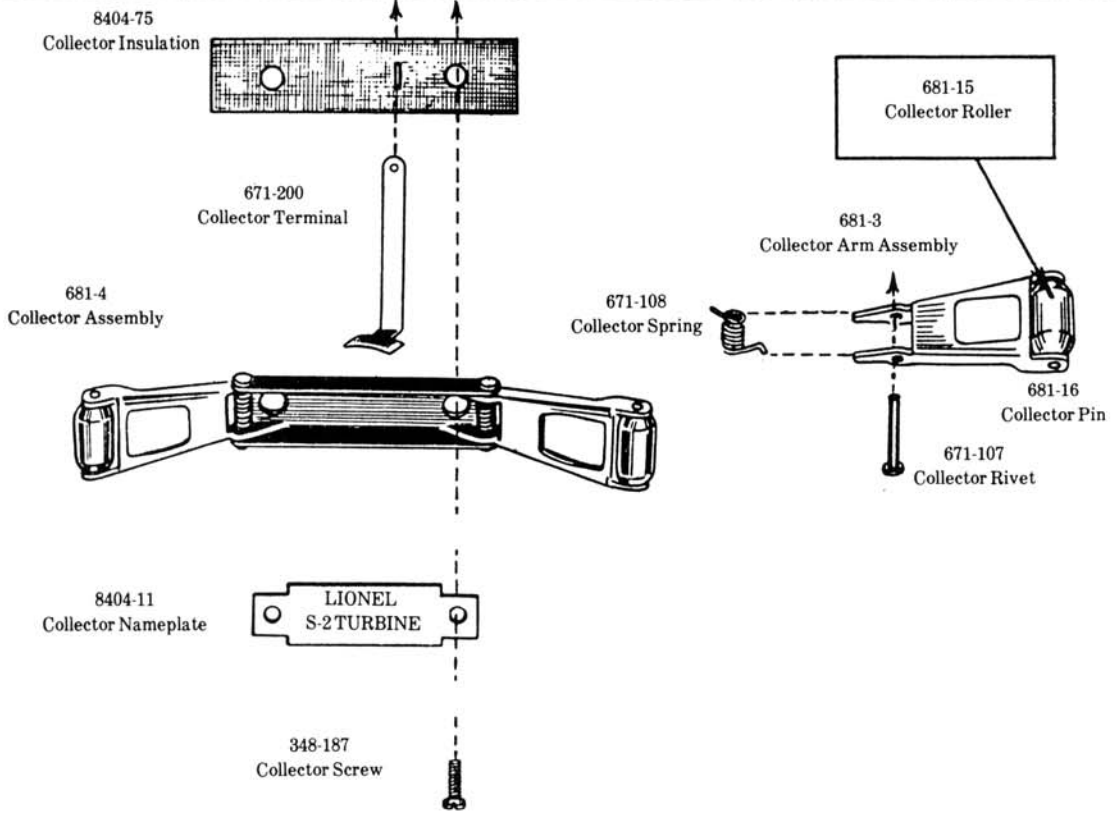
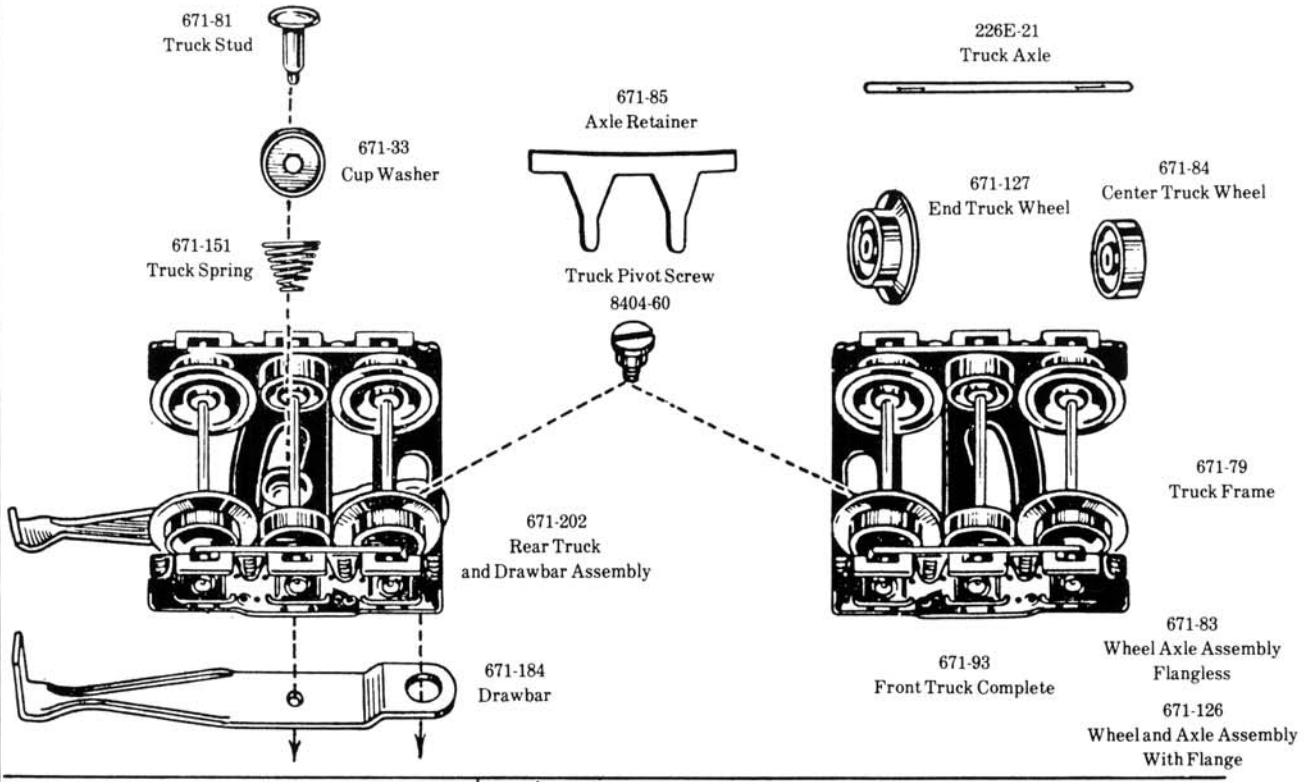
8404-61
Female Plug Assembly
Five-Pin

622-191
Brush Spring



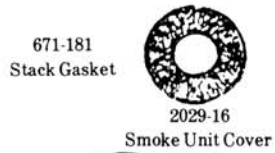
8404 Steam Turbine

(Continued from page 2)

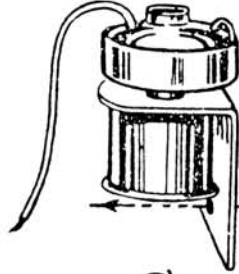


8404 Steam Turbine

(Continued from page 3)



8002-50
Smoke Unit Complete



8304-165
Binding Head Screw

8101 T-30
Washer

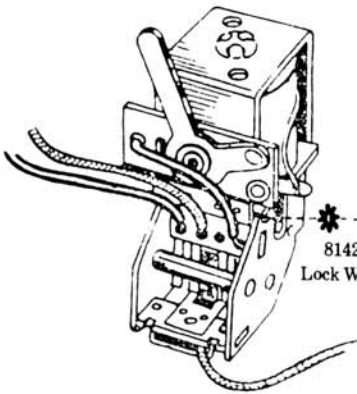
8142-63
Lock Washer

8002-525
Smoke Unit Piston
And Spring Assembly



Internal Components:
671-221 - Smoke Unit Liner
2029-15 - Black Sleeve
8141-55 - Resister
8141-56 - Sleeve for Resister

681-22
Smoke Lever



8304-165
Self-Tapping Screw

8142-63
Lock Washer

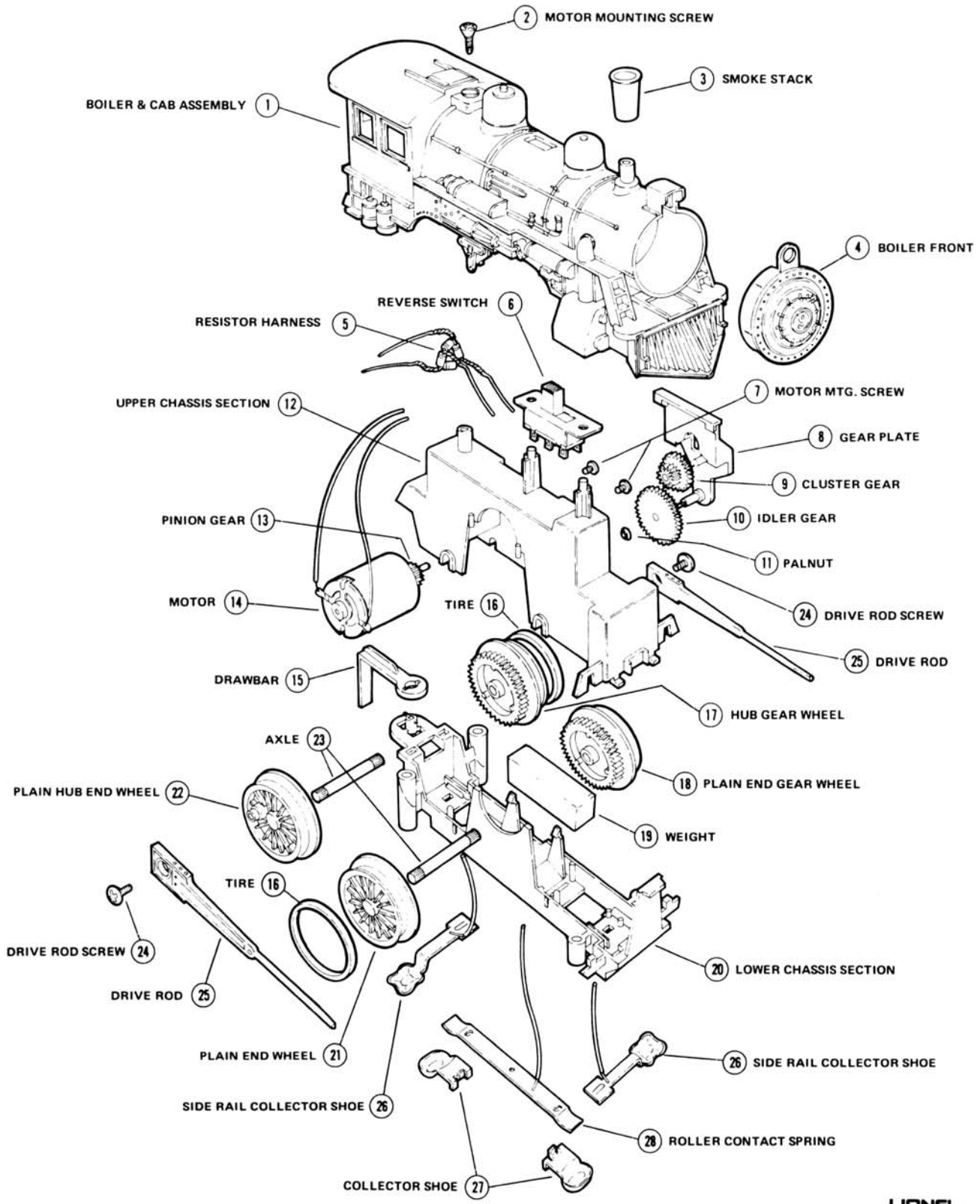
8506-50
E-Unit

8404 STEAM TURBINE (6200)

SECTION STEAM LOCOMOTIVES
DATE 4/86

REF. NO.	QUANTITY PER PART NUMBER UNIT	DESCRIPTION	Reference Drawing
1	8XXX-2 1	Cab decorated	
2	671-6 1	Handrail RH	
3	671-7 1	Handrail LH	
4	1666E-11 6	Cotter pin	
5	8404-21 1	Boiler front	
6	1666E-20 1	Headlight lens	
7	8404-10 1	Decal	
8	682-5 2	Lubricating linkage	
9	682-9 2	Hex head stud	
10	8404-45 2	Screw (cab mounting rear)	
11	8600-45 1	Screw (cab mounting front)	
12	8304-165 2	Screw (smoke unit mounting & E-unit mounting)	
13	8142-63 2	Lock washer smoke & E-unit mounting	
14	8101-T30 1	Washer smoke unit mounting	
15	78-73 1	Lamp socket	
16	671-233 1	Wire & washer assembly	
17	1447-300 1	Lamp	
18	8002-50 1	Smoke unit	
19	8506-50 1	E-unit	
20	2-111 4	Lock washer motor mounting	
21	8551-31 2	Screw (motor mounting)	
22	8100-100 1	Motor	
23	8002-525 1	Smoke unit piston & spring assembly	
24	671-183 1	Worm cover	
25	8404-61 1	Female plug assembly	
26	682-13 2	Side rod	
27	671-238 8	Side rod screw	
28	8515-53 1	Frame & wheel assembly magnetized	
29	671-200 1	Collector terminal	
30	681-4 1	Collector assembly	
31	348-187 2	Screw (collector assembly mounting)	
32	8404-11 1	Nameplate	
33	8404-75 1	Insulating plate	
34	671-106 1	Collector frame	
35	671-107 2	Collector rivet	
36	671-108 2	Collector spring	
37	681-3 2	Collector arm assembly	
38	681-6 2	Collector arm	
39	681-15 2	Collector roller	
40	681-16 2	Collector pin	
41	8404-531 1	Set screw	
42	671-93 1	Front truck complete see drawing D-70	
43	671-202 1	Rear truck & drawbar assembly see drawing D-70	
44	8404-60 2	Truck pivot screw	
45	671-33 2	Cup washer	
46	671-151 2	Truck spring	
47	671-32 1	Apron	
48	671-94 1	Front truck stud	
49	671-180 1	Worm wheel	
50	671-201 2	Dowel pin	

8803 STEAM LOCOMOTIVE



LIONEL

8803
STEAM LOCOMOTIVE

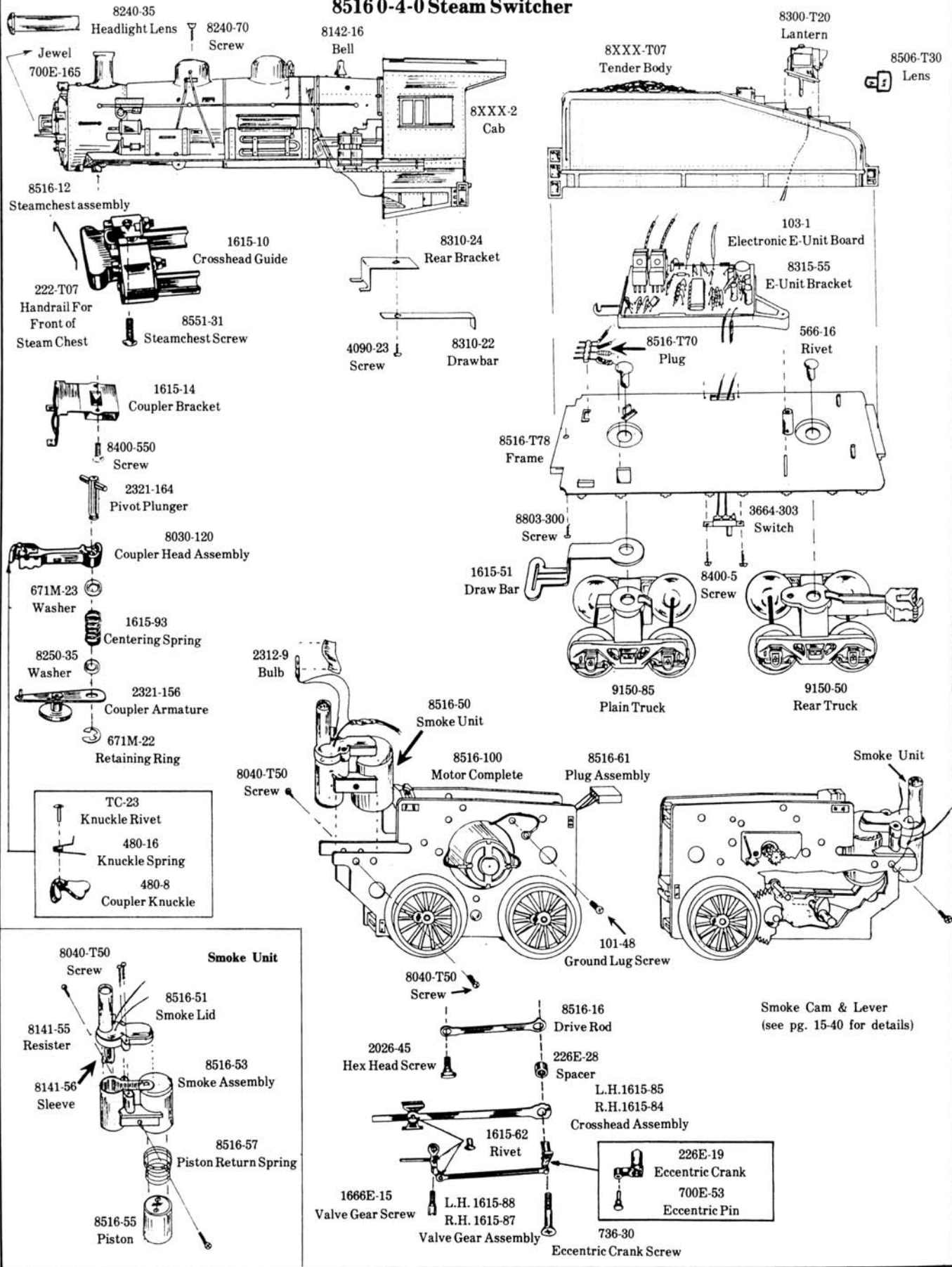
SECTION STEAM LOCOMOTIVES

DATE 9-78

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-3	1	Boiler & Cab Assembly
2	8803-145	1	Motor Mtg. Screw (Chasis)
3	8601-20	1	Smoke Stack
4	8601-40	1	Boiler Front
5	8803-125	1	Resistor Harness (also reported as Rectifier Assembly)
6	8803-200	1	Reverse Switch
7	8240-71	2	Motor Mtg. Screw (Gear Plate)
8	8803-113	1	Gear Plate
9	8040-118	1	Cluster Gear
10	8040-117	1	Idler Gear
11	8803-114	1	Palnut (Idler Gear)
12	8803-111	1	Upper Chasis Section
13		1	Pinion Gear (Not Sold Separate)
14	8803-122	1	Motor
15	8803-129	1	Drawbar
16	242-206	2	Tire
17	8803-141	1	Hub Gear Wheel
18	8803-142	1	Plain End Gear Wheel W/Undercut
19	8803-137	1	Weight (Lower Chasis)
20	8803-112	1	Lower Chasis Section
21	8803-143	1	Plain End Wheel W/Undercut
22	8803-144	1	Plain Hub End Wheel
23	8803-127	2	Axle
24	8142-45	2	Drive Rod Screw
25	8601-55	2	Drive Rod
26	8803-136	2	Side Rail Collector
27	8500-30	2	Collector Shoe
28	8350-123	1	Roller Contact Spring
			Note: When replacing idler gear, gear plate, palnut must be replaced also.

85160-4-0 Steam Switcher



8516 0-4-0 STEAM SWITCHER

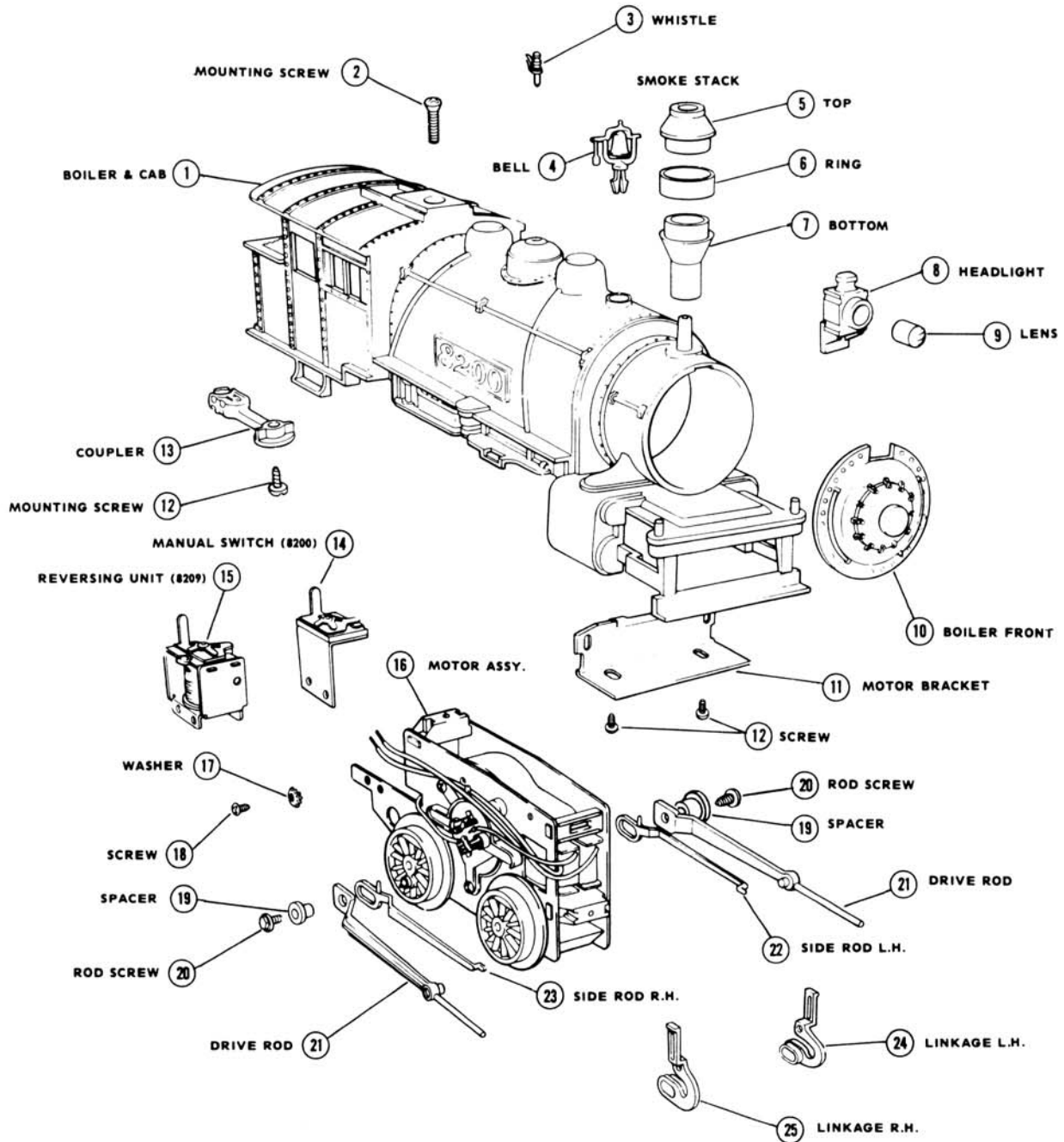
SECTION STEAM LOCOMOTIVE

DATE 4/86

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-2	1	Cab
2	8142-16	1	Bell
3	8240-35	1	Headlight lens
4	700E-165	2	Rhinestone (red)
5	8516-12	1	Steam chest assembly
6	2222-T07	1	Handrail
7	1615-10	2	Crosshead guide
8	1615-84	1	Crosshead assembly RH
9	1615-85	1	Crosshead assembly LH
10	1615-62	6	Rivet
11	1615-71	2	Drive rod
12	1615-83	2	Crosshead
13	1615-87	1	Valve gear assembly RH
14	1615-88	1	Valve gear assembly LH
15	1615-80	2	Eccentric rod
16	1615-86	2	Valve stem
17	226E-19	2	Eccentric crank
18	226E-51	1	Combo lever RH
19	226E-13	1	Combo lever LH
20	700E-53	2	Eccentric pin
21	226E-28	2	Spacer
22	736-30	2	Eccentric crank screw
23	8516-16	2	Side rod
24	2026-45	2	Hex head screw (side rod)
25	1666E-15	2	Screw (valve gear)
26	8516-20	1	Coupler bracket assembly
27	1615-14	1	Coupler bracket
28	1615-93	1	Spring
29	2321-156	1	Armature uncoupler assembly
30	2321-164	1	Coupler head shaft
31	8030-120	1	Coupler head assembly
32	8250-35	1	Fiber washer
33	671M-22	1	Retaining clip
34	671M-23	1	Washer
35	8400-550	2	Screw (coupler bracket)
36	8551-31	2	Screw (steam chest)
37	4090-23	1	Screw (drawbar & coupler bracket)
38	8240-70	1	Screw (body mounting)
39	8310-22	1	Drawbar
40	8310-24	1	Rear bracket
41	8516-100	1	Motor body complete

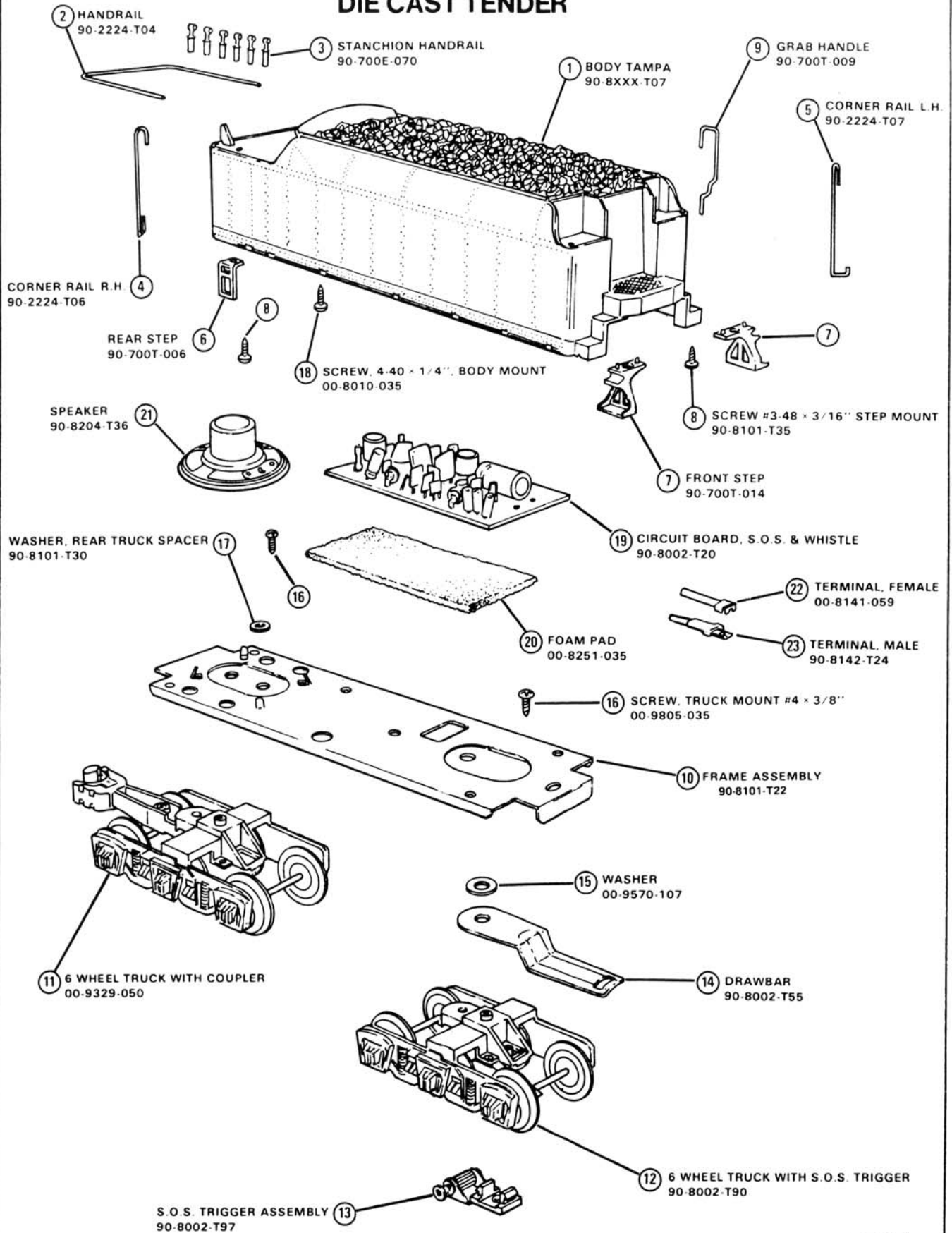
8200-8209 DOCKSIDE SWITCHER



FOR MOTOR BREAKDOWN
SEE "MOTORS" SECTION

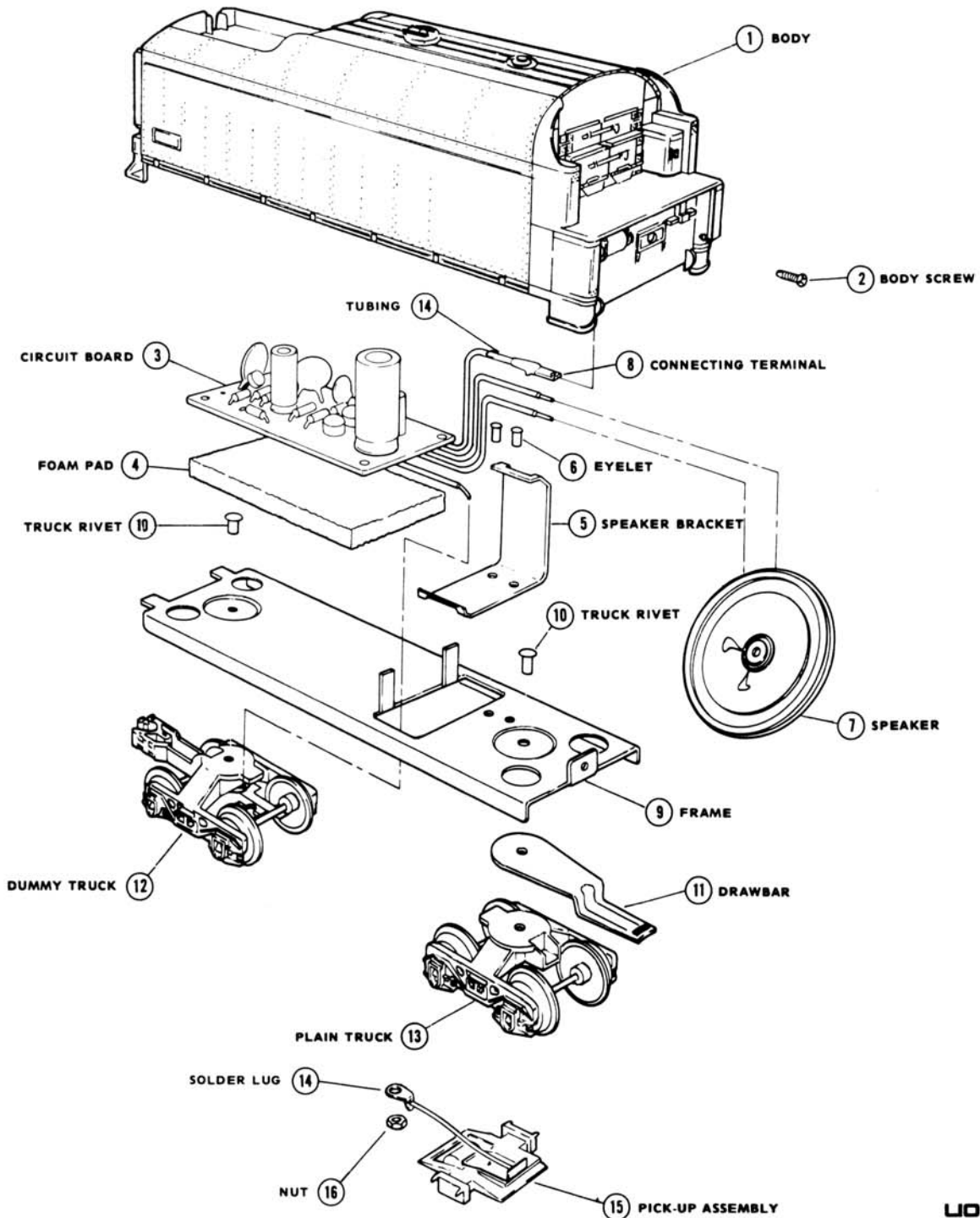
LIONEL

DIE CAST TENDER



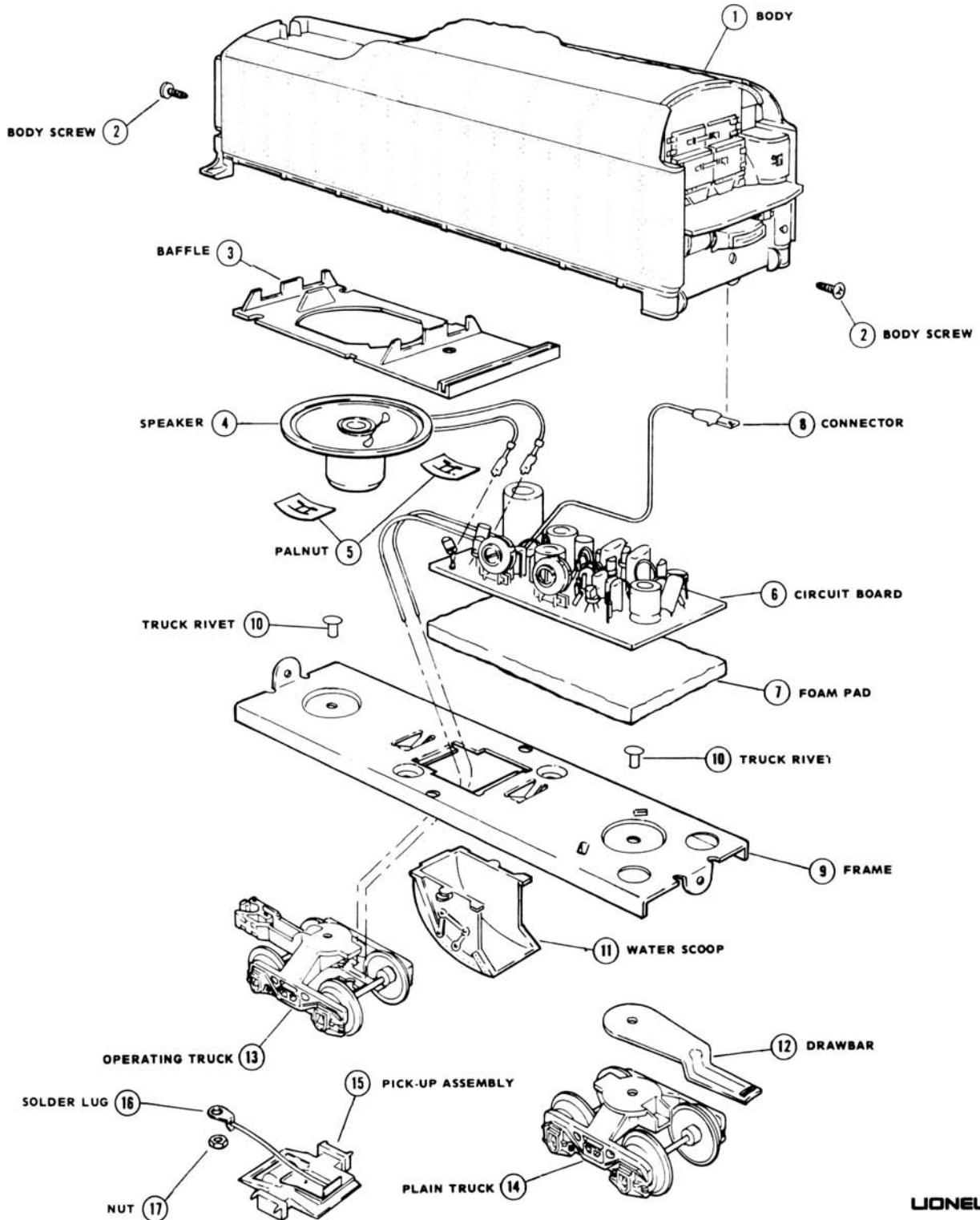
LIONEL

SMALL ROUND TYPE TENDER



LIONEL

LARGE ROUND TYPE TENDER



LIONEL

LARGE ROUND TENDER W/SOS

8702T
8801T
8900T

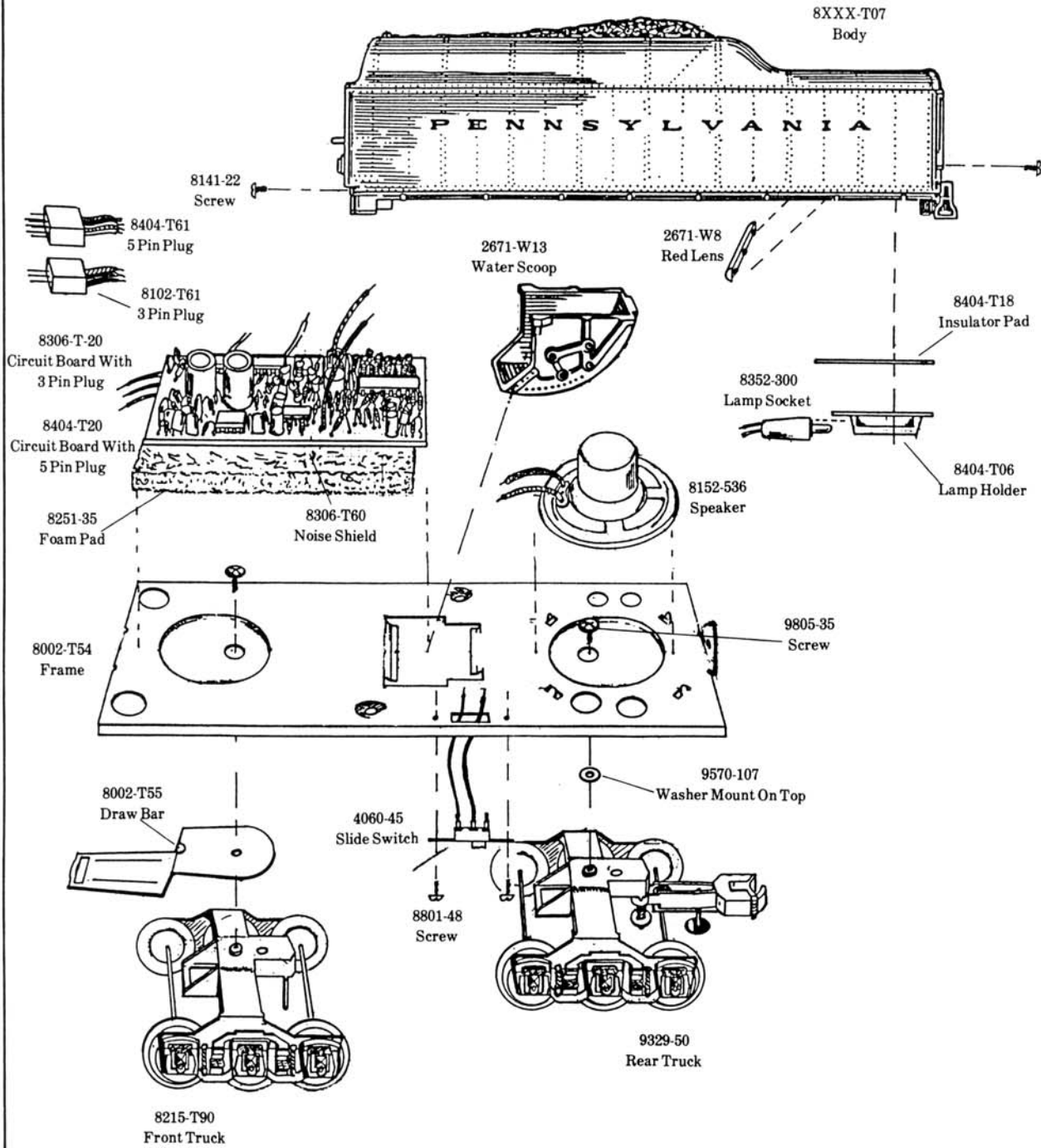
SECTION DUMMYS/TENDERS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXXT-3	1	Body
2	8900-10	2	Decal
3	8010-165	2	Screw - 4/40x1/4 Truss Hd.
4	9150-175	1	Axle Contact
5	8141-61	1	Plug Insulation
6	8141-62	1	1/2" Tubing
7	2671W-13	1	Water Scoop
8	8142T-35	1	Circuit Board
9	8142T-36	1	Speaker
10	8142T-22	1	Double Adhesive Foam Pad
11	8142T-24	1	Connecting Terminal
12	8142T-15	1	Speaker Bracket
13	2046-54	1	Frame
14	6026-7	1	Drawbar
15	9150-85	1	Plain Truck
16	9150-50	1	Operating Coupler Truck

Large Round Top Tenders with S.O.S. And Whistles



LARGE ROUND TOP TENDERS
WITH S.O.S. & WHISTLES

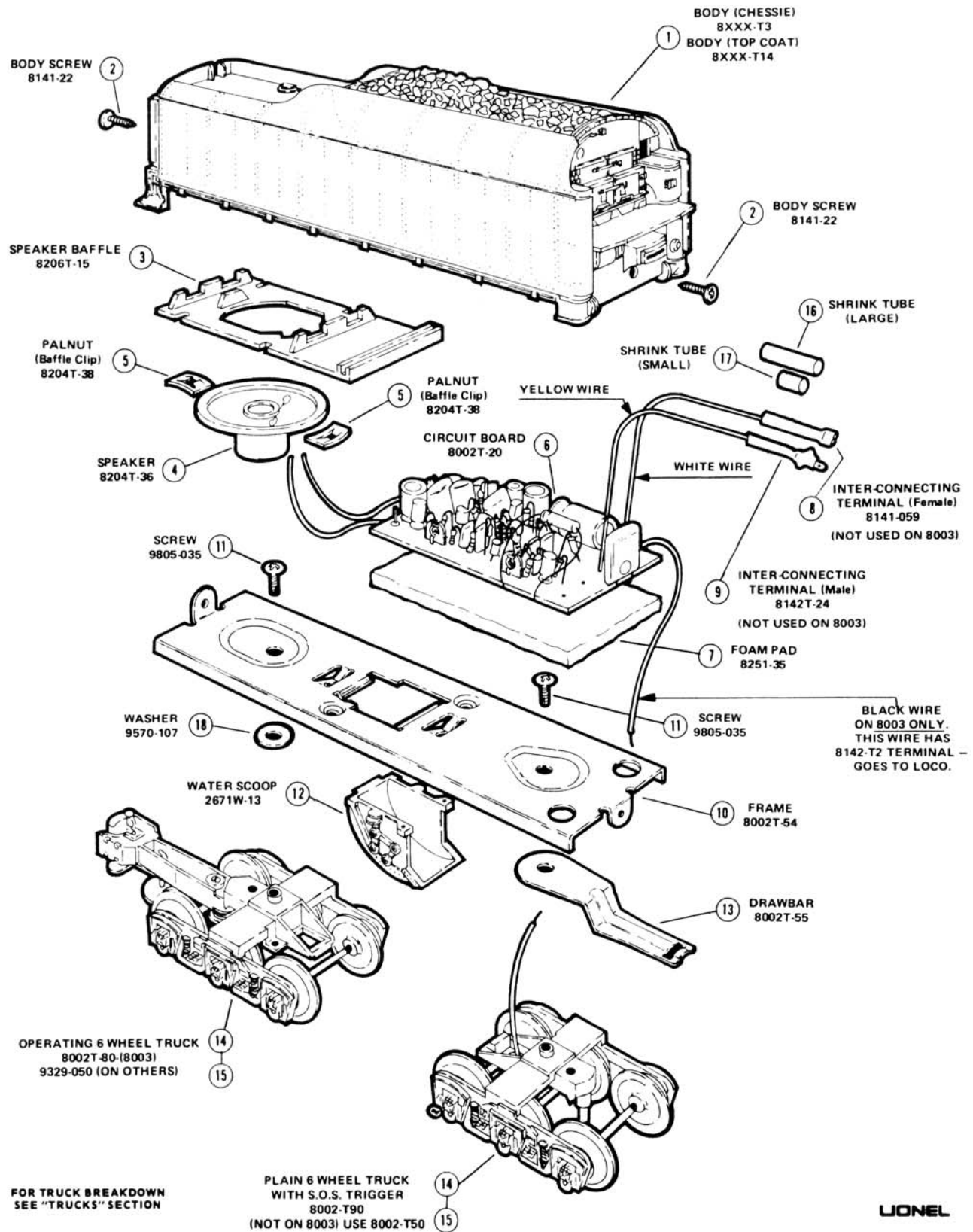
SECTION DUMMY'S/TENDERS

DATE 4/86

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-T07	1	Tender body - decorated
2	8141-22	2	Body mounting screw
3	2671-W08	1	Lens molded red (8404-T01 only)
4	2671-W13	1	Water scoop
5	8352-300	1	Lamp & socket assembly (8404-T01 only)
6	8404-T06	1	Lamp holder (8404-T01 only)
7	8404-T18	1	Insulator pad (8404-T01 only)
8	8251-35	1	Foam pad
9	8XXX-T20	1	Circuit board & male plug assembly
10	8152-536	1	Speaker
11	8002-T54	1	Tender frame
12	4060-45	1	Slide switch
13	8801-48	2	Screw (slide switch)
14	9329-50	1	Rear truck
15	9570-107	1	Washer rear truck
16	8215-T90	1	Front truck
17	8002-T55	1	Drawbar
18	9805-35	2	Screw (truck mounting)

LARGE ROUND TOP TENDER WITH 6 WHEEL TRUCKS



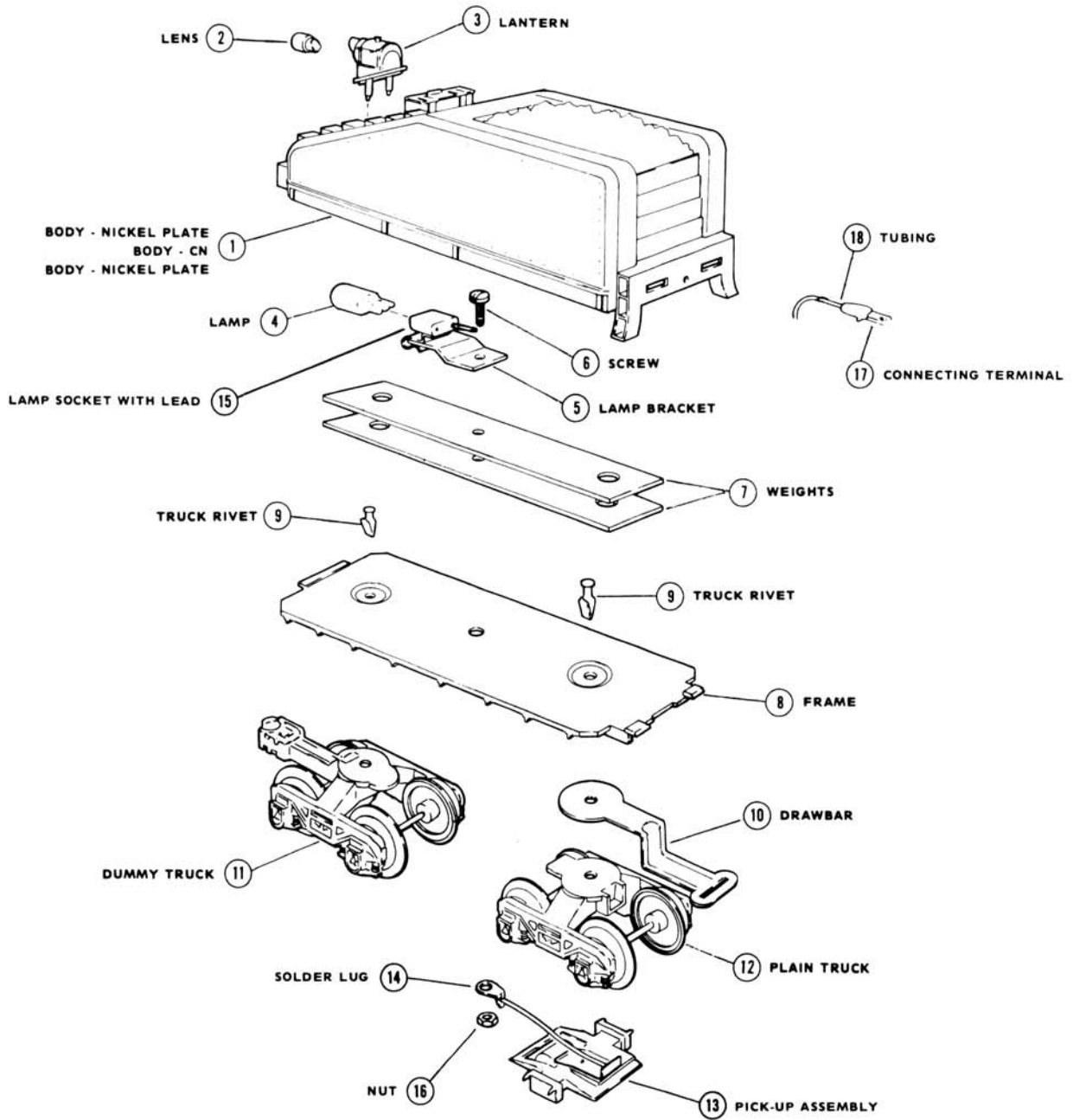
8002-T LARGE ROUND TOP TENDER
w/SIX WHEEL TRUCKS

SECTION Dummy's/Tenders
DATE 11/81

REF. QUANTITY PER UNIT REFERENCE DRAWING

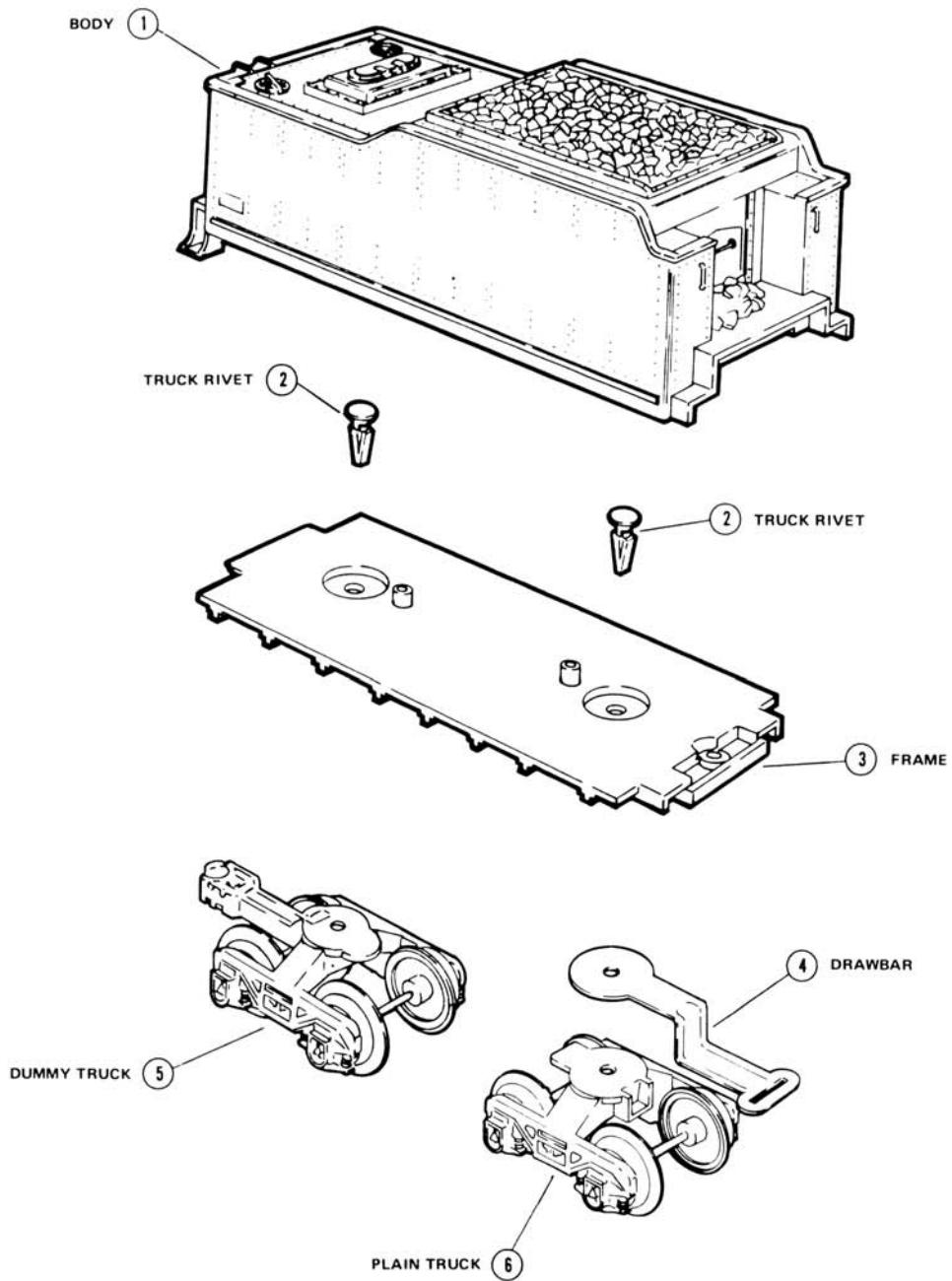
NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8XXX-T3	1	Body (8003 Chessie)
1	8XXX-T14	1	Body - Top Coated
2	8141-22	2	Screw, Body
3	8206-T15	1	Baffle, Speaker
4	8204-T36	1	Speaker
5	8204-T38	2	Clip, Baffle (Pal Nut)
6	8002-T20	1	Circuit Board
7	8251-35	1	Foam Pad
8	8142-T24	1	Terminal, interconnecting-male
9	8141-059	1	Terminal, interconnecting-female
10	8002-T54	1	Frame
11	9805-35	2	Screw, truck
12	2671-W13	1	Water Scoop
13	8002-T55	1	Drawbar
14	8002-T80	1	6-Wheel Truck, operating (8003 Chessie)
14	9329-50	1	6-Wheel Truck, operating
15	8002-T50	1	6-Wheel Truck, plain w/strap (8003 Chessie)
15	8002-T90	1	6-Wheel Truck, plain w/S.O.S. trigger
16		1	Shrink Tube, large
17		1	Shrink Tube, small
18	9570-107	1	Spacer Washer

SLOPE-BACK TENDER WITH BACK-UP LIGHT



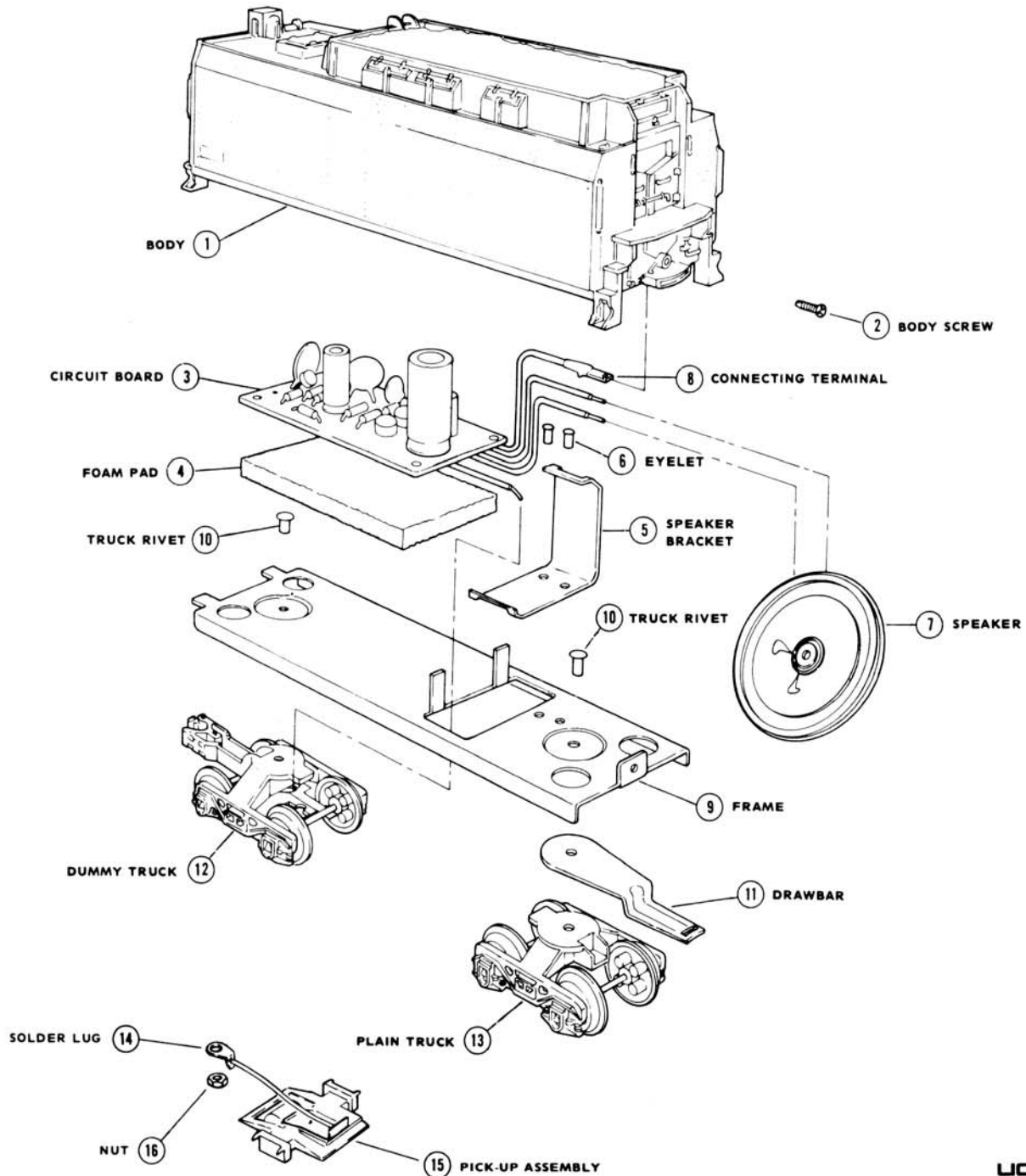
LIONEL

SMALL SQUARE TOP TENDER



LIONEL

LARGE SQUARE TOP TENDER



LIONEL

SQUARE TOP TENDER

W/SOS & WHISTLE

SECTION DUMMY'S/TENDERS

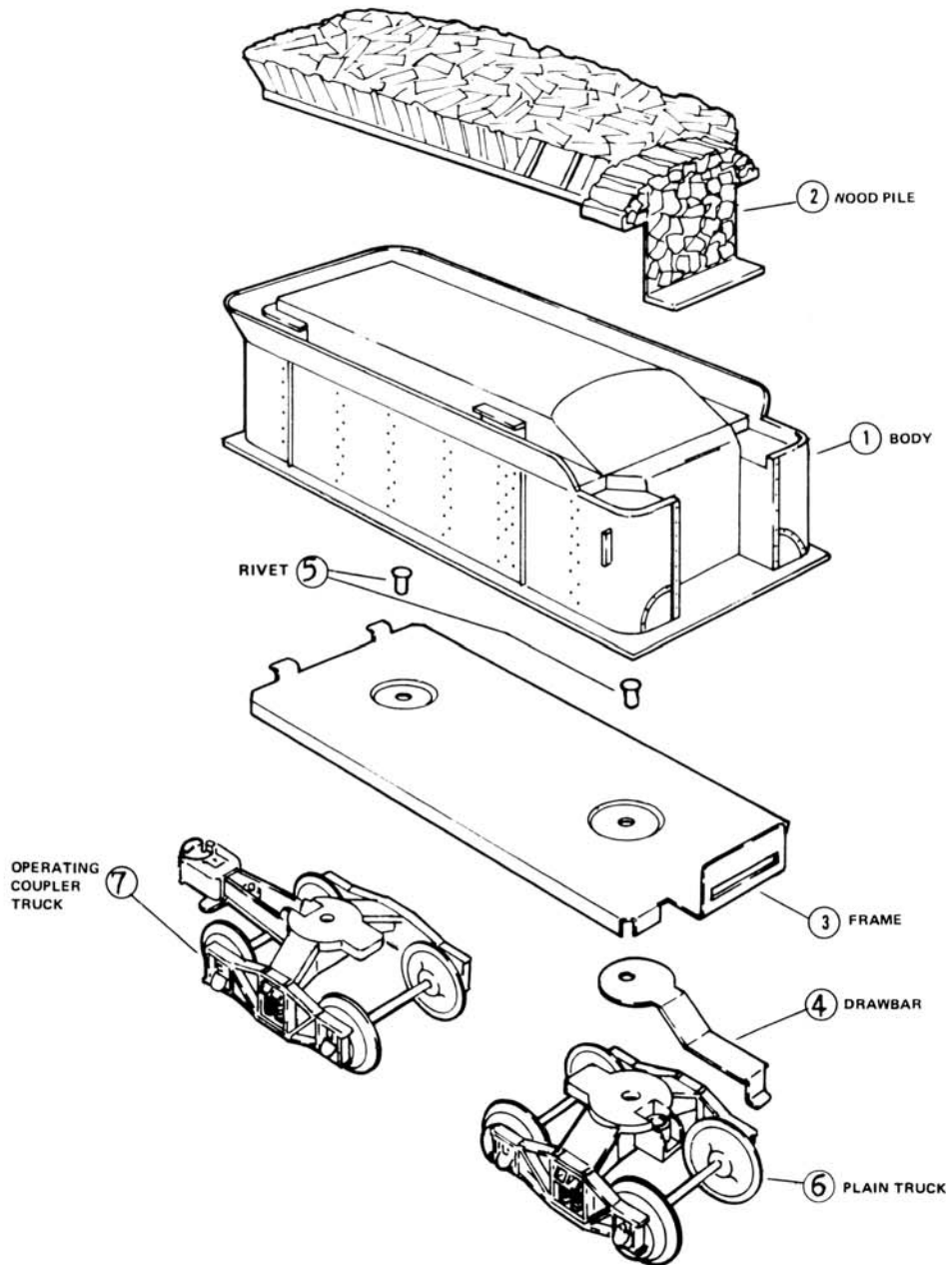
DATE 2-78

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8204T-8	1	Body
2	8040-172	1	Screw (Body Mtg.)
3	8204T-35	1*	Circuit Board
4	8251-35	1*	Double Adhesive Foam Pad
5	8142T-15	1*	Speaker Bracket
6	SE-35	2*	Eyelet (Speaker Bracket)
7	8204T-36	1*	Speaker
8	8142T-24	1*	Connecting Terminal
9	8141T-10	1	Frame
10	566-16	2	Rivet (Truck Mtg.)
11	6026-7	1	Drawbar
12	9150-135	1	Dummy Coupler Truck
13	9150-85	1	Plain Truck W/Die Cast Wheels
15	9050-150		Pick-up Assembly
	9150-175	1*	Axle Contact Assm. (Attaches To Plain Truck)
		*	Components for SOS & Whistle
			For Tenders W/Mechanical SOS Delete Items Marked With "*" And Substitute The Following Parts For Like Components Above:
	8302-T03	1	Frame
	8302-T15	1	Wheel Housing Assm.
	8302-T06	1	Tire (Part Of 8302-T15)

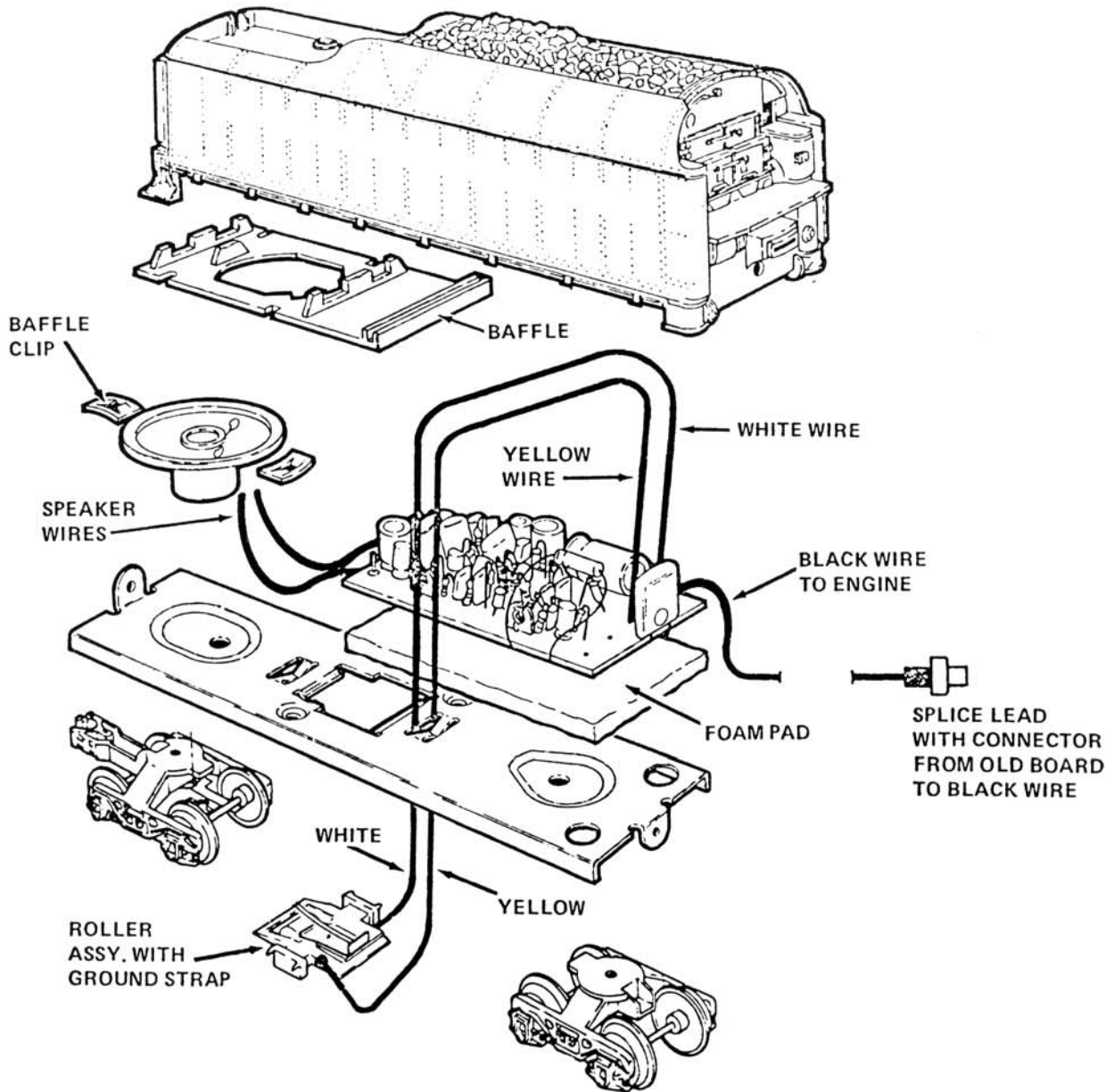
Rev. 6/92

WOOD TENDER – GENERAL TYPE



LIONEL

CONVERSION OF TENDER WITH ELECTRONIC SOUND OF STEAM TO S.O.S. AND WHISTLE



PARTS REQ'D.

- 1 pc. 8002-T20 CIRCUIT BOARD
- 1 pc. 8251-035 FOAM PAD
- 1 pc. 9050-150 ROLLER ASSY. WITH GROUND STRAP
- 1 pc. 8206-T15 SPEAKER BAFFLE
- 2 pcs. 8204-T38 BAFFLE CLIPS

INSTALLATION

FEED WIRES (YELLOW AND WHITE) THROUGH FRAME AS SHOWN.

SOLDER WHITE WIRE TO CENTER ROLLER OF PICKUP.

SOLDER YELLOW WIRE TO GROUND STRAP OF PICKUP.

CUT BLACK WIRE AND SPLICE BLACK WIRE AND CONNECTOR FROM OLD BOARD. INSULATE SPLICE WITH TAPE.

IF SYSTEM DOES NOT FUNCTION PROPERLY REVERSE YELLOW AND WHITE WIRES AT PICKUP.

AUTO CARRIER

FRAME

SECTION ROLLING STOCK

DATE 5-77

REFERENCE
DRAWING

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9123	C & O	1	9123-6	1			
9125	N & W	1	9125-6	1			
9126	C & O	1	9126-6	1			
9129	N & W	1	9129-6	1			
9139	P C	1	9139-6	1			
9145	Illinois Central	1	9145-6	1			
9216	Great Northern	1	9216-6	1			
9281	Santa Fe	1	9281-6	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9123-12	1	Upper Carrier
2	9126-12	1	Upper Carrier
2	9129-12	1	Upper Carrier
2	9139-12	1	Upper Carrier
2	9145-12	1	Upper Carrier
	9216-12		Upper Carrier
2	9281-12	1	Upper Carrier
3	9123-11	1	Lower Carrier
3	9125-11	1	Lower Carrier Only
3	9126-11	1	Lower Carrier
3	9129-11	1	Lower Carrier
3	9139-11	1	Lower Carrier
3	9145-11	1	Lower Carrier
	9216-11		Lower Carrier
3	9281-11	1	Lower Carrier
4	9150-50 A	2	Operating Coupler Truck
5	9700-20	2	Plastic Truck Rivet
5	566-16	2	Metal Truck Rivet
6	9123-7	4	Latch

BOXCAR-Early 9200 & 9700 Units

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

DRAWING

BODY

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY		REF. NO.	PART NUMBER	QUANTITY	
				PER UNIT				PER UNIT	
9200	Illinois Central	1	9200-6	1		2	9200-12	2	
9201	Penn Central	1	9201-6	1		2	9201-12	2	
9202	Santa Fe	1	9202-6	1		2	9202-12	2	
9203	Union Pacific	1	9203-6	1		2	9203-12	2	
9204	Northern Pacific	1	9204-6	1		2	9204-12	2	
9205	Norfolk & Western	1	9205-6	1		2	9205-12	2	
9206	Great Northern	1	9206-6	1		2	9206-12	2	
9207	Soo Line	1	9207-6	1		2	9207-12	2	
9208	CP Rail	1	9208-6	1		2	9208-12	2	
9209	Burlington	1	9209-6	1		2	9209-12	2	
9211	Penn Central	1	9211-6	1		2	9211-12	2	
9214	North Pacific	1	9214-6	1		2	9214-12	2	
9215	Norfolk & Western	1	9215-6	1		2	9215-12	2	
9230	Monon	1	9230-6	1		2	9230-12	2	
9700	Southern	1	9700-6	1		2	9700-12	2	
9702	Soo Line	1	9702-6	1		2	9700-12	2	
9703	C P Rail	1	9703-6	1		2	9700-12	2	
9704	Norfolk & Western	1	9704-6	1		2	9704-12	2	
9705	Denver Rio Grande	1	9705-6	1		2	9705-12	2	
9706	C & O	1	9706-6	1		2	9706-12	2	
9709	State of Maine	1	9709-6	1		2	9709-12	2	
9710	Rutland	1	9710-6	1		2	9710-12	2	

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	6464-5	4	Door Guide - Metal
3	9700-15	2	Door Guide - Plastic
4	9020-10	1	Brakewheel
5	6464-9	1	Frame
6	9150-50	2	Operating Coupler Truck
7	566-16	2	Truck Rivet
8	9700-25	1	Screw - Body Mtg.
9	3656-153	8	Drive Stud - Metal Guide

BOX CAR

SECTION ROLLING STOCK

DATE 10-78

CAT. NO.	DESCRIPTION	REF. NO.	BODY		REFERENCE DRAWING		DOOR		QUANTITY PER UNIT
			PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT		
9400	Con Rail	1	9400-3	1	2	9704-12	2		
9401	Great Northern	1	9401-3	1	2	7603-12	2		
9402	Susquehanna	1	9402-3	1	2	9742-12	2		
9403	Seaboard Coastline	1	9403-3	1	2	9404-12	2		
9404	Nickel Plate High Spd	1	9404-3	1	2	9404-12	2		
9405	Chatahooche Ind.	1	9405-3	1	2	9705-12	2		
9406	Denyer & Rio Grande	1	9406-3	1	2	9704-12	2		
9411	Lackawanna	1	9411-3	1	2	9411-12	2		
9729	C P Rail	1	9729-3	1	2	9715-12	2		

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9700-15	4	Door Guide
4	9020-10	1	Brakewheel
5	6464-9	1	Frame
6	9150-50	2	Operating Coupler Truck
7	566-16	2	Truck Rivet
8	9700-25	1	#4 x 1/4 Flat Hd. Screw
	9550-50	2	Die Cast Operating Die Cast Truck
	9160-500	2	Spacer Washer - Die Cast Truck Mtg.
	9775-350	2	Spacer Bushing - Die Cast Truck Mtg.
	9805-25	2	Screw - Die Cast Truck Mtg.

SINGLE-DOOR BOXCARS

SECTION ROLLING STOCK

DATE 3/79

CAT. NO.	DESCRIPTION	REF. NO.	BODY		REFERENCE DRAWING QUANTITY		DOOR		QUANTITY PER UNIT
			PART NUMBER	PER UNIT	REF. NO.	PART NUMBER			
9412	RF & P	1	9412-3	1	2	9705-12	2		
9413	Napierville Junction	1	9413-3	1	2	9706-12	2		
9414	Cotton Belt	1	9414-3	1	2	9704-12	2		
9415	Prov. & Worcester	1	9415-3	1	2	9751-12	2		
9416	Minn. Dakota & West.	1	9416-3	1	2	9713-12	2		
9417	CP Rail	1	9417-3	1	2	9715-12	2		
9732	Southern Pacific	1	9732-3	1	2	9715-12	2		
9734	Bangor & Aroostock	1	9734-3	1	2	9781-12	2		

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9700-15	4	Door Guide
4	9020-10	1	Brakewheel
5	6464-9	1	Frame
6	9150-50	2	Operating Coupler Truck
7	566-16	2	Truck Rivet
8	9700-25	1	#4 x 1/4 Flat Hd. Screw
	9550-50	2	Die Cast Operating Die Cast Truck
	9160-500	2	Spacer Washer - Die Cast Truck Mtg.
	9775-350	2	Spacer Bushing - Die Cast Truck Mtg.
	9805-25	2	Screw - Die Cast Truck Mtg.

BOX CARS

SECTION ROLLING STOCK
DATE 11/80

CAT. NO.	DESCRIPTION	REF. NO.	BODY		REFERENCE DRAWING	DOOR		QUANTITY PER UNIT
			PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER		
9420	Sentinel	1	9420-3	1	2	9420-12	2	
9421	Maine Central	1	9421-3	1	2	9742-12	2	
9422	E. J. & E.	1	9422-3	1	2	9422-12	2	
9423	NY, NH & H	1	9423-3	1	2	9704-12	2	
9424	T.P.W.	1	9424-3	1	2	9770-12	2	
9426	C & O	1	9426-3	1	2	9426-12	2	
9427	Bay Line	1	9427-3	1	2	9750-12	2	
9428	Toledo Peoria & West.	1	9428-3	1	2	9428-12	2	
9429	Cowen - Early Years	1	9429-3	1	2	7601-12	2	
9430	Cowen - Standard Gauge	1	9430-3	1	2	9705-12	2	
9431	Cowen - Pre-War Years	1	9431-3	1	2	9431-12	2	
9432	Cowen - Post War Years	1	9432-3	1	2	9432-12	2	
9433	Cowen - Golden Years	1	9433-3	1	2	7506-12	2	

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9700-15	4	Door Guide
4	9020-10	1	Brakewheel
5	6464-9	1	Frame
	9775-9	1	Frame - Die Cast Trucks
6	9150-50	2	Operating Coupler Truck
	9550-50	2	Die Cast Coupler Truck
7	566-16	2	Truck Rivet
	8040-172	2	Screw - Die Cast Truck
8	9700-25	1	Screw
9	9775-350	2	Spacer Bushing - Die Cast Truck
10	9160-500	2	Washer - Die Cast Truck

HI CUBE BOX CAR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

DRAWING

BODY

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	BODY		REF. NO.	DOOR	
			PART NUMBER	QUANTITY PER UNIT		PART NUMBER	QUANTITY PER UNIT
9600	Chessie	1	9600-3	1	2	9600-12	2
9601	Illinois Central	1	9601-3	1	2	9601-12	2
9602	Santa Fe	1	9602-3	1	2	9602-12	2
9603	Penn Central	1	9603-3	1	2	9602-12	2
9604	Norfolk & Western	1	9604-3	1	2	9604-12	2
9605	New Haven	1	9605-3	1	2	9605-12	2
9606	Union Pacific	1	9606-3	1	2	9606-12	2
9607	Southern Pacific	1	9607-3	1	2	9607-12	2
9608	Burlington Northern	1	9608-3	1	2	9608-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9020-10	1	Brakewheel
4	9600-10	1	Frame
5	9150-50	2	Operating Coupler Truck
6	9700-20	2	Plastic Truck Rivet

BOX CARS

SECTION ROLLING STOCK

DATE 11/80

CAT. NO.	DESCRIPTION	BODY			REFERENCE DRAWING		DOOR	
		REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT	
9620	N.H.L. Wales	1	9620-3	1	2	7700-12	2	
9621	N.H.L. Campbell	1	9621-3	1	2	7700-12	2	
9622	N.B.A. West	1	9622-3	1	2	7700-12	2	
9623	N.B.A. East	1	9623-3	1	2	7700-12	2	
9624	National League	1	9624-3	1	2	7700-12	2	
9625	American League	1	9625-3	1	2	7700-12	2	

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9700-15	4	Door Guide
4	9020-10	1	Brakewheel
5	6464-9	1	Frame
6	9150-50	2	Operating Coupler Truck
7	566-16	2	Truck Rivet
8	9700-25	1	Screw #4x1/4

BOX CAR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

DRAWING

BODY

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	BODY		DOOR		QUANTITY PER UNIT
			REF. NO.	PART NUMBER	REF. NO.	PART NUMBER	
9708	Post Office	1	9708-6	1	2	9708-12	2
9711	Southern	1	9711-6	1	2	9711-12	2
9713	C P Rail	1	9713-6	1	2	9713-12	2
9714	D & RG	1	9714-6	1	2	9714-12	2
9715	C & O	1	9715-6	1	2	9715-12	2
9716	Penn Central	1	9716-6	1	2	9716-12	2
9717	Union Pacific	1	9717-6	1	2	9717-12	2
9718	Canadian National	1	9718-6	1	2	9718-12	2
9723	Western Pacific	1	9723-6	1	2	9723-12	2
9724	Missouri Pacific	1	9724-6	1	2	9724-12	2
9730	CP Rail	1	9730-6	1	2	9730-12	2
9731	Milwaukee	1	9731-3	1	2	9731-12	2
9735	GT	1	9735-3	1	2	9735-12	2
9737	Central Vermont	1	9737-3	1	2	9737-12	2
9739	D & RG	1	9739-3	1	2	9739-12	2
9740	Chessie	1	9740-3	1	2	9740-12	2
9742	Minn. St. Louis	1	9742-3	1	2	9742-12	2
9743	Sprite	1	9743-3	1	2	9743-12	2
9744	Tab	1	9744-3	1	2	9744-12	2
9745	Fanta	1	9745-3	1	2	9745-12	2
9748	CP Rail	1	9748-3	1	2	9748-12	2
9749	Penn Central	1	9749-3	1	2	9749-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	6464-5	4	Door Guide - Metal
3	9700-15	2	Door Guide - Plastic
4	9020-10	1	Brakewheel
5	6464-9	1	Frame
6	9150-50	2	Operating Coupler Truck
7	566-16	2	Truck Rivet
8	9700-25	1	Screw - Body Mtg.
8	3656-153	8	Drive Stud - Metal Guide
	9723-8	2	Decal - Not Shown - 9723 only

BOX CAR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

BODY DRAWING DOOR

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY	REF. NO.	PART NUMBER	QUANTITY
				PER UNIT			PER UNIT
9750	DT & I	1	9750-3	1	2	9750-12	2
9751	Frisco	1	9751-3	1	2	9751-12	2
9752	L & N	1	9752-3	1	2	9752-12	2
9753	Maine Central	1	9753-3	1	2	9753-12	2
9754	NYC Pacemaker	1	9754-3	1	2	9754-12	2
9755	Union Pacific	1	9755-3	1	2	9755-12	2
9758	Alaska	1	9758-3	1	2	9758-12	2
9759	Rio Grande	1	9759-3	1	2	9759-12	2
9767	Rail Box	1	9767-3	1	2	9767-12	2
9768	Boston & Maine	1	9768-3	1	2	9768-12	2
9769	Bessimer & Lake Erie	1	9769-3	1	2	9769-12	2
9770	Northern Pacific	1	9770-3	1	2	9770-12	2
9771	Norfolk & Western	1	9771-3	1	2	9771-12	2
9777	Virginian	1	9777-3	1	2	9777-12	2
9781	Delaware & Hudson	1	9781-3	1	2	9781-12	2
9782	The Rock	1	9782-3	1	2	9782-12	2
9783	Baltimore & Ohio	1	9783-3	1	2	9783-12	2
9784	Santa Fe	1	9784-3	1	2	9784-12	2
9785	Con Rail	1	9785-3	1	2	9785-12	2
9786	Chicago & NorthWest.	1	9786-3	1	2	9786-12	2
9787	Jersey Central	1	9787-3	1	2	9787-12	2
9788	Lehigh Valley	1	9788-3	1	2	9788-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	6464-5	4	Door Guide - Metal
3	9700-15	2	Door Guide - Plastic
4	9020-10	1	Brakewheel
5	6464-9	1	Frame
6	9150-50	2	Operating Coupler Truck
7	566-16	2	Truck Rivet
8	9700-25	1	Screw - Body Mtg.
9	3656-153	8	Drive Stud - Metal Guide

BOXCARS

SECTION ROLLING STOCK

DATE 3/79

CAT. NO.	DESCRIPTION	ROOF			REFERENCE DRAWING		DOOR	
		REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT	
9873	Ralston Purina	1	9858-17	1	2	9850-12	2	
9874	Miller Lite	1	7507-17	1	2	9874-12	2	
9875	A & P	1	9851-17	1	2	7502-12	2	
9876	Central Vermont	1	9855-17	1	2	9855-12	2	
9877	Gerber	1	9877-17	1	2	9877-12	2	
9878	Good & Plenty	1	9878-17	1	1	9850-12	2	
9880	Santa Fe	1	9881-17	1	2	7503-12	2	
9881	Rath	1	9881-17	1	2	9853-12	2	
9882	NYC	1	9851-17	1	2	9858-12	2	
9883	Oreo Cookies	1	7507-17	1	2	9883-12	2	

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	98XX-3	1	Body
4	9850-15	4	Door Guide (9850-15 alternate Door Guide - plastic)
5	9020-10	1	Brakewheel
6	9150-50	2	Operating Coupler Truck
7	9700-20	2	Plastic Truck Rivet
8	8240-71	1	# 4x1/4 Truss Head Screw
	8900-10	2	Decal (9880 only)
*	8040-172	2	#4x5/16 Pan Head Screw
*	8209-27	2	Spacer Bushing
*	9550-50	2	Die Cast Operating Coupler Truck
			* CARS WITH DIE CAST SPRUNG TRUCKS

7712 BOX CAR SANTA FE

SECTION ROLLING STOCK
 DATE 3/79
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	7712-3	1	Body
2	7712-17	1	Roof
3	9706-12	1	Door - Yellow
4	9020-10	1	Brakewheel
5	9150-50	2	Operating Coupler Truck
6	9700-20	2	Plastic Truck Rivet
7	8240-71	1	Screw (Body Mtg.)
	8900-10	2	Decal

9339 GREAT NORTHERN - SMALL BOX CAR

SECTION ROLLING STOCK
 DATE 3/79
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9339-3	1	Body
2	9040-10	1	Frame
3	9150-90	1	Operatina Truck - Plastic Wheels
4	9150-95	1	Dummy Truck - Plastic Wheels
5	9700-20	2	Truck Rivet - Plastic

9425 BRITISH COLUMBIA
 DOUBLE DOOR BOX CAR

SECTION ROLLING STOCK
 DATE 11/80

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9425-3	1	Body
2	9425-14	2	Door R
	9425-24	2	Door L
1	9425-3	1	Body
2	9425-14	1	Door R - Dark Green
	9425-34	1	Door R - Light Green
	9425-24	1	Door L - Dark Green
	9425-44	1	Door L - Light Green
3	9020-10	1	Brakewheel
4	6468-5	4	Door Guide
5	3656-153	8	Drive Stud
6	9700-25	1	Screw
7	6464-9	1	Frame
8	9150-50	2	Operating Coupler Truck
9	566-16	2	Truck Rivet

BOX CAR - DOUBLE DOOR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

DRAWING

BODY

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9210	B & O	1	9210-6	1	2	9210-12 R	1
					2	9210-15 L	1
9701	B & O	1	9701-6	1	2	9701-12 R	1
					2	9701-13 L	1
9712	B & O	1	9712-6	1	2	9712-12 R	1
					2	9712-13 L	1
9719	New Haven	1	9719-6	1	2	9210-12 R	1
					2	9210-15 L	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9020-10	1	Brakewheel
4	6468-5	4	Door Guide
5	3656-153	8	Drive Stud
6	9700-25	1	Screw
7	6464-9	1	Frame
8	9150-50	2	Operating Coupler Truck
9	566-16	2	Truck Rivet

HI CUBE BOX CAR - DISNEY

SECTION ROLLING STOCK

DATE 5-77

REFERENCE DRAWING

BODY

DOOR

CAT. NO.	DESCRIPTION	BODY			DOOR		
		REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9660	Mickey Mouse	1	9660-3	1	2	9660-12	2
9661	Goofey	1	9661-3	1	2	9661-12	2
9662	Donald Duck	1	9662-3	1	2	9662-12	2
9663	Dumbo	1	9663-3	1	2	9663-12	2
9664	Cinderella	1	9664-3	1	2	9664-12	2
9665	Peter Pan	1	9665-3	1	2	9665-12	2
9666	Pinocchio	1	9666-3	1	2	9666-12	2
9667	Snow White	1	9667-3	1	2	9667-12	2
9668	Pluto	1	9668-3	1	2	9668-12	2
9669	Bambi	1	9669-3	1	2	9669-12	2
9670	Alice In Wonderland	1	9670-3	1	2	9670-12	2
9671	Fantasia	1	9671-3	1	2	9671-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9020-10	1	Brakewheel
4	9600-10	1	Frame
5	9150-50	2	Operating Coupler Truck
6	9700-20	2	Plastic Truck Rivet

BOX CAR - SODA POP ROAD

SECTION ROLLING STOCK

DATE 5-77
REFERENCE
DRAWING

BODY

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	BODY		REF. NO.	DOOR	
			PART NUMBER	QUANTITY PER UNIT		PART NUMBER	QUANTITY PER UNIT
7800	Pepsi	1	7800-3	1	2	9748-12	2
7801	A & W	1	7801-3	1	2	9704-12	2
7802	Canada Dry	1	7802-3	1	2	7506-12	2
7809	Vernors	1	7809-3	1	2	7806-12	2
7810	Orange Crush	1	7810-3	1	2	7700-12	2
7811	Dr. Pepper	1	7811-3	1	2	7700-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9700-15	2	Door Guide (Plastic)
4	9020-10	1	Brakewheel
5	6464-9	1	Frame
6	9150-50	2	Operating Coupler Truck
7	9700-20	2	Truck Rivet (Plastic)
8	8240-71	1	Screw (Body Mtg.)

BOX CARS - SPIRIT OF 76

SECTION ROLLING STOCK

DATE 5-77

ROOF ENDS

REFERENCE

DRAWING

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
7601	Delaware	1	7601-17	1	2	7601-12	2
7602	Pennsylvania	1	7602-17	1	2	7602-12	2
7603	New Jersey	1	7603-17	1	2	7603-12	2
7604	Georgia	1	7604-17	1	2	7602-12	2
7605	Connecticut	1	7601-17	1	2	7602-12	2
7606	Massachusetts	1	7606-17	1	2	7606-12	2
7607	Maryland	1	7607-17	1	2	7601-12	2
7608	South Carolina	1	7608-17	1	2	7608-12	2
7609	New Hampshire	1	7609-17	1	2	9706-12	2
7610	Virginia	1	7610-17	1	2	9723-12	2
7611	New York	1	7610-17	1	2	7606-12	2
7612	North Carolina	1	7607-17	1	2	7608-12	2
7613	Rhode Island	1	7603-17	1	2	7613-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	76XX-3	1	Body
4	9020-10	1	Brakewheel
5	6672-15	2	Truck Beam
5	7601-26	2	Truck Beam
6	8240-71	1	Screw (Truck Beam)
7	9150-50	2	Operating Coupler Truck
8	9700-20	2	Truck Rivet (Plastic)
9	9850-15	2	Door Guide - plastic

STANDARD "O" BOX CAR

SECTION ROLLING STOCK

DATE 5-77
REFERENCE

DRAWING

BODY

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	BODY		REF. NO.	DOOR	
			PART NUMBER	QUANTITY PER UNIT		PART NUMBER	QUANTITY PER UNIT
9801	B & O	1	9801-3	1	2	9801-12	2
9803	Johnson Wax	1	9803-3	1	2	9803-12	2
9806	Rock Island	1	9806-3	1	2	9806-12	2
9826	N.Y. Central P&E	1	9826-3	1	2	9826-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9020-10	1	Brakewheel
4	9801-15	2	Door Guide
4	9803-15	2	Door Guide
5	9801-16	1	Catwalk
5	9803-16	1	Catwalk (9803 - 9806)
6	9805-9	1	Underframe
7	9550-50	2	Operating Die Cast Truck
8	8142-41	2	Spacer Bushing
9	9805-35	2	Screw
9	8040-172	2	Screw - Alternate
	9801-6	1	Decal - Not Shown

BOX CAR - TABACCO ROAD

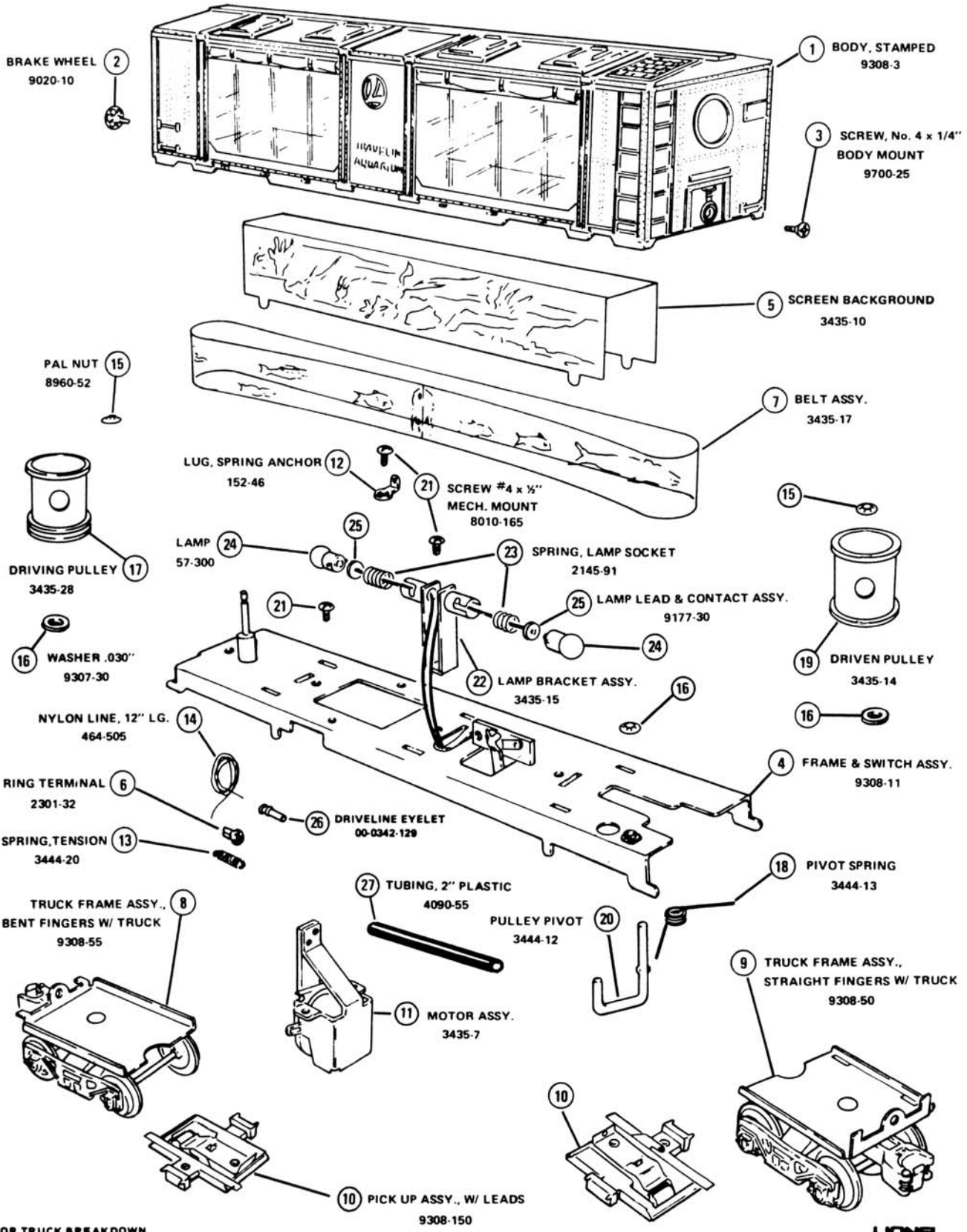
SECTION ROLLING STOCK
 DATE 5-77
 REFERENCE
 DRAWING
 ROOF/ENDS
 DOOR

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
7701	Camel	2	7701-17	1	3	7701-12	2
7702	Prince Albert	2	7607-17	1	3	7702-12	2
7703	Beech-Nut	2	7604-17	1	3	9735-12	2
7706	Sir Walter Raleigh	2	7610-17	1	3	7506-12	2
7707	White Owl	2	7701-17	1	3	7707-12	2
7708	Winston	2	7603-17	1	3	7506-12	2
7709	Salem	2	7603-17	1	3	7506-12	2
7710	Mail Pouch	2	7604-17	1	3	7710-12	2
7711	El Producto	2	7604-17	1	3	9706-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	77XX-3	1	Body
4	9020-10	1	Brakewheel
5	9150-50	2	Operating Coupler Truck
6	9700-20	2	Plastic Truck Rivet
7	8240-71	1	Screw (Body Mtg.)

9308 AQUARIUM CAR



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

BUNK CAR

SECTION ROLLING STOCK

DATE 3-84

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
	00-57XX-007	1	Body
	00-57XX-024	1	Roof
	00-9020-010	1	Brakewheel
	90-8040-T50	2	Screw, #4x7/16", body mount
	00-0566-016	2	Rivet, truck mount
	90-8701-T70	2	Trucks
	00-9160-017	1	Pickup assembly
	00-8352-300	1	Lamp & socket
	00-5717-045	1	Lamp bracket
	00-5717-016	1	Window glazing
	00-9060-006	1	Smokestack
	00-8111-030	2	Marker lamp

CAT. NO.	DESCRIPTION	BODY			ROOF		
		REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
5717	ATSF		5717-7	1		5717-24	1
5724	PRR		5724-7	1		5724-24	1
5726	SOU		5726-7	1		5726-24	1
5727	USMC		5727-7	1		5727-27	1

7904 GIRAFFE CAR

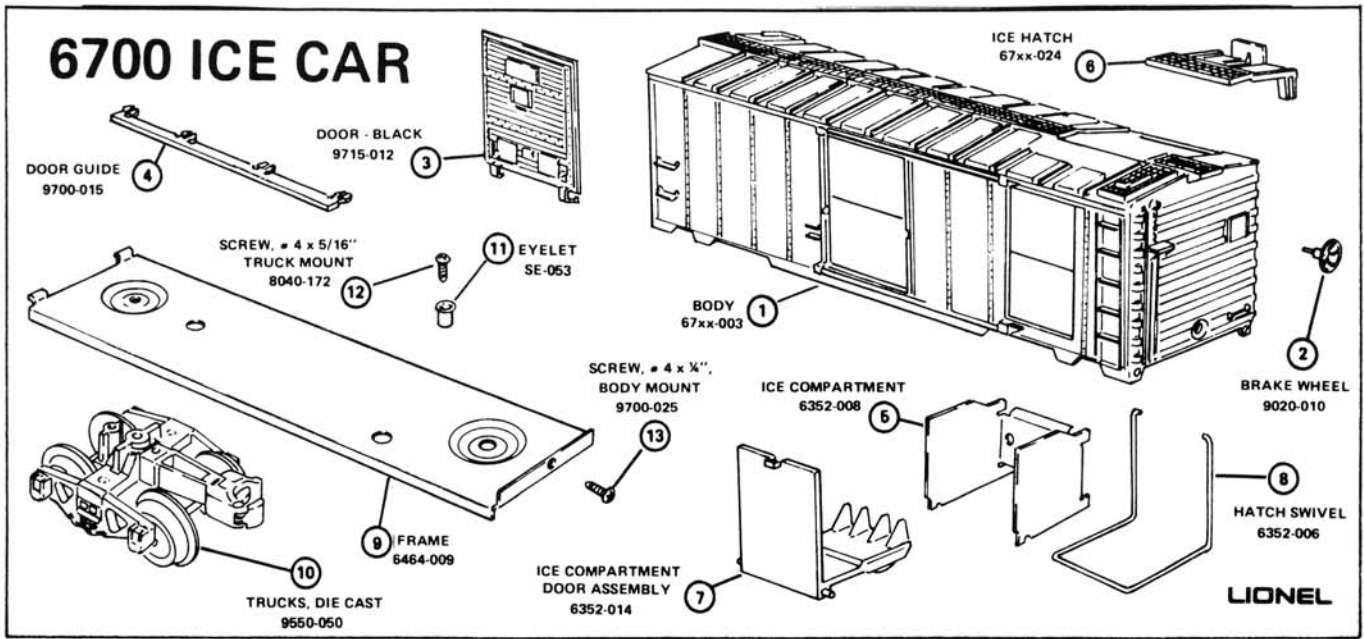
SECTION ROLLING STOCK
DATE 10/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	00-7904-003	1	Body
2	00-3376-014	1	Giraffe head lever
3	00-3376-018	1	Weight
4	00-3376-013	1	Lever
5	00-0101-089	2	Compression ring
6	00-3360-050	1	Pinion shaft
7	00-3376-017	1	Pin
8	00-3376-011	1	Frame
9	00-9150-050	1	Operating coupler truck
10	00-9150-075	1	Dummy coupler truck
11	00-0566-016	2	Rivet
12	00-8010-165	2	Screw, #4x $\frac{1}{4}$ ", body mount
13	00-3376-016	1	Tension spring
14	00-3376-105	1	Cam plate assembly
15	00-3424-080	1	Support base assembly
16	00-3376-111	1	Cam spring
17	00-3424-084	1	Spring
18	00-7904-079	1	Tell tale support rod
19	00-3424-077	1	Tell tale support
20	00-3424-078	12	Tell tale
21	00-7904-080	1	End retainer

GOLD BULLION CAR 7515 7517 7518
 9319 9320 9349

SECTION ROLLING STOCK
 DATE 3/79
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-3	1	Body
2	9020-10	1	Brakewheel
3	9320-14	1	Bullion Load, Bronze
3	6445-10	1	Bullion Load, Silver
4	6464-9	1	Frame
5	9150-50	2	Operating Coupler Truck
6	566-16	2	Truck Rivet
7	9700-25	1	#4x1/4 FH Screw
			ALTERNATE PARTS (NOT SHOWN ON DRAWINGS)
	9550-50	2	Die Cast Standard "0" Truck
	9775-9	1	Frame
	9775-350	2	Spacer
	9160-500	2	Fix-It Washer
	8040-172	2	#4x5/16 RH Screw

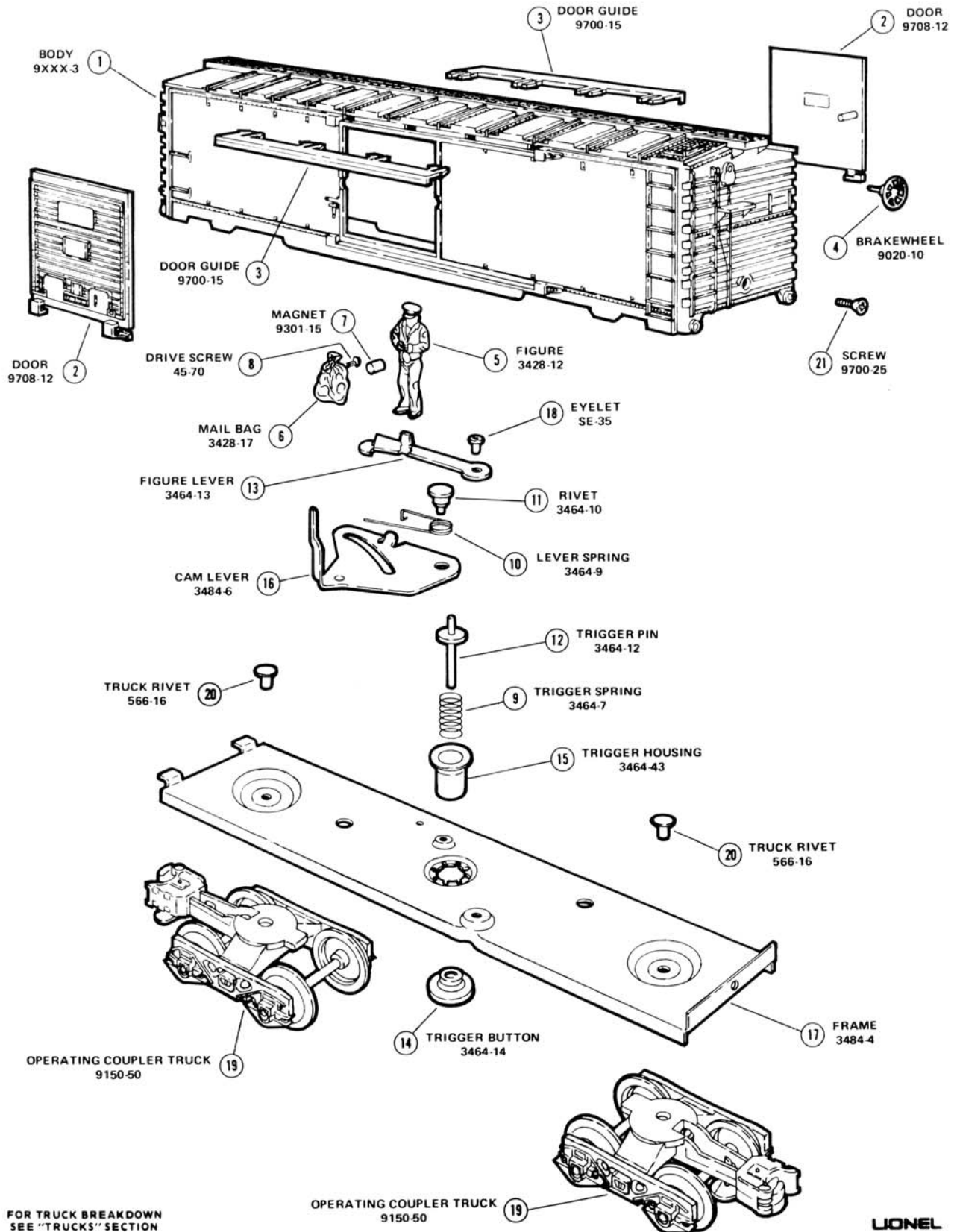


6700 ICE CAR

SECTION ROLLING STOCK
DATE 11/82

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	67XX-003	1	Body
2	9020-010	1	Brakewheel
3	9715-012	2	Door - Black
4	9700-015	4	Door guide
5	6352-008	1	Ice compartment
6	67XX-024	1	Ice hatch
7	6352-014	1	Ice compartment door assembly
8	6352-006	1	Hatch swivel
9	6464-009	1	Frame
10	9550-050	2	Trucks, die cast
11	SE-053	2	Eyelet
12	8040-172	2	Screw, #4x5/16", truck mount
13	9700-025	1	Screw, #4x1/4", body mount

OPERATING POST OFFICE CAR



BILLBOARD REEFERS

SECTION ROLLING STOCK

DATE 5-77
 REFERENCE
 ROOF/ENDS DRAWING

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
7502	Anniversary	2	9851-17	1	3	7502-12	2
7503	Anniversary	2	9858-17	1	3	7503-12	2
7507	Anniversary	2	7507-17	1	3	7507-12	2
9850	Budweiser	2	9850-17	1	3	9850-12	2
9851	Schlitz	2	9850-17	1	3	9850-12	2
9852	Miller	2	9850-17	1	3	9850-12	2
9853	Cracker Jacks	2	9850-17	1	3	9853-12	2
9854	Baby Ruth	2	9854-17	1	3	9854-12	2
9855	Swift	2	9855-17	1	3	9855-12	2
9856	Old Milwaukee	2	9856-17	1	3	9856-12	2
9858	Butterfinger	2	9858-17	1	3	9858-12	2
9859	Pabsts	2	9859-17	1	3	9859-12	2
9860	Gold Medal	2	9860-17	1	3	9860-12	2
9861	Tropicana	2	9861-17	1	3	9861-12	2
9862	Hamm's	2	9862-17	1	3	9862-12	2
9863	Railway Express	2	9863-17	1	3	9863-12	2
9865	Schaefer	2	9850-17	1	3	9865-12	2
9866	Cooks	2	9851-17	1	3	9850-12	2
9867	Hershey	2	9867-17	1	3	9855-12	2
9870	Dutch Clenser	2	9850-17	1	3	9865-12	2
9871	Carlings	2	9855-17	1	3	9856-12	2
9872	Pacific Fruit	2	9867-17	1	3	7503-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	98XX-3	1	Body
4	6672-16	4	Door Guide (9850-15 alternate Door Guide - plastic)
5	6672-18	2	Floating Spring
6	3656-153	8	Drive Stud
7	9020-10	1	Brakewheel
8	7501-26	2	Truck Beam
9	9150-50	2	Operating Coupler Truck
10	566-16	2	Truck Rivet (Metal)
10	9700-20	2	Truck Rivet (Plastic)
11	8240-71	1	Screw
			NOTE: 7501-26 REPLACES 6672-15

BILLBOARD REEFERS

SECTION ROLLING STOCK

DATE 11/80

ROOF ENDS

DOOR

CAT. NO.	DESCRIPTION	REF. NO.	QUANTITY		REF. NO.	QUANTITY	
			PART NUMBER	PER UNIT		PART NUMBER	PER UNIT
9811	Union Pacific	2	9851-17	1	3	7502-12	2
9812	Arm & Hammer	2	9812-17	1	3	9812-12	2
9813	Ruffles Potatoe Chips	2	9813-17	1	3	9813-12	2
9814	Perrier	2	9814-17	1	3	9814-12	2
9816	Brachs Candies	2	9881-17	1	3	9816-12	2
9817	Bazooka Bubble Gum	2	9817-17	1	3	9817-12	2
9818	Western Maryland	2	9818-17	1	3	9858-12	2
9879	Hills Bros. Coffee	2	9879-17	1	3	9865-12	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	98XX-3	1	Body
4	9020-10	1	Brakewheel
5	9150-50	2	Operating Coupler Truck
5	9550-50	2	Die Cast Operating Coupler Truck
6	9700-20	2	Plastic Truck Rivet (9150-50 Mtg)
7	8040-71	1	Screw (Body Mtg)
8	9775-350	2	Spacer Bushing (9550-50 Mtg)
9	8040-172	2	Screw (9550-50 Mtg)
10	566-16	2	Truck Rivet (9150-50 Mtg. - optional)
11	9850-15	2	Door Guide - plastic

REFRIGERATOR CAR - SHORT (9")

SECTION ROLLING STOCK

DATE 5-77

BODY

REFERENCE DRAWING

FRAME

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9037	Conrail	1	9037-3	1	2	9040-10	1
9040	Wheaties	1	9040-3	1	2	9050-12	1
9041	Hersheys	1	9041-3	1	2	9050-12	1
9042	Autolite	1	9042-3	1	2	9050-12	1
9043	Erie Lackawanna	1	9043-3	1	2	9040-10	1
9044	Denver & Rio Grande	1	9044-3	1	2	9040-10	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9150-50	1	Operating Coupler Truck
3	9150-90	1	Operating Coupler Truck (9043 Only)
4	9150-75	1	Dummy Coupler Truck
4	9150-95	1	Dummy Coupler Truck (9043 Only)
5	566-16	2	Truck Rivet

STANDARD "O" REFRIGERATOR CAR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE
DRAWING

BODY

CATWALK

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9802	Miller	1	9802-3	1	2	9802-16	1
9805	Grand Trunk	1	9805-3	1	2	9801-16	1
9807	Strohs	1	9807-3	1	2	9803-16	1
9809	Clark	1	9809-3	1	2	9809-16	1
9825	Schaefer	1	9825-3		2	9808-16	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9020-10	1	Brakewheel
4	9805-9	1	Underframe
5	9550-50	2	Operating Die Cast Truck
6	8142-41	2	Spacer Bushing
7	9805-35	2	Screw
7	8040-172	2	Screw - Alternate

WOODSIDE REEFER 5708 5709 5710 5711 5712 5713
 5714 5715 5716 5719 5720 5721
 5722

SECTION ROLLING STOCK
 DATE 5/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	57XX-007	1	Body
2	57XX-024	1	Roof
3	57XX-014	2	Door
4	566-016	2	Rivet
5	9020-010	1	Brake wheel
6	90-8040-T50	2	Screw, #4x7/16" roof mount
7	90-8701-T70	2	Operating truck

STOCK CAR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

DRAWING

BODY

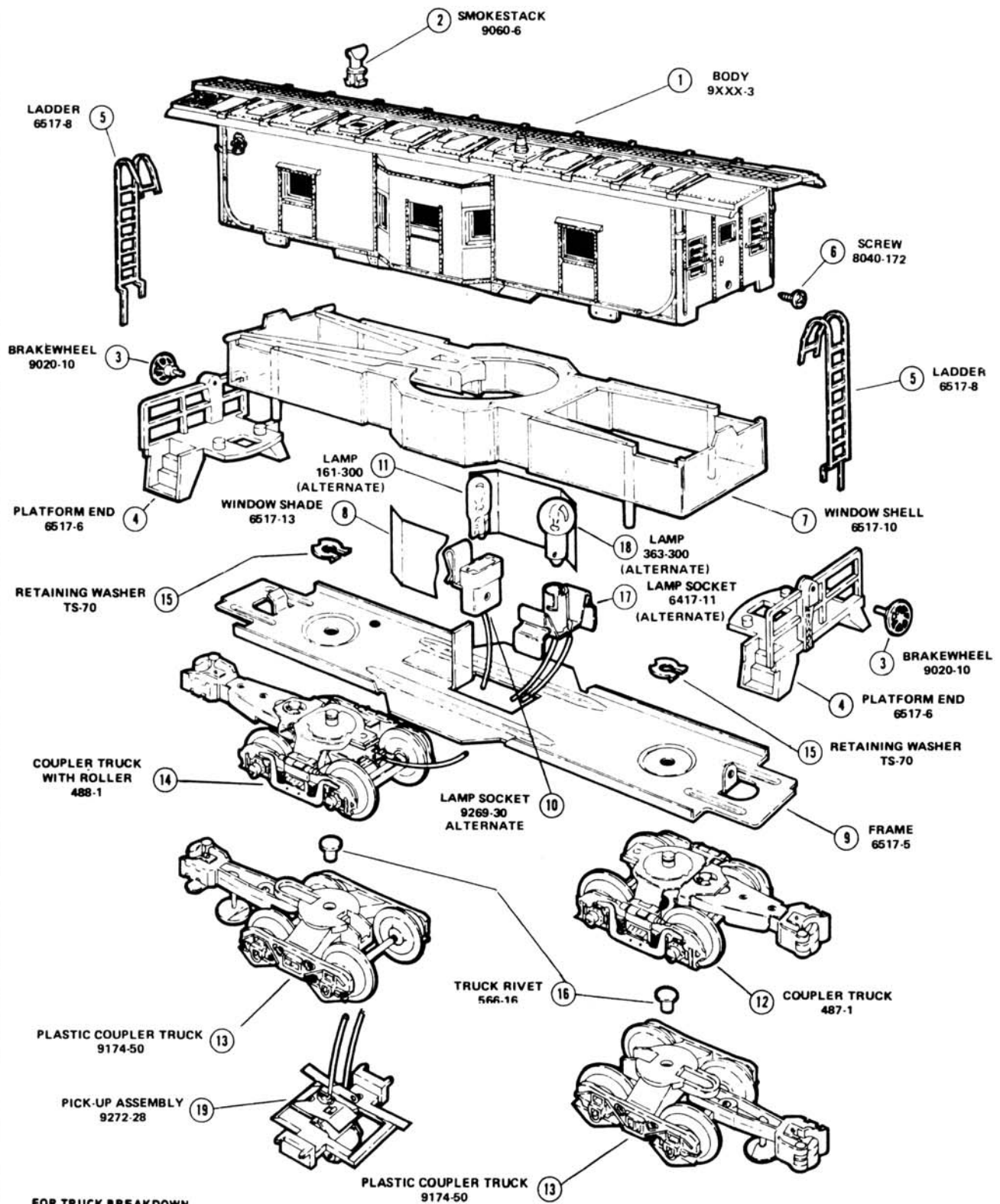
DOOR

CAT. NO.	DESCRIPTION	REF. NO.	BODY		REF. NO.	DOOR	
			PART NUMBER	QUANTITY PER UNIT		PART NUMBER	QUANTITY PER UNIT
9407	Union Pacific	1	9407-6	1	2	9725-14 U	2
					2	9725-15 L	2
9408	Stock Car	1	9408-6	1	2	9408-14 U	2
					2	9408-15 L	2
9707	MKT	1	9707-6	1	2	9707-12 U	2
					2	9707-13 L	2
9725	MKT	1	9725-6	1	2	9725-14 U	2
					2	9725-15 L	2
						NOTE:	
						U-Upper	
						L-Lower	

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	6464-5	4	Door Guide
3	6356-10	2	Center Door Guide
4	3656-153	8	Drive Stud
5	9020-10	1	Brakewheel
6	6350-19	1	Frame - 9408-29 Frame (9408 only)
7	9150-50	2	Operating Coupler Truck
7	9550-50	2	Die Cast Operating Coupler Truck (9408)
8	566-16	2	Truck Rivet
9	9700-25	1	Screw
10	9775-350	2	Spacer Bushing (9550-50 Mtg)
11	9160-500	2	Spacer Washer (9550-50 Mtg)
12	9805-35	2	4/40 x 3/8 Truss Hd Sc. (9550-50 Mtg)

BAY WINDOW CABOOSE



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

BAY WINDOW CABOOSE

9316 9317 9231
9323 9326

SECTION ROLLING STOCK
DATE 3 / 79

BODY REFERENCE DRAWING DOOR

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QTY. PER UNIT	REF. NO.	PART NUMBER	QTY. PER UNIT
9231	Reading	1	9231-3	1			
9316	Southern Pacific	1	9316-3	1			
9317	Santa Fe	1	9317-3	1			
93233	Santa Fe	1	9323-3	1			
9326	Burlington Northern	1	9326-3	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QTY. PER UNIT	DESCRIPTION
2	9060-6	1	Smokestack
3	9020-10	2	Brakewheel
4	6517-6	2	Platform End
5	6517-8	2	Ladder
6	8040-172	1	Screw (Body Mtg.)
7	6517-10	1	Window Shell
8	6517-13	2	Window Shade
9	6517-5	1	Frame
10	9269-30	1	Lamp Socket
11	161-300	1	Lamp
12	61-22	1	Washer & Eyelet (Not Shown)
13	487-1	1	Coupler Truck
13	9174-50	2	Plastic Coupler Truck
14	488-1	1	Coupler Truck w/Roller
15	TS-70	2	Retaining Washer
16	566-16	2	Truck Rivet
17	6417-11	1	Lamp Socket
18	57-300	1	Lamp

Rev. 6/92

NOTE: 2145-91 or R-91 Lamp Spring Socket used only with Lamp Socket 6417-11 (Not Shown).

BAY WINDOW CABOOSE

SECTION Rolling Stock

DATE 11/81

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9060-6	1	Smokestack
3	9020-10	2	Brakewheel
4	6517-6	2	Platform End
5	6517-8	2	Ladder
6	8040-172	1	Screw #4x5/16 RH
7	6517-10	1	Window Shell
8	6517-13	2	Window Shade
9	6517-5	1	Frame
10	6417-11	1	Lamp Socket with Lead
11	161-300	1	Lamp
12	487-1	1	Coupler Truck
13	9174-50	2	Plastic Coupler Truck, Alternate
14	488-1	1	Coupler Truck w/roller
15	TS-70	2	Retaining Washer
16	566-16	2	Truck Rivet (Plastic Truck)
17	9272-30	1	Lamp Socket 9309 9355 9361
18	363-300	1	Lamp
19	9272-28	1	Pick-up Assembly w/Ground Strap
1	XXXX-3	1	Body

BOBBER CABOOSE

SECTION ROLLING STOCK

DATE 5-77

REFERENCE CUPOLA/ROOF
DRAWING

BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY	REF. NO.	PART NUMBER	QUANTITY
				PER UNIT			PER UNIT
9067	Kickapoo Valley & N.	1	9067-16	1	2	9067-30	1
9068	Reading	1	9068-16	1	2	9068-30	1
9071	Santa Fe	1	9071-4	1	2	9071-30	1
9072	Union Pacific	1	9072-4	1	2	9072-30	1
9078	Rock Island	1	9078-4	1	2	9071-30	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9067-50	1	Stove Pipe
4	9067-40	1	End Railing
5	9067-10	1	Frame
6	9090-18	2	Coupler
7	8240-71	2	Screw (Coupler Mt.)
8	9150-54	2	Wheels & Axle

EXTENDED VISION CABOOSE

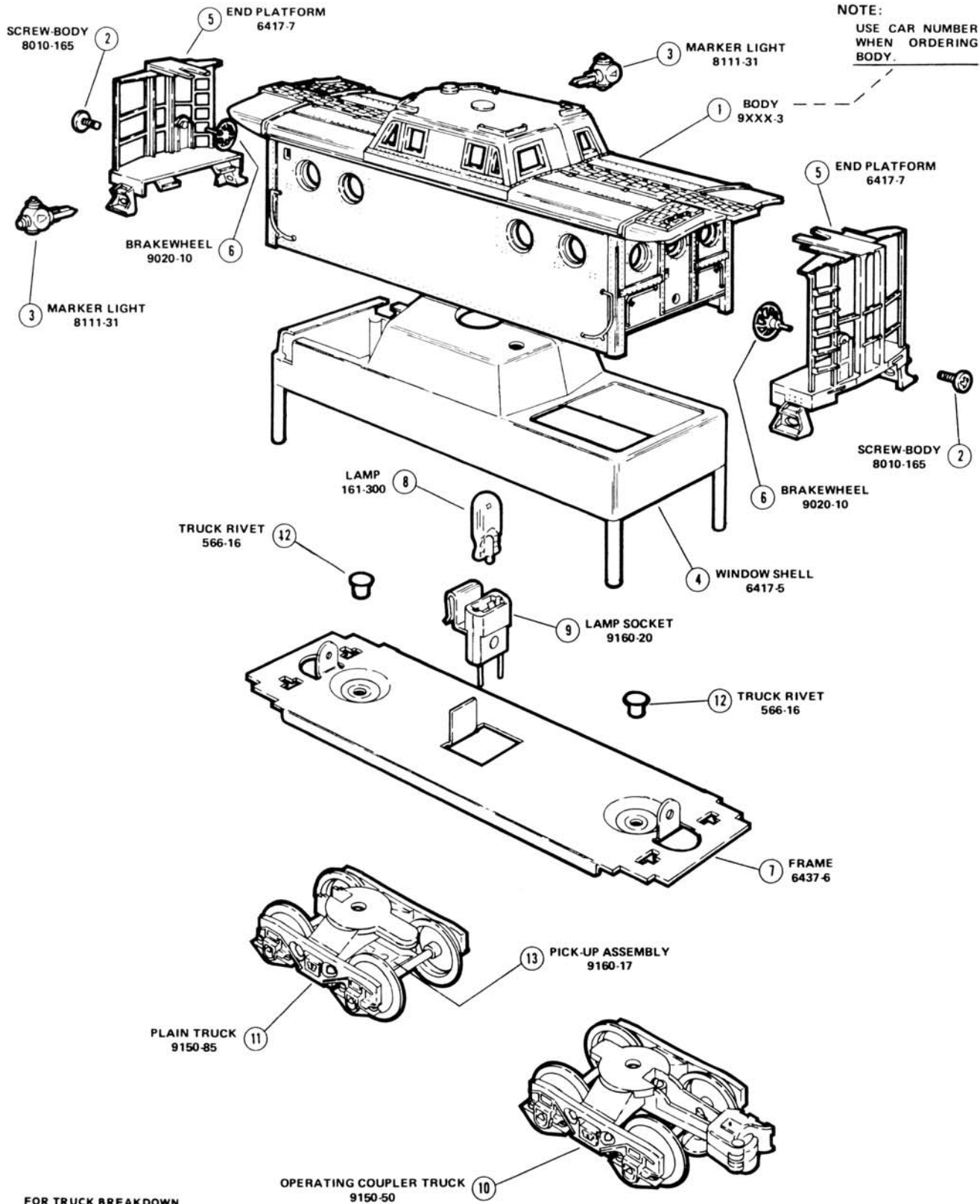
6900 6901 6903 6904
6905 6906 6910 6913

SECTION ROLLING STOCK

DATE 10/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	00-69XX-003	1	Body
2	00-69XX-024	1	Cupola painted
2	00-69XX-013	1	Cupola stamped
3	00-6900-015	1	Window shell
4	00-6900-035	1	Cupola window shell
5	00-6900-055	4	Lantern lens, red
6	00-6517-008	2	Ladder, where appicable
7	00-6900-045	1	Smoke stack
8	00-6517-006	2	Platform end
9	00-9020-010	2	Brakewheel
10	00-6900-058	1	Frame
11	00-0487-001	1	Coupler truck
12	00-0488-001	1	Coupler truck with pickup
13	00-9269-030	1	Light socket assembly
14	00-0161-300	1	Lamp 12V
15	00-6900-026	1	Light shield
16	00-9570-107	2	Washer
17	90-671M-022	2	Retaining ring
18	00-6900-085	1	Underframe
19	00-6900-065	1	Battery box
20	00-6900-075	1	Air tank
21	00-8040-172	1	Screw, #4x5/16"
22	6904-6	1	Underframe - grey UP
23	8960-52	2	Palnut to retain underframe

PORTHOLE CABOOSE (illuminated)



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

PORTHOLE CABOOSE
(ILLUMINATED)

SECTION ROLLING STOCK

DATE 5-77
REFERENCE
DRAWING

BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
7508	Anniversary	1	7508-3	1			
7600	Spirit of 76	1	7600-3	1			
9160	Illinois Central	1	9160-3	1			
9161	Canadian Pacific	1	9161-3	1			
9162	Pennsylvania	1	9162-3	1			
9163	ATSF	1	9163-3	1			
9164	NYC	1	9164-3	1			
9165	Canadian Pacific	1	9165-3	1			
9167	Chessie	1	9167-3	1			
9168	Union Pacific	1	9168-3	1			
9175	Virginian	1	9175-3	1			
9180	The Rock	1	9180-3	1			
9181	B & M	1	9181-3	1			
9182	N & W	1	9182-3	1			
9183	Disney	1	9183-3	1			
9185	Grand Trunk	1	9185-3	1			
9186	Con Rail	1	9186-3	1			
9270	Northern Pacific	1	9270-3	1			
9278	Southern	1	9278-3	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	8010-165	2	Screw (Body Mtg.)
3	8111-31	2	Marker Light
4	6417-5	1	Window Shell
5	6417-7	2	End Platform
6	9020-10	2	Brakewheel
7	6437-6	1	Frame
8	161-300	1	Lamp
9	9160-20	1	Lamp Socket
10	9150-50	1	Operating Coupler Truck
11	9150-85	1	Plain Truck
12	566-16	2	Truck Rivet
13	9160-17	1	Pick-up Assembly

SQUARE WINDOW CABOOSE

SECTION ROLLING STOCK

DATE 5-77

REFERENCE DRAWING

BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY	REF. NO.	PART NUMBER	QUANTITY
				PER UNIT			PER UNIT
9057	C P Rail	1	9057-3	1			
9058	Lionel Lines	1	9058-3	1			
9060	Nickel Plate	1	9060-3	1			
9061	Santa Fe	1	9061-3	1			
9062	Penn Central	1	9062-3	1			
9063	Grand Trunk & West	1	9063-3	1			
9064	C & O	1	9064-3	1			
9065	Canadian National	1	9065-3	1			
9066	Great Northern	1	9066-3	1			
9069	Jersey Central	1	9069-3	1			
9070	Rock Island	1	9070-3	1			
9073	Coke	1	9073-3	1			
9074	MKT	1	9074-3	1			
9075	Rock Island	1	9075-3	1			
9076	Liberty Special	1	9076-3	1			
9080	Wabash	1	9080-3	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9060-6	1	Smokestack
3	9020-10	2	Brakewheel
4	9060-20	2	End Railing & Platform
4	9060-25	2	End Railing & Platform W/Brakewheel
5	9060-5	1	Frame
6	9150-50	1	Operating Coupler Truck
6	9150-90	1	Operating Coupler Truck - Plastic Wheels
7	9150-85	1	Plain Truck
7	9150-95	1	Dummy Coupler Truck - Plastic Wheels
8	566-16	2	Truck Rivet (Metal)
9	9700-20	2	Alternate Truck Rivet (Plastic)
			NOTE: 9060-25 MAY BE USED IN PLACE OF 9060-20 & 9020-10

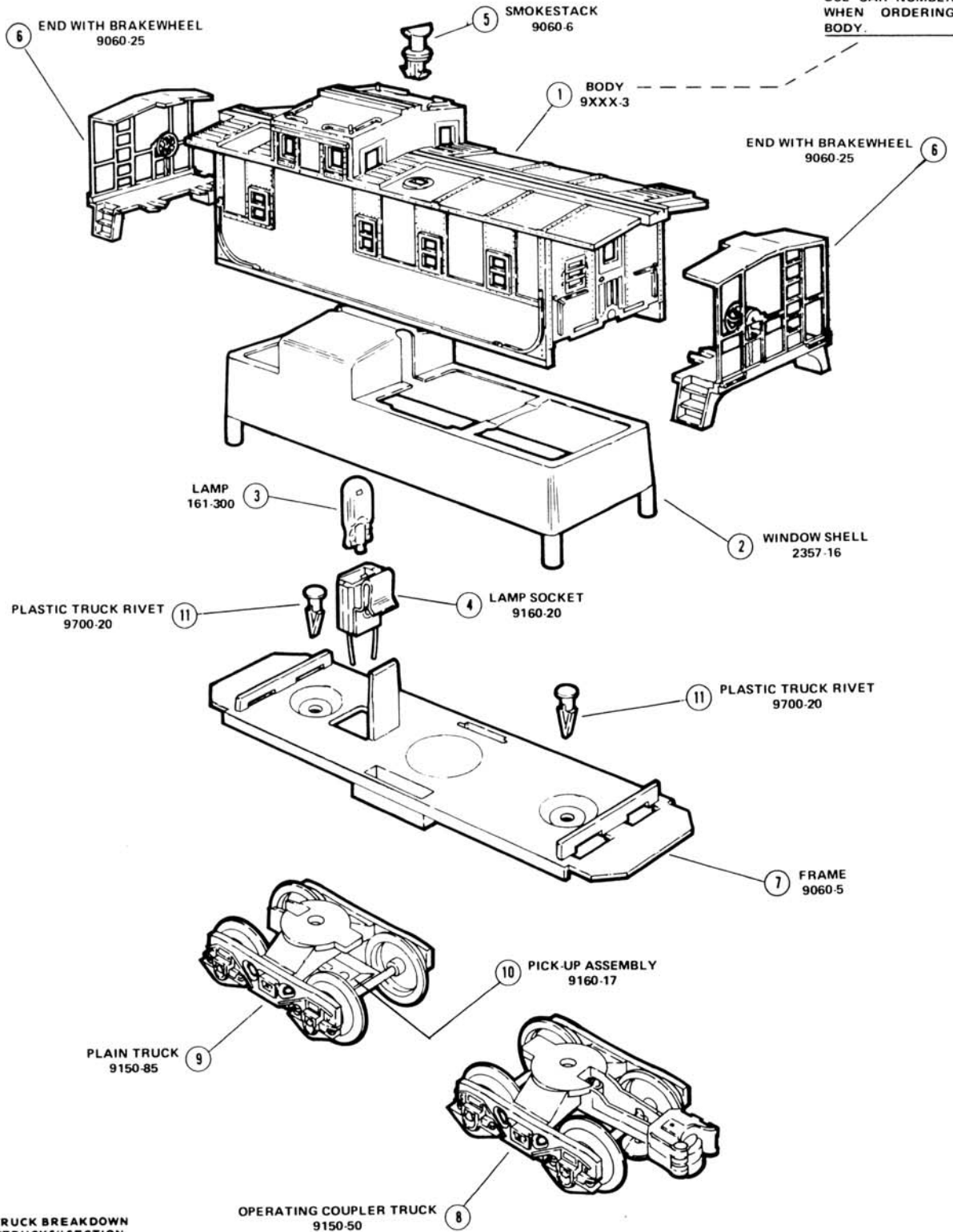
9341 ATLANTIC COAST LINE - SQUARE WINDOW CABOOSE
 9346 WASBASH - SQUARE WINDOW CABOOSE

SECTION ROLLING STOCK
 DATE 3/79
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9341-3	1	Body
1	9346-3	1	Body
2	9060-6	1	Smokestack
3	9020-10	1	Brakewheel
4	9060-25	2	Caboose Ends W/Brakewheel
5	9060-5	1	Frame
6	9150-90	1	Operating Coupler Truck -Plastic Wheels
7	9150-95	1	Plain Truck - Plastic Wheels
8	566-16	2	Truck Rivet - Metal
9	9700-20	2	Truck Rivet - Plastic
	9341-15	1	Window Shell

SQUARE WINDOW CABOOSE (illuminated)

NOTE:
USE CAR NUMBER
WHEN ORDERING
BODY.



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

SQUARE WINDOW CABOOSE
(ILLUMINATED)

SECTION ROLLING STOCK
DATE 5-77
REFERENCE DRAWING

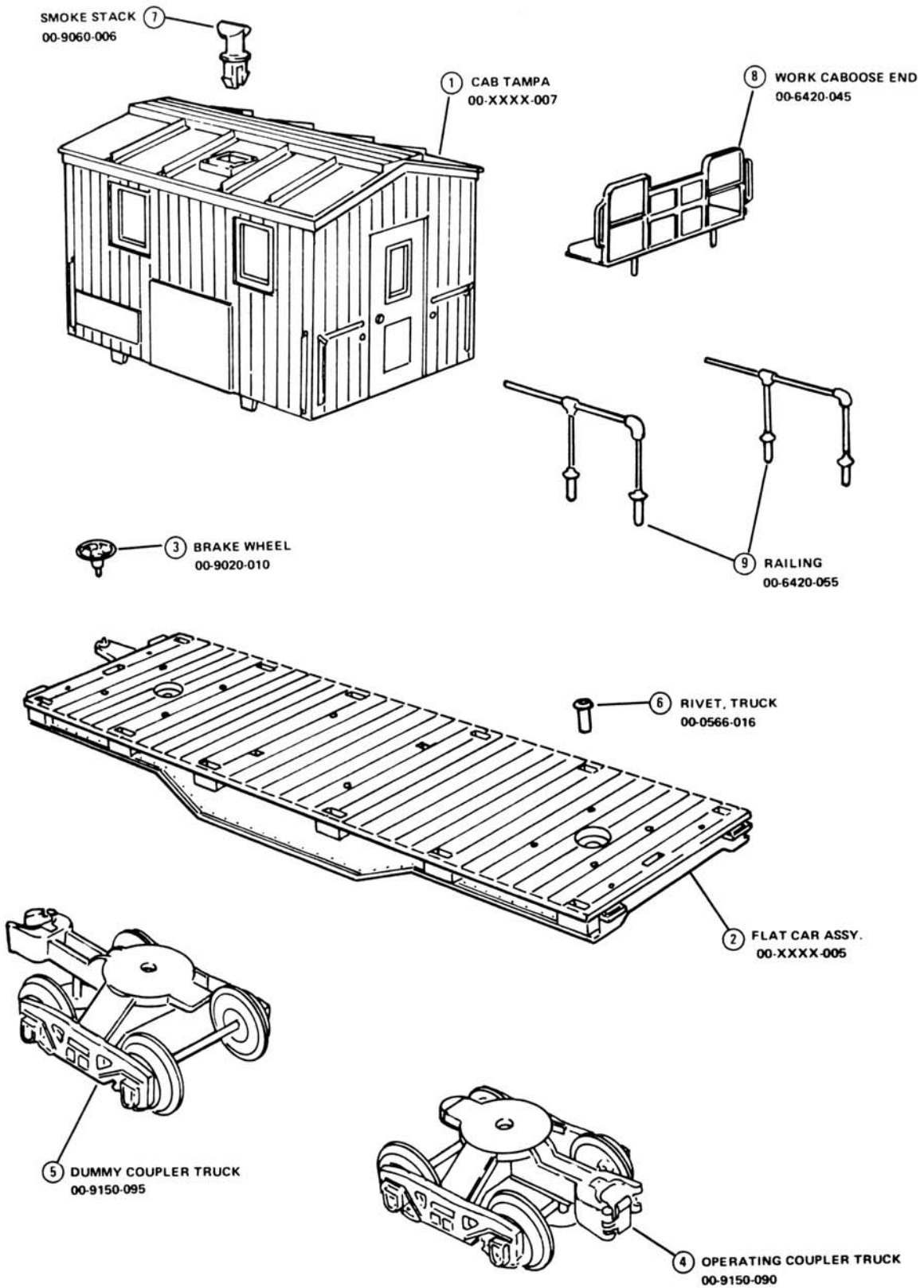
BODY

CAT. NO.	DESCRIPTION	BODY		QUANTITY PER UNIT		QUANTITY PER UNIT	
		REF. NO.	PART NUMBER	REF. NO.	PART NUMBER	REF. NO.	PART NUMBER
9166	Rio Grande	1	9166-3	1			
9169	Milwaukee	1	9169-3	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	2357-16	1	Window Shell
3	161-300	1	Lamp
4	9160-20	1	Lamp Socket
5	9060-6	1	Smokestack
6	9060-25	2	Ends W/Brakewheel
7	9060-5	1	Frame
8	9150-50	1	Operating Coupler Truck
9	9150-85	1	Plain Truck
10	9160-17	1	Pick-up Assembly
11	9700-20	2	Plastic Truck Rivet

TRANSFER CABOOSE



LIONEL

TRANSFER CABOOSE

6420

6427

SECTION ROLLING STOCK

DATE 5/83

6426

6428

REFERENCE
DRAWING

REF. QUANTITY PER UNIT DESCRIPTION
NO. PART NUMBER

1	00-XXXX-003	1	Cab
2	00-XXXX-013	1	Flat car
3	00-9020-010	1	Brake wheel
4	00-9150-090	2	Operating coupler truck, plastic wheels
5	00-9150-050	2	Operating truck, metal wheels
6	00-0566-016	2	Truck rivet
7	00-9060-006	1	Smokestack
8	00-6420-045	2	End, work caboose
9	00-6420-055	4	Railing

WORK CABOOSE

SECTION ROLLING STOCK

DATE 5-77

CAT. NO.	DESCRIPTION	REF. NO.	BODY PART NUMBER	REFERENCE DRAWING QUANTITY PER UNIT	REF. NO.	TRAY PART NUMBER	QUANTITY PER UNIT
9021	Santa Fe	1	9021-15	1	2	9021-10	1
9025	DT & I	1	9025-15	1	2	9025-10	1
9027	Soo Line	1	9027-2	1	2	9021-10	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9060-8	1	Smoke Stack
4	9020-10	1	Brakewheel
5	9021-9	1	End Railing
6	9021-3	1	Chassis
	9025-3	1	Chassis
	9027-3	1	Chassis
7	9020-7	16	Lumber Stakes
8	9150-50		Operating Coupler Truck
	9150-90		Operating Coupler Truck (9027 Only)
9	9150-75		Dummy Coupler Truck
	9150-105		Dummy Coupler Truck (9027 Only)
10	9700-20		Plastic Truck Rivet

9342 UNION PACIFIC WORK CABOOSE

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9342-3	1	Body
2	9342-15	1	Tray
3	9060-8	1	Smokestock
4	9020-10	1	Brakewheel
5	9021-9	1	End Railing
6	9325-5	1	Chassis
7	NOT NEEDED		
8	9150-90	1	Operating Coupler Truck - Plastic Wheels
9	9150-95	1	Dummy Truck - Plastic Wheels
10	566-16	2	Truck Rivet - Metal

FLATCARS AND LOADS

SECTION ROLLING STOCK

DATE 4-78

FRAME

REFERENCE
DRAWING

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9014	Trailer Train	1	9014-3	1			
9026	Republic Steel	1	9026-3	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9020-10	1	Brakewheel
3	9020-7	16	Lumber Stake
4	9020-8	2	Bulkhead
5	9150-90	1	Operating Coupler Truck
6	9150-95	1	Dummy Coupler Truck
7	9700-20	2	Plastic Truck Rivet

FLAT CAR AND LOADS

SECTION ROLLING STOCK

DATE 5-77

FRAME

REFERENCE

DRAWING

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9020	Union Pacific	1	9020-3	1			
9022	ATSF	1	9022-3	1			
9023	MKT	1	9023-3	1			
9024	C & O	1	9024-3	1			
9120	NP	1	9120-3	1			
9121	L & N	1	9121-3	1			
9122	NP	1	9122-3	1			
9124	Pitts. & Lake Erie	1	9124-3	1			
9133	Burlington	1	9133-3	1			
9149	CP	1	9149-3	1			
9157	C & O	1	9157-3	1			
9158	PC	1	9158-3	1			
9282	Great Northern	1	9282-3	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9020-10	1	Brakewheel
3	9020-7	16	Lumber Stake
4	9020-8	2	Bulkhead
5	9150-50	1	Operating Coupler Truck
5	9150-90	1	Operating Coupler Truck (9020 & 9124 Only)
6	9150-75	1	Dummy Coupler Truck
6	9150-95	1	Dummy Coupler Truck (9020 & 9124 Only)
7	9700-20	2	Plastic Truck Rivet
	3364-8	3	Logs - Not Shown
	9120-5	1	Van - Not Shown
	9120-20	1	Dozer Kit - Not Shown
	9121-30	1	Scraper - Not Shown
	9157-101	1	Crane Kit - Not Shown
	9158-101	1	Steam Shovel Kit - Not Shown
	9282-25	2	Trailer Van - Not Shown

9325 N&W FLAT CAR

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9325-3	1	Frame
2	9150-90	1	Operating Truck - Plastic Wheels
3	9150-95	1	Dummy Truck - Plastic Wheels
4	566-16	2	Truck Rivets - Metal
5	9019-6	1	Fence

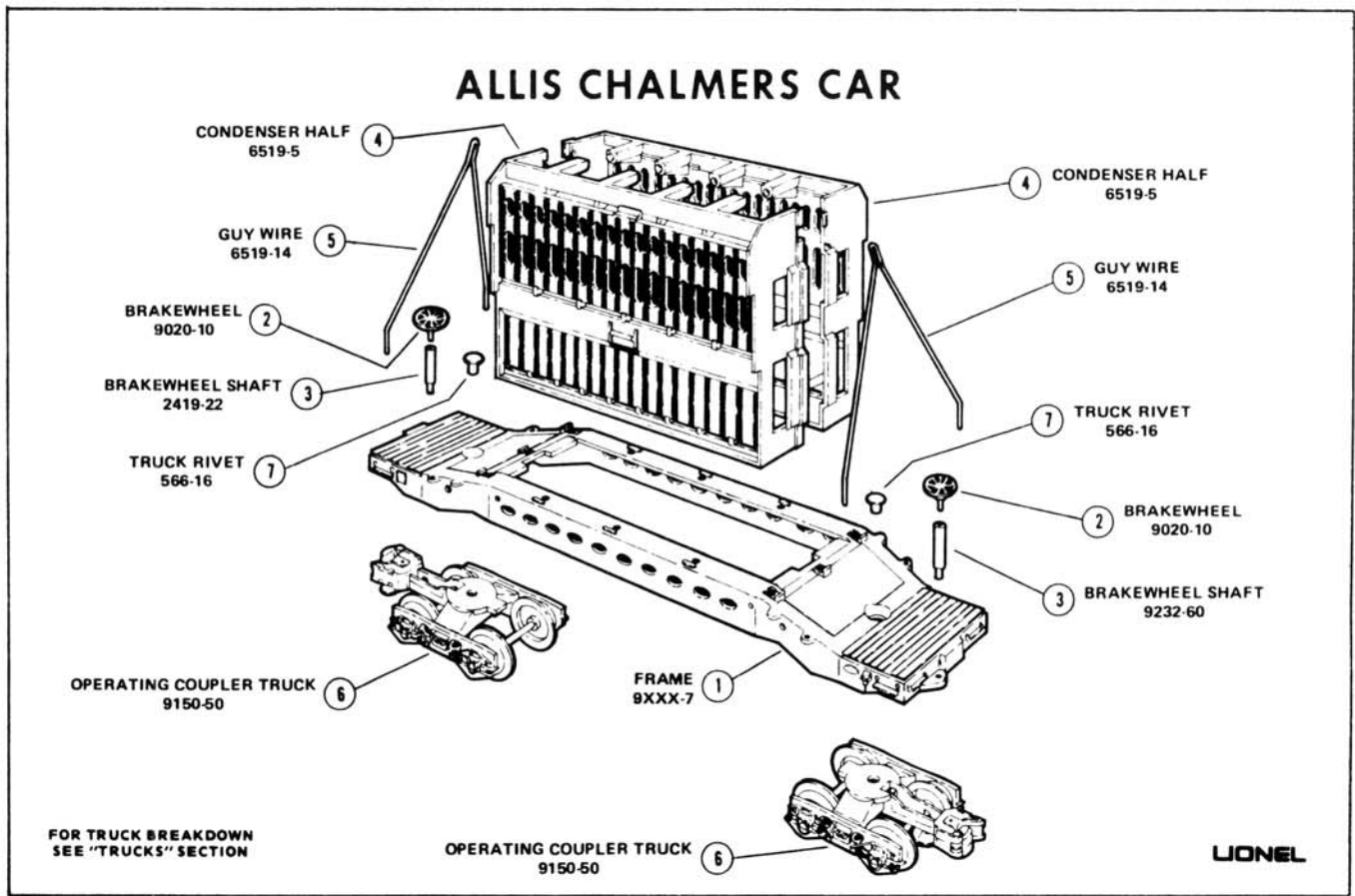
9333 SOUTHERN PACIFIC FLAT CAR W/VANS

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9333-3	1	Frame
2	9020-10	1	Brakewheel
3	9120-7	2	Wheel Chuch
4	9150-50	2	Operating Coupler Truck
5	9700-20	2	Truck Rivet - Plastic
6	9333-13	2	Trailer Body
7	9333-16	2	Trailer Roof



9232 ALLIS CHALMERS CAR

SECTION ROLLING STOCK
DATE 11/81

REFERENCE
DRAWING

REF. QUANTITY PER UNIT

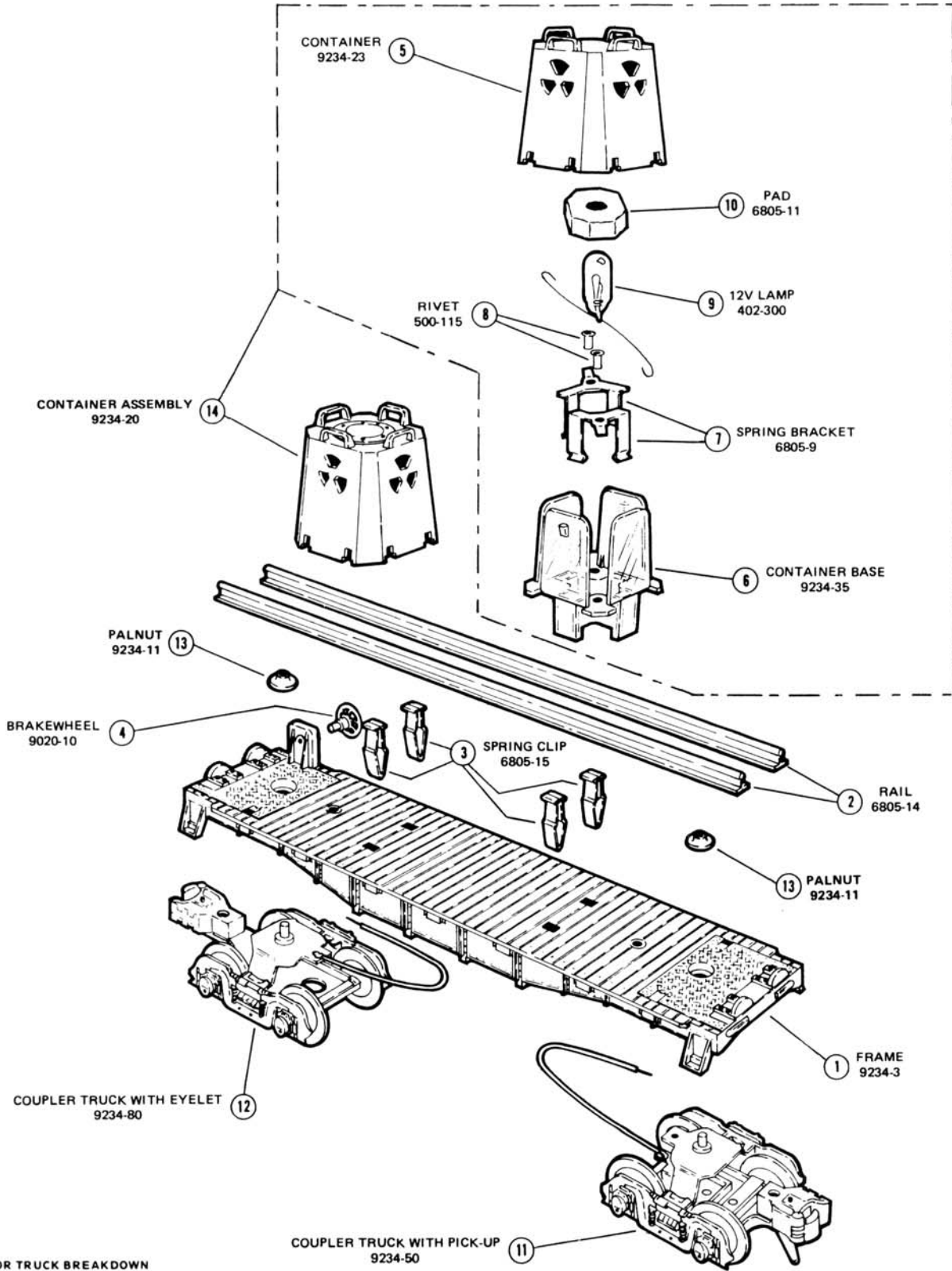
NO. PART NUMBER

DESCRIPTION

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-7	1	Frame
2	9020-10	2	Brakewheel
3	9232-60	2	Brakewheel Shaft
4	6519-5	2	Condenser Half
5	6519-14	2	Guy Wire
6	9150-50	2	Operating Coupler Truck
7	566-15	2	Truck Rivet

ATOMIC WASTE DISPOSAL CAR

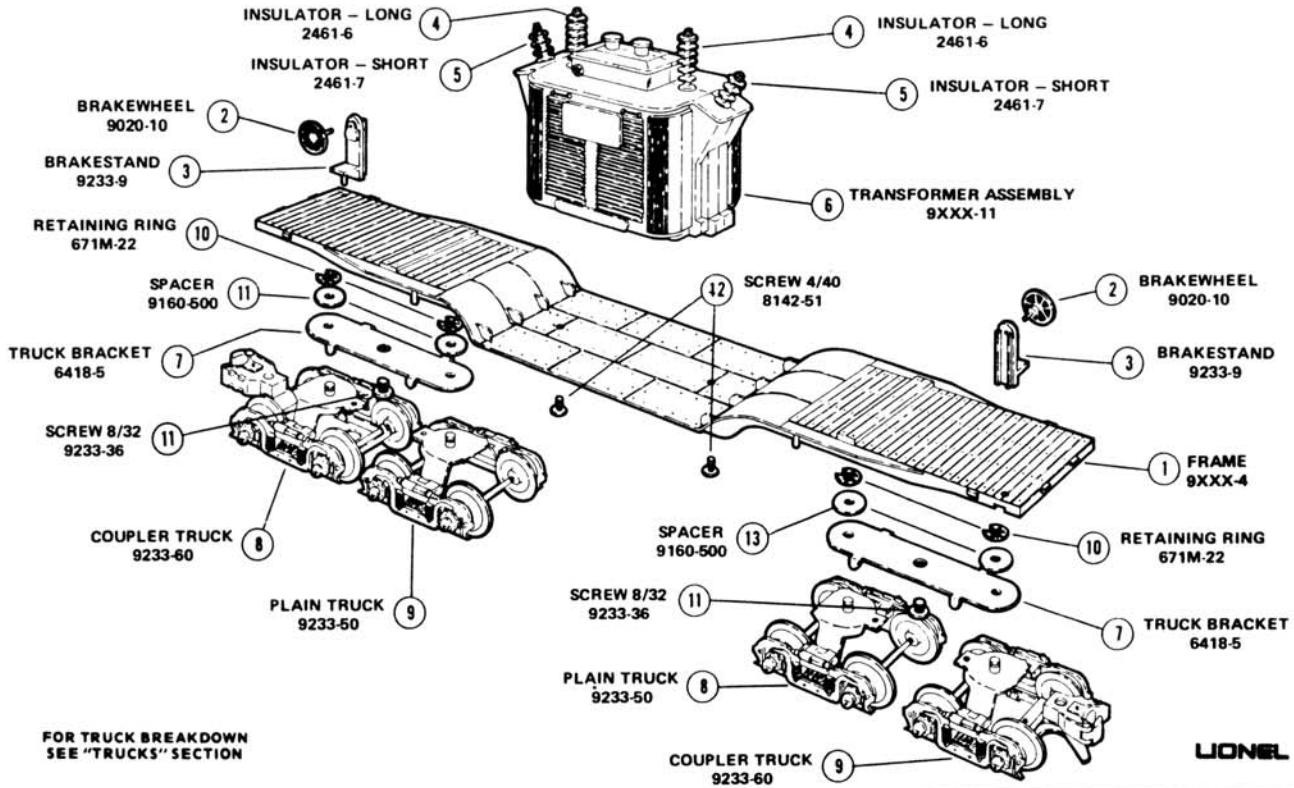
CONTAINER BREAKDOWN



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

DEPRESSED FLAT CAR WITH TRANSFORMER



9233 DEPRESSED FLAT CAR w/TRANSFORMER

SECTION ROLLING STOCK
DATE 11/81

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
----------	-------------	-------------------	-------------

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-4	1	Frame
2	9020-10	2	Brakewheel
3	9233-9	2	Brakestand
4	2461-6	2	Insulator-long
5	2461-7	2	Insulator-short
6	9XXX-11	1	Transformer Assembly
7	6418-5	2	Truck Bracket
8	9233-50	2	Plain Truck
9	9233-60	2	Coupler Truck
10	671M-22	4	Retaining Ring
11	9233-36	2	Screw 8/32x3/16 BH
12	8142-51	2	Screw 4/40x1/4 RH
13	9160-500	4	Spacer

9553 FLAT CAR GENERAL TYPE

SECTION ROLLING STOCK
 DATE 10-78
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9553-3	1	Frame
2	1877-4	2	Brace
3	8701T-90	2	Operating Coupler Truck
4	1877-5	2	Long Fence
5	1877-6	8	Short Fence
6	1877-10	2	Horse Figure - White
7	1877-11	2	Horse Figure - Black
8	1877-12	2	Horse Figure - Brown

GONDOLA

SECTION ROLLING STOCK

DATE 5-77
REFERENCE
DRAWING

BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9031	Nickel Plate	1	9031-3	1			
9032	Southern Pacific	1	9032-3	1			
9033	Penn Central	1	9033-3	1			
9055	Republic Steel	1	9055-3	1			
9131	D & Rio Grande	1	9131-3	1			
9136	Republic	1	9136-3	1			
9137	Republic	1	9137-3	1			
9140	Burlington	1	9140-3	1			
9141	Burlington Northern	1	9141-3	1			
9142	Republic	1	9142-3	1			
9143	Canadian National	1	9143-3	1			
9144	D & Rio Grande	1	9144-3	1			
9284	Santa Fe	1	9284-3	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9150-50	1	Operating Truck - Metal Wheels
2	9150-90	1	Operating Truck - Plastic Wheels
3	9150-75	1	Dummy Truck - Metal Wheels - USED FOR: 9131-37-41-43-44-9284
3	9150-95	1	Dummy Truck - Plastic Wheels - USED FOR: 9031-32-33-9136-40-42
4	566-16	2	Truck Rivet (Metal)
4	9700-20	2	Truck Rivet (Plastic)
	6112-6	3	Cannister (Load) NOT SHOWN

9084 FRISCO LONG GONDOLA

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9084-3	1	Body
2	9150-50	1	Operating Truck - Metal Wheels
2	9150-90	1	Operating Truck - Plastic Wheels
3	9150-75	1	Dummy Truck - Metal Wheels
3	9150-95	1	Dummy Truck - Plastic Wheels
4	566-16	2	Truck Rivet - Metal
4	9700-20	2	Truck Rivet - Plastic
5	9150-55	3	Cannisters - Silver

9315 GONDOLA SOUTHERN PACIFIC (LONG)

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9315-3	1	Body
2	8040-172	2	Screw - #4x5/16 RH
3	9775-350	2	Spacer Bushing
4	9559-50	2	Operating Die Cast Spring Truck

9336 CP RAIL LONG GONDOLA

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9336-3	1	Body
2	9550-50	2	Die Cast Sprung Truck
3	8040-172	2	Screw #4x5/16 RH
4	9775-350	2	Spacer Bushing

9340 ILLINOIS CENTRAL SHORT GONDOLA

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9340-3	1	Body
2	9150-90	1	Operating Truck
3	9150-95	1	Dummy Truck
4	9700-20	2	Truck Rivet - Plastic Rivet

9370 GONDOLA - SEABOARD COASTLINE
9379 GONDOLA - SANTA FE

SECTION ROLLING STOCK

DATE 11/80

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9370-3	1	Body
	9379-3	1	Body
2	9150-50	2	Operating Coupler Truck
	9550-50	2	Die Cast Coupler Truck
3	566-16	2	Truck Rivet
	8040-172	2	Screw - Die Cast Truck
4	9775-350	2	Spacer Bushing
5	9140-55	2	Cannisters - 9370
	9234-23	2	Containers

STANDARD "O" GONDOLA

SECTION ROLLING STOCK

DATE 5-77

REFERENCE DRAWING

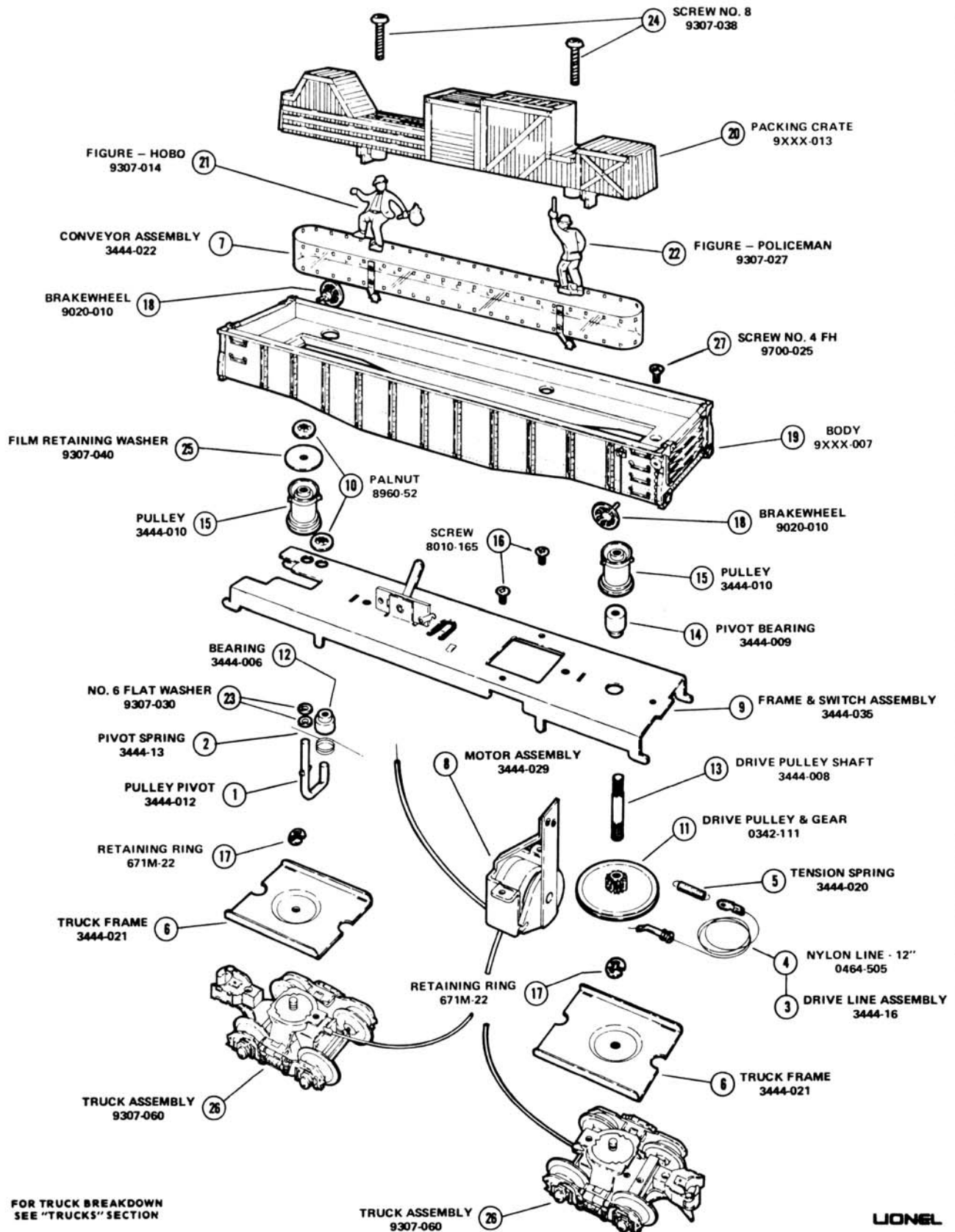
BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	BODY			QUANTITY PER UNIT
					REF. NO.	PART NUMBER	QUANTITY PER UNIT	
9820	Wabash	1	9820-3	1				
9821	Southern Pacific	1	9821-3	1				
9822	Grand Trunk	1	9822-3	1				
9824	NYC	1	9824-3	1				

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9820-25	1	Coal Pile
3	9020-10	1	Brakewheel
4	9805-9	1	Under Frame
5	9550-50	1	Operating Die Cast Truck
6	8141-41	2	Spacer Bushing
7	9805-35	2	Screw
7	8040-172	2	Screw - Alternate

9307 ANIMATED GONDOLA



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

TRUCK ASSEMBLY
9307-060

LIONEL

LOW COST ANIMATED GONDOLA

6201 U. P.

SECTION ROLLING STOCK

DATE 5/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
	XXXX-07	1	Gondola body, stamped
	9307-15	1	Crates
	6201-25	2	Plastic rivet, crate mount
	6201-35	2	Pulley stud
	6201-36	1	Pulley stud, fixed
	3444-10	2	Pulley
	3512-23	1	Drive pulley
	6505-42	1	Rubber band
	6201-30	1	Pal nut
	6201-21	1	Belt assembly
	3444-18	1	Hobo figure
	3444-19	1	Police figure
	9150-90	1	Operating truck, plastic wheels
	9150-95	1	Dummy truck, plastic wheels
	SE-46	2	Eyelet
	SE-56	2	Eyelet

OPERATING BARREL CAR

SECTION ROLLING STOCK

DATE 3-84

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	00-9XXX-003	1	Body
2	00-9020-010	1	Brakewheel
3	00-3562-015	1	Frame
4	00-9290-013	1	Conveyor assembly
5	00-8803-300	2	Screw, 4-40 $\frac{1}{4}$ ", conveyor mount
6	00-9290-014	2	Speednut
7	00-0362-022	1	Coil assembly
8	00-3562-016	1	Coil housing assembly
9	00-3562-018	1	Pole piece
10	00-8040-171	1	Screw, 6-32x $\frac{1}{2}$ ", coil mount
11	00-0002-111	1	Lockwasher
12	00-0483-001	2	Truck assembly
13	00-9160-500	2	Washer
14	90-671M-022	2	Retaining ring
15	00-3562-008	1	Figure cam lever
16	00-8240-071	1	Screw, #4x $\frac{1}{2}$ ", cam lever mount
17	00-9290-011	1	Figure
18	00-9700-025	1	Screw, #4x $\frac{1}{2}$ ", body mount
19	00-0362-078	6	Barrel
20	00-0160-002	1	Bin

BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9290	Union Pacific		9230-3	1			
9225	Conrail		9225-3	1			

HOPPER - SHORT (9 1/2")

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

DRAWING

BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY	REF. NO.	PART NUMBER	QUANTITY
				PER UNIT			PER UNIT
9010	Great Northern	1	9010-3	1			
9011	Great Northern	1	9011-3	1			
9012	TA&G	1	9012-3	1			
9013	CN	1	9013-3	1			
9015	Reading	1	9015-3	1			
9016	Chessie	1	9016-3	1			
9018	DT&I	1	9018-3	1			
9038	Chessie	1	9038-3	1			

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9150-50	1	Operating Coupler Truck
2	9150-90	1	Operating Coupler Truck- Plastic Wheels
3	9150-75	1	Dummy Coupler Truck
3	9150-95	1	Dummy Coupler Truck - Plastic Wheels
4	566-16	2	Truck Rivet (metal)
4	9700-20	2	Truck Rivet (plastic)

9083 DELAWARE & HUDSON SHORT HOPPER

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9083-3	1	Body
2	9150-50	1	Operating Truck - Metal Wheels
2	9150-90	1	Operating Truck - Plastic Wheels
3	9150-75	1	Dummy Truck - Metal Wheels
3	9150-95	1	Dummy Truck - Plastic Wheels
4	566-16	2	Truck Rivet - Metal
4	9700-20	2	Truck Rivet - Plastic

9338 PENNSYLVANIA POWER & LIGHT HOPPER

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9338-3	1	Body
2	9267-26	2	Truck Bracket
3	9550-50	2	Die Cast Sprung Trucks
4	8040-172	2	Screw - #4x5/16 RH
5	9775-350	2	Spacer Bushing
6	9338-10	2	Decal

HOPPER - COVERED

SECTION ROLLING STOCK

DATE 5-77

REFERENCE DRAWING

Roof

HATCH

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REFERENCE DRAWING		QUANTITY PER UNIT
					REF. NO.	HATCH	
7504	Anniversary	2	9119-29	2	3	9119-11	12
9110	B & O		None			None	
9111	N & W		None			None	
9130	B & O		None			None	
9135	N & W	2	9135-29	2	3	9135-11	12
9112	D & RG	2	9112-29	2	3	9112-11	12
9117	Alaska	2	9117-28	2	3	9117-11	12
9114	Mortons Salt	2	9114-29	2	3	9114-11	12
9115	Planters Peanuts	2	9114-29	2	3	9114-11	12
9116	Domino Sugar	2	9116-29	2	3	9116-11	12
9119	Detroit & Mack	2	9119-29	2	3	9119-11	12
9134	Virginian	2	9134-29	2	3	9134-11	12
9260	Reynolds Aluminum	2	9260-28	2	3	9116-11	12
9261	Sun Maid Raisins	2	9114-29	2	3	9114-11	12
9262	Ralston Purina	2	9114-29	2	3	9262-11	12
9263	Penn	2	9263-28	2	3	9263-11	12
9264	Illinois Central	2	9264-28	2	3	9264-11	12
9265	Chessie	2	9265-28	2	3	9265-11	12
9267	Alcoa	2	9267-29	2	3	9267-11	12
9276	Peabody Coal	2	9276-29	2	3	9276-11	12
9286	Bessimer & Lake Erie	2	9117-29	2	3	9117-11	12

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-3	1	Body
4	6446-10	2	Clip (Except 9110-11-30)
5	6446-12	3	Speednut (Except 9110-11-30)
6	6446-6	2	Truck Bracket
7	8010-165	2	Screw
8	9150-50	2	Operating Coupler Truck
9	566-16	2	Truck Rivet
10	9020-10	1	Brakewheel
	9550-50	2	Die Cast Operating Coupler Truck - 9276
	9805-35	2	#4 x 3/8 Truss Head Screw - 9550 Mtg.
	9775-350	2	Spacer Bushing - 9550 Mtg.
	9160-500	2	Washer - 9550 Mtg

9322 COVERED HOPPER - SANTA FE

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9322-3	1	Body
2	9119-29	1	Roof - Red
3	9119-11	12	Hatch - Red
4	8900-10	2	Decal
5	9020-10	1	Brakewheel
6	9110-26	2	Truck Bracket
7	9150-50	2	Operating Coupler Truck
8	9700-20	2	Plastic Truck Rivet

9371
9374

HOPPER - COVERED

SECTION ROLLING STOCK

DATE 11/80

REFERENCE

ROOF

DRAWING

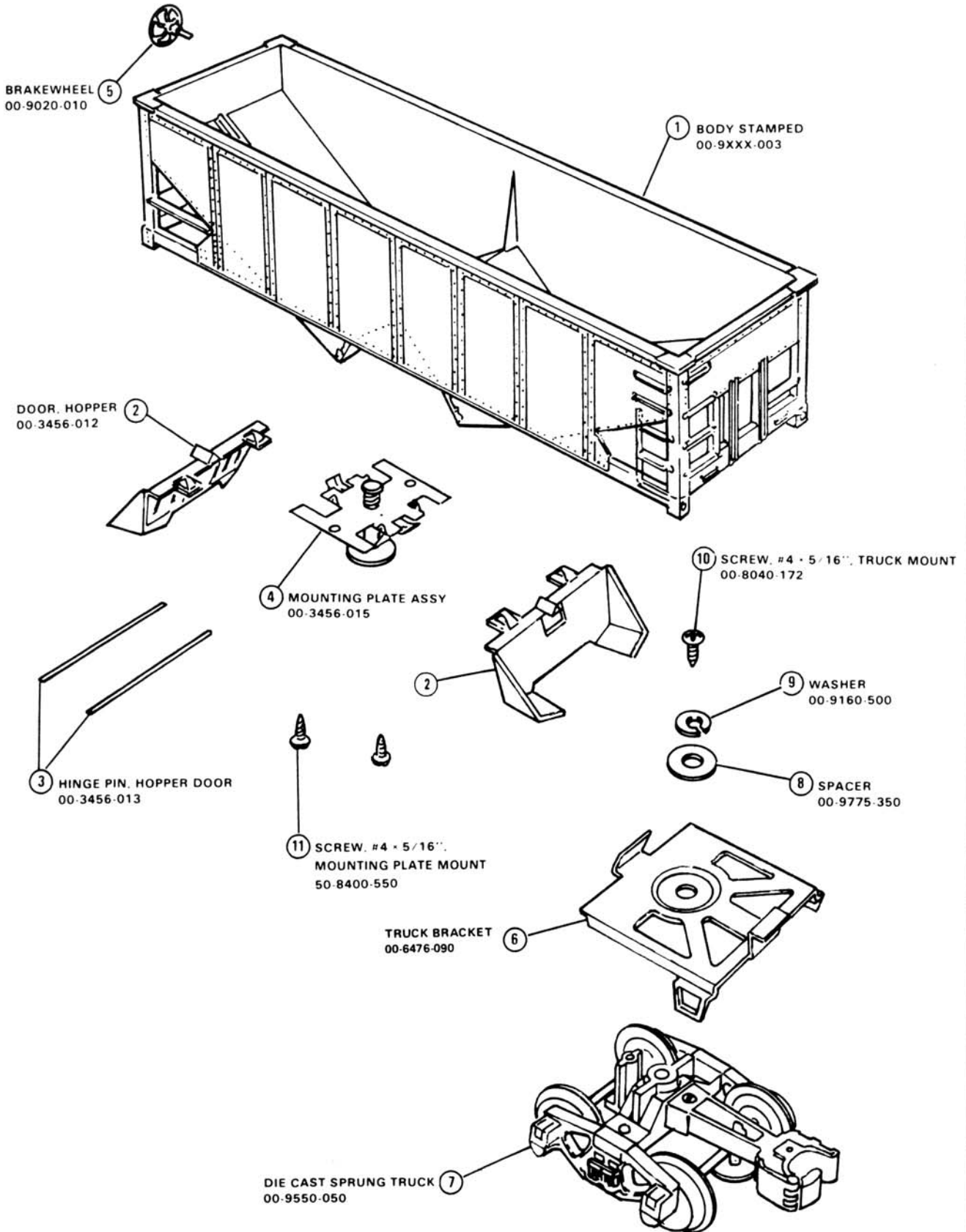
HATCH

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9371	Atlantic Sugar Co.	2	9114-29	1	3	9114-11	12
9374	Reading	2	9117-29	1	3	9117-11	12

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-3	1	Body
4	6446-10	2	Clip
5	6446-12	3	Speednut
6	9110-26	2	Truck Bracket
	9267-26	2	Truck Bracket - Die Cast Truck
7	8010-165	2	Screw
	8040-172	2	Screw - Die Cast Truck
8	9150-50	2	Operating Coupler Truck
	9550-50	2	Die Cast Coupler Truck
9	566-16	2	Truck Rivet
	9775-350	2	Spacer Bushing - Die Cast Truck

OPERATING HOPPER CAR



LIONEL

OPERATING HOPPER CAR

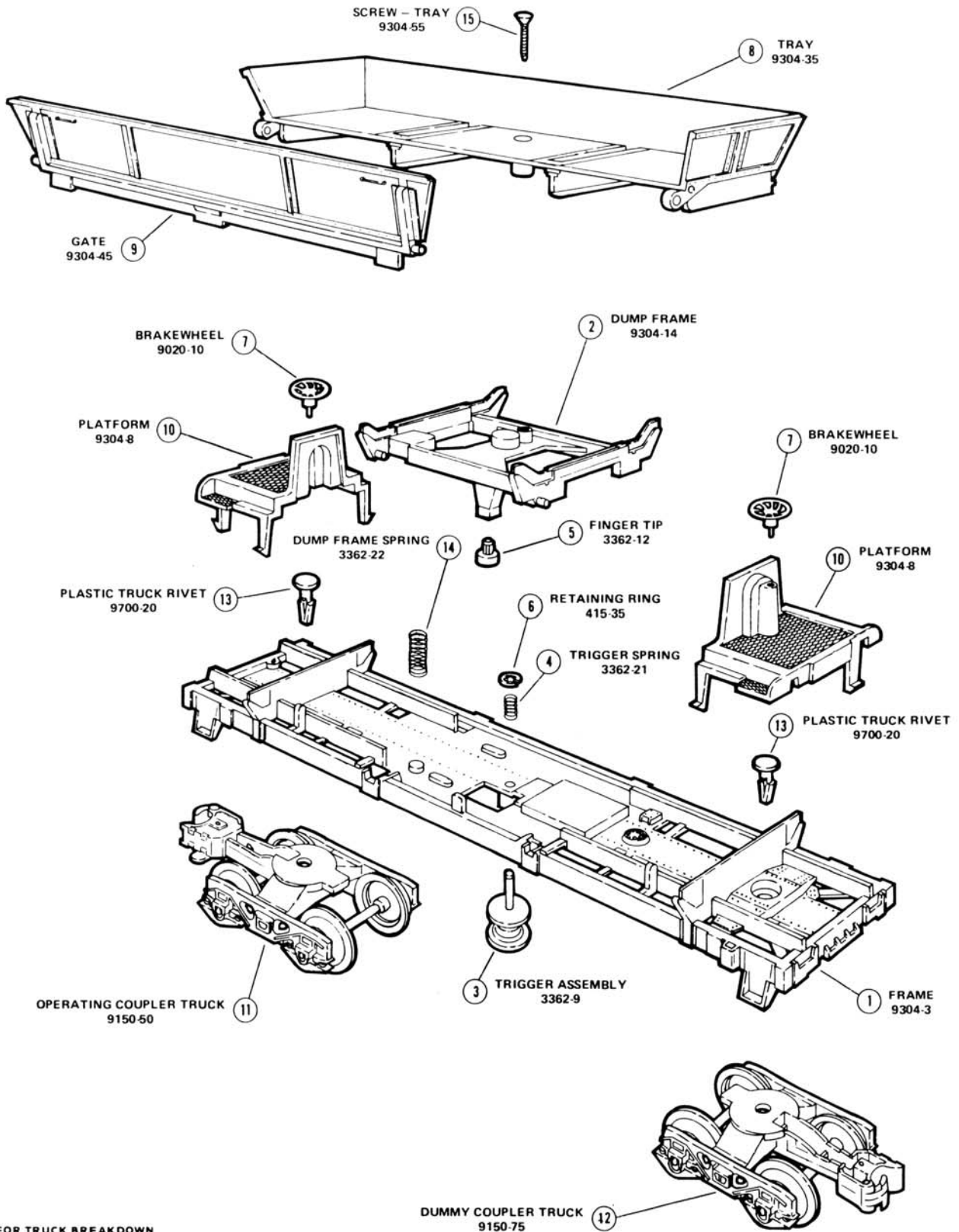
SECTION ROLLING STOCK

9384 GREAT NORTHERN

DATE 3/82
Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	00-9XXX-003	1	Body, Stamped
2	00-3456-012	2	Door, hopper
3	00-3456-013	2	Hinge Pin, hopper door
4	00-3456-015	1	Mounting Plate Assembly
5	00-9020-010	1	Brakewheel
6	00-6476-090	2	Truck Bracket
7	00-9550-050	2	Die Cast Sprung Truck
8	00-9775-350	2	Spacer
9	00-9160-500	2	Washer
10	00-8040-172	2	Screw, #4x5/16", truck mount
11	50-8400-550	2	Screw, #4x5/16", mounting plate mount

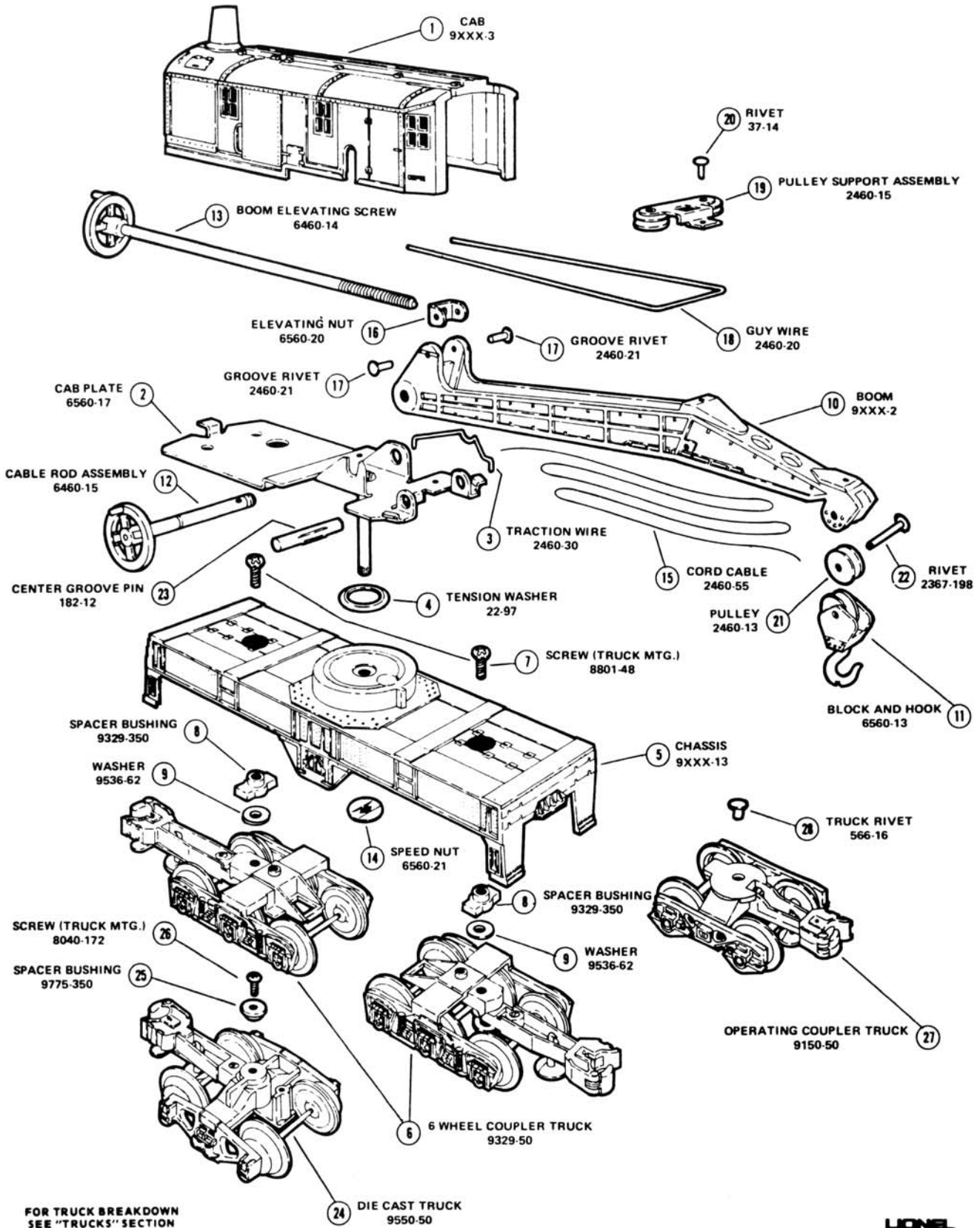
OPERATING COAL DUMP CAR



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

CRANE CAR



CRANE CAR 9329 9348

SECTION Accessories
DATE 11/80

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-3	1	Cab
2	6560-17	1	Cab Plate
3	2460-30	1	Traction Wire
4	22-97	1	Tension Washer
5	9XXX-13	1	Chassis
6	9329-50	2	6 Wheel Coupler Truck
7	8801-48	2	Screw #6x5/16 (Truck Mtg)
8	9329-350	2	Spacer Bushing
9	9536-62	2	Washer
10	9XXX-2	1	Boom
11	6560-13	1	Block & Hook
12	6460-15	1	Cable Rod Assembly
13	6460-14	1	Boom Elevating Screw
14	6560-21	1	Speed Nut
15	2460-55	1	Cord Cable (Approx 22")
16	6560-20	1	Elevating Nut
17	2460-21	2	Groove Rivet
18	2460-20	1	Guy Wire
19	2460-15	1	Pulley Support Assembly
20	37-14	1	Rivet
21	2460-13	1	Pulley
22	2367-198	1	Rivet
23	182-12	1	Center Groove Pin
			Note: Some cars may use the following parts
24	9550-50	2	Die Cast Truck
25	9775-350	2	Spacer Bushing
26	8040-172	2	Screw #4x5/16 (Truck Mtg)
27	9150-50	2	Operating Coupler Truck
28	566-16	2	Truck Rivet

9332 CRANE CAR - READING

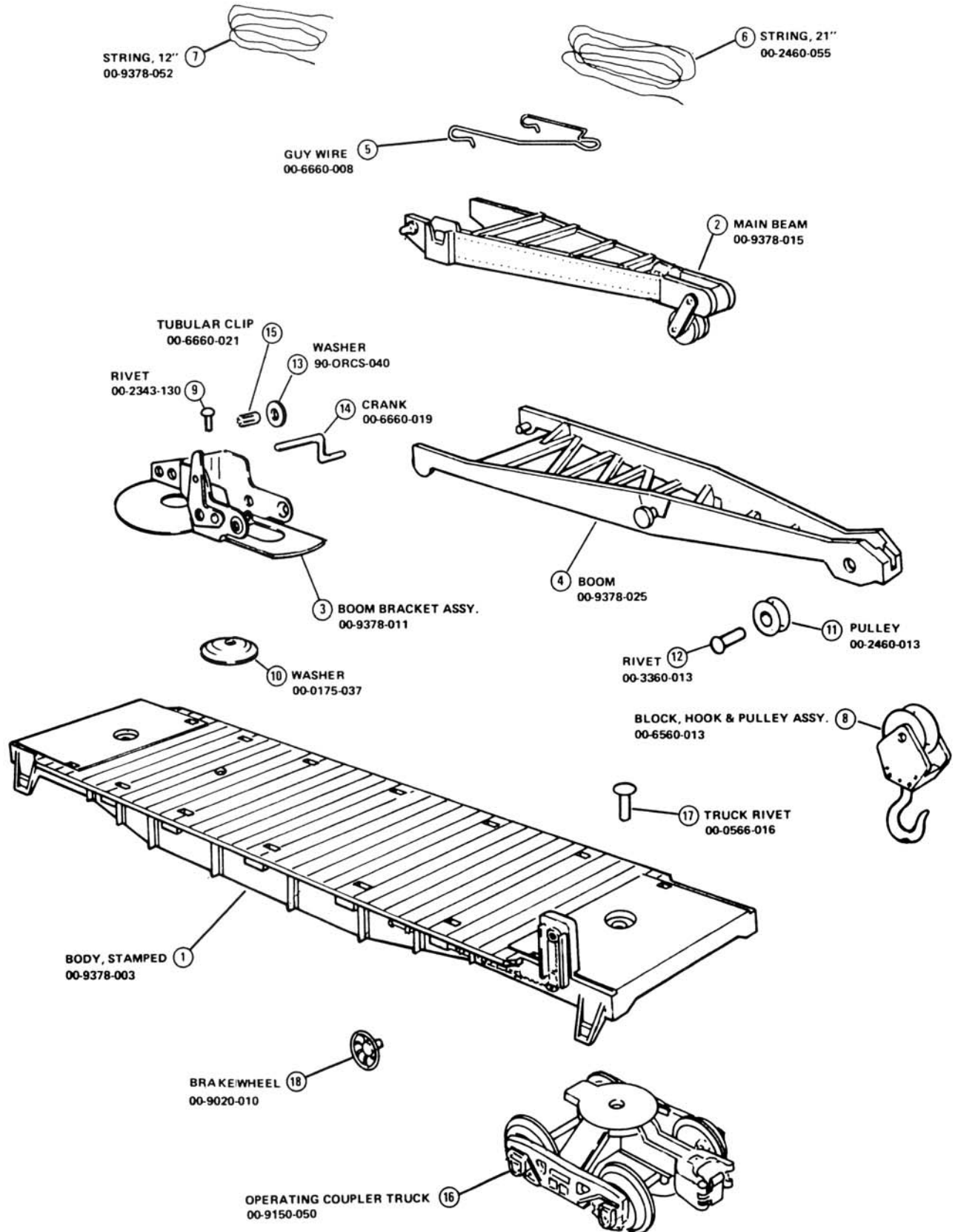
SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-3	1	Cab
2	9XXX-7	1	Cab Base
3	9XXX-13	1	Cab Base (FOR DIE CAST SPRUNG TRUCKS)
4	9XXX-20	1	Boom
5	6560-20	1	Elevating Nut (Boom)
6	2460-21	2	Groove Rivet (Boom)
7	2460-20	1	Guy Wire (Boom)
8	6560-13	1	Block & Pulley Assembly
9	6560-17	1	Base Plate Assembly
10	6560-15	1	Cable Rod Assembly
11	6460-12	1	Hand Wheel
12	2460-30	1	Traction Wire
13	182-32	1	Center Groove Pin
14	2460-55	1	Cord Cable 22" Long (Approx.)
15	6460-14	1	Boom Elevating Screw Assembly
16	6560-21		Speednut
17	22-97	1	Tension Washer
18	9150-50	2	Operating Coupler Truck
19	566-16	2	Truck Rivet
20	9550-50	2	Die Cast Operating Truck
21	8040-172	2	Screw #4x5/16 Pan Hd.(Truck Mtg.)
22	9775-350	2	Spacer Bushing (Truck Mtg.)
23	9160-500	2	Spacer Washer (Truck Mtg.)

9378 DERRICK CAR



LIONEL

9378 DERRICK CAR

SECTION ROLLING STOCK
DATE 11/82

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	00-9378-003	1	Body
2	00-9378-015	1	Main beam
3	00-9378-011	1	Boom bracket assembly
4	00-9378-025	1	Boom
5	00-6660-008	1	Guy wire
6	00-2460-055	1	String, 21" long
7	00-9378-052	1	String, 12" long
8	00-6560-013	1	Block, hook & pulley assembly
9	00-2343-130	1	Rivet
10	00-0175-037	1	Washer
11	00-2460-013	1	Pulley
12	00-3360-013	1	Rivet
13	90-ORCS-040	2	Washer
14	00-6660-019	2	Crank
15	00-6660-021	2	Tubular Clip
16	00-9150-050	2	Operating coupler truck
17	00-0566-016	2	Truck rivet
18	00-9020-010	1	Brakewheel

OPERATING LOG DUMP CAR

9300 9303

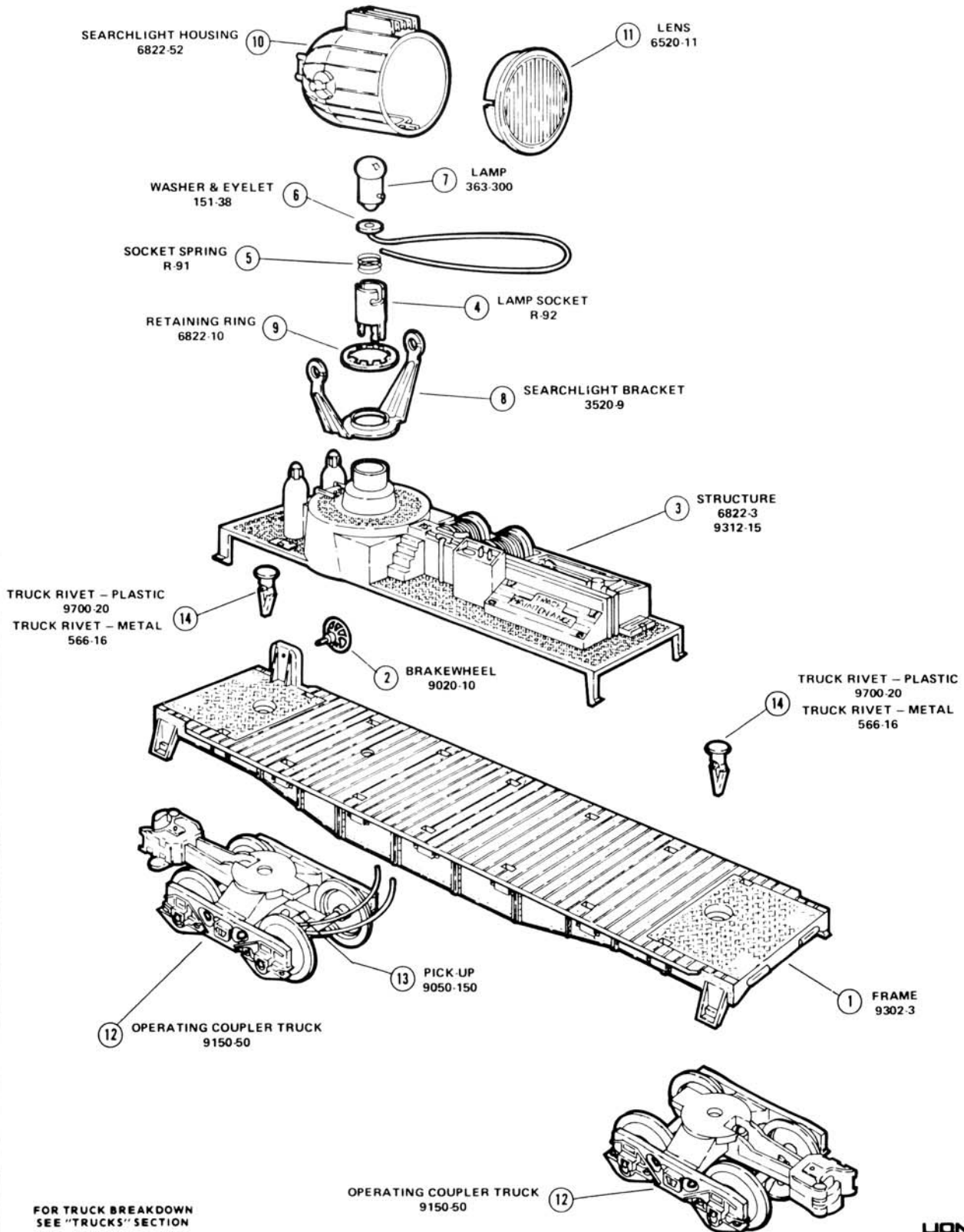
SECTION ROLLING STOCK
 DATE 5-77
 CHASSIS REFERENCE
 DRAWING DUMP FRAME

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9300	Penn Central	1	9300-3	1	2	3362-16	1
9303	UP	1	9303-3	1	2	9303-14	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9020-10	1	Brakewheel
4	3362-9	1	Trigger Assembly
5	3362-12	1	Finger Tip
6	3362-21	1	Trigger Spring
7	3362-22	1	Dump Frame Spring
8	ZW-127	1	Washer
9	622-17	1	Rivet
10	415-35	1	Lockwasher
11	3362-7	2	Truck Frame
12	6 x 3/16	2	BHST Screw
13	566-16	2	Metal Truck Rivet
13	9700-20	2	Plastic Truck Rivet
14	9150-50	1	Operating Coupler Truck
15	9150-75	1	Dummy Coupler Truck
16	3361-21	3	Log - Not Shown

OPERATING SEARCHLIGHT CAR



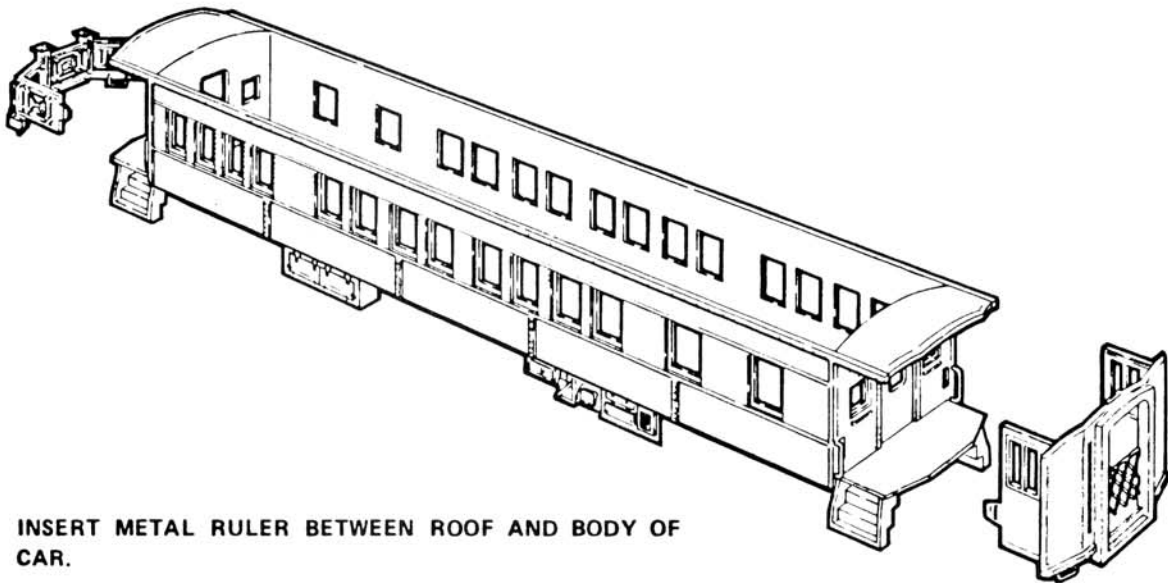
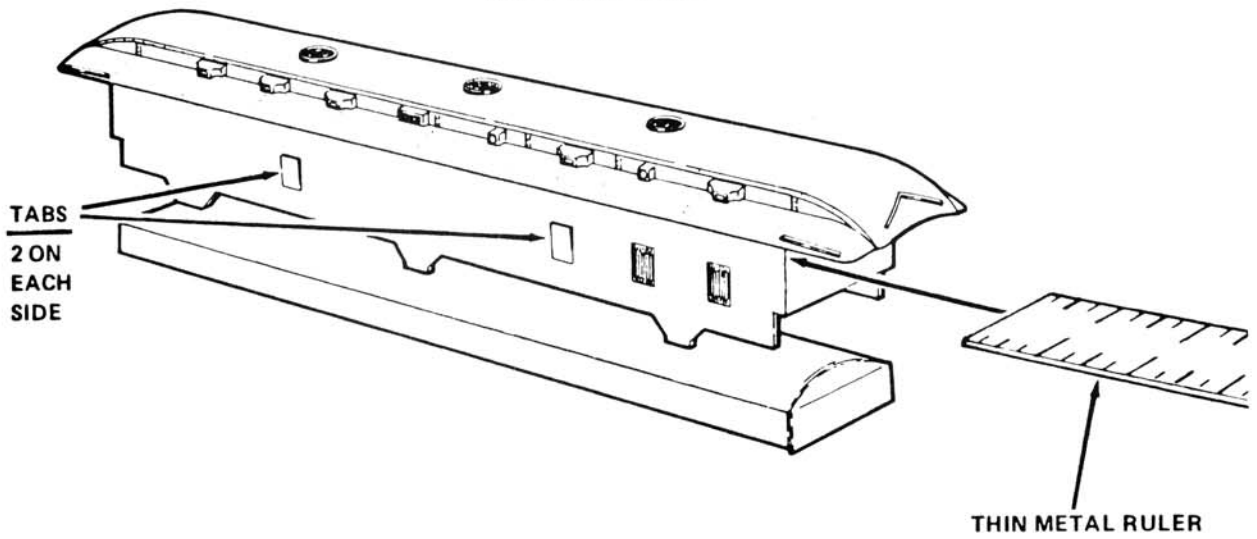
OPERATING SEARCHLIGHT CAR (#9302)
(#9312)

SECTION ROLLING STOCK
DATE 5-77
REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9302-3	1	Frame
2	9020-10	1	Brakewheel
3	6822-3	1	Structure
3	9312-15	1	Structure
4	R-92	1	Lamp Socket
5	R-91	1	Socket Spring
6	151-38	1	Washer & Eyelet
7	363-300	1	Lamp
8	3520-9	1	Searchlight Bracket
9	6822-10	1	Retaining Ring
10	6822-52	1	Searchlight Housing
11	6520-11	1	Lens
12	9150-50	2	Operating Coupler Truck
13	9050-150	1	Pick-up
14	566-16	2	Truck Rivet

PASSENGER, OBSERVATION, COMBINE CARS

ROOF REMOVAL

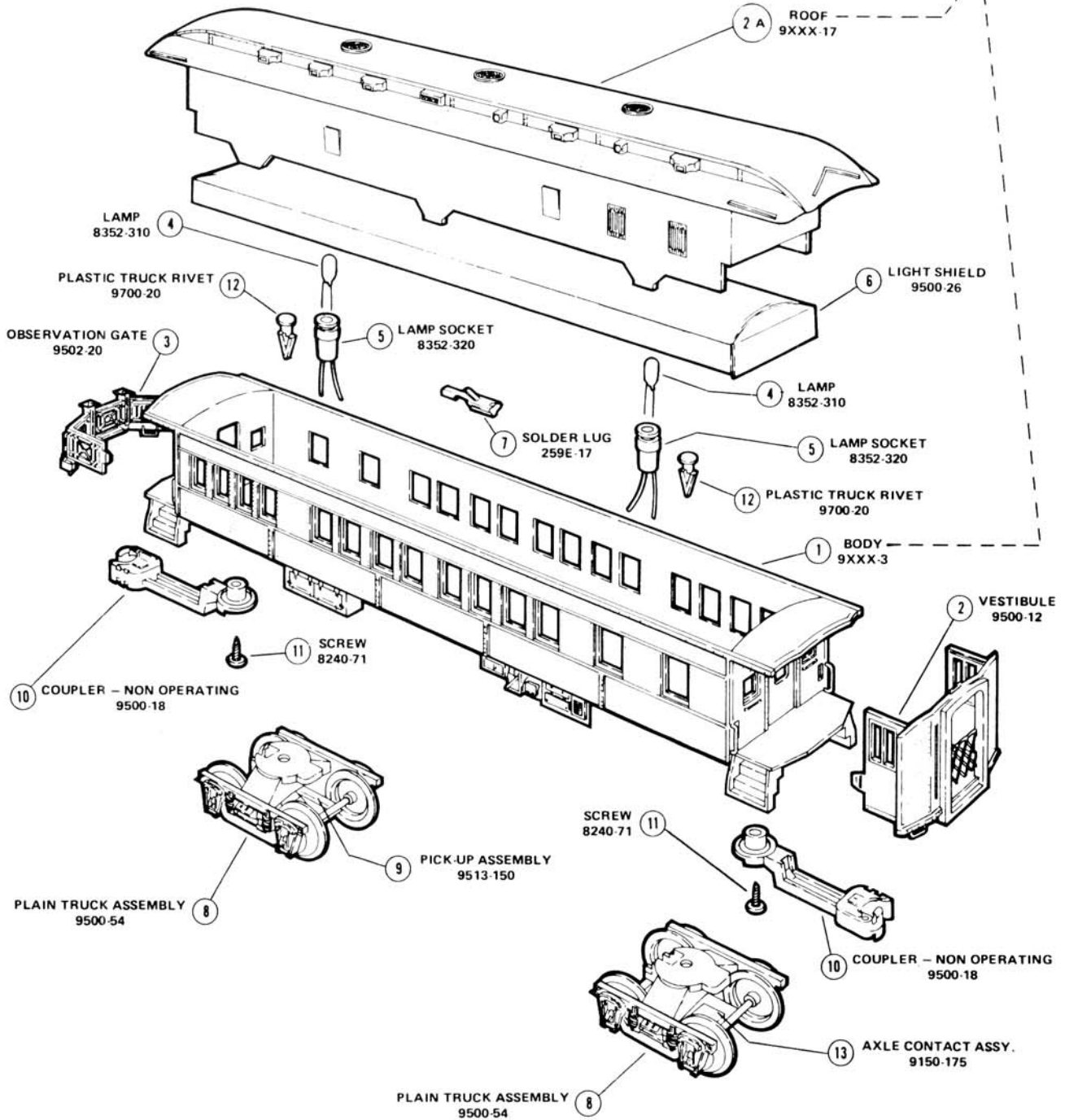


1. INSERT METAL RULER BETWEEN ROOF AND BODY OF CAR.
2. GENTLY PRY UPWARD, WORKING ROOF AWAY FROM CAR BODY AT ALL FOUR CORNERS, WHILE AT THE SAME TIME, DEPRESSING THE TABS CLOSE TO THE END BEING LIFTED.

LIONEL

PASSENGER, OBSERVATION, COMBINE CARS

NOTE:
USE CAR NUMBER
WHEN ORDERING
BODY OR ROOF.



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

PASSENGER CAR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

DRAWING

ROOF

BODY

CAT. NO.	DESCRIPTION	REF. NO.	QUANTITY		REF. NO.	QUANTITY	
			PART NUMBER	PER UNIT		PART NUMBER	PER UNIT
9500	Milwaukee-	1	9500-3	1	2	9500-17	1
9501	Aberdeen -	1	9501-3	1	2	9500-17	1
9502	Pres. Washington -	1	9502-3	1	2	9500-17	1
9503	Chicago -	1	9503-3	1	2	9500-17	1
9504	Tacoma -	1	9504-3	1	2	9500-17	1
9505	Seattle -	1	9505-3	1	2	9500-17	1
9506	Combine Car -Milw.	1	9506-3	1	2	9500-17	1
9507	Manhattan -	1	9507-3	1	2	9507-17	1
9508	Philadelphia -	1	9508-3	1	2	9507-17	1
9509	President Adams -	1	9509-3	1	2	9507-17	1
9510	Combine Car-Penna.	1	9510-3	1	2	9507-17	1
9511	Minneapolis -	1	9511-3	1	2	9500-17	1
9513	Pennsylvania -	1	9513-3	1	2	9507-17	1
9514	Time Square -	1	9514-3	1	2	9507-17	1
9515	Washington Circle	1	9515-3	1	2	9507-17	1
9516	Mountain Top -	1	9516-3	1	2	9516-17	1
9517	Capitol City -	1	9517-3	1	2	9516-17	1
9518	National View -	1	9518-3	1	2	9516-17	1
9519	Combine Car - B&O	1	9519-3	1	2	9516-17	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9500-12	2	Vestibule (Combine Car)
2	9506-12	2	Vestibule (Combine Car)
3	9502-20	1	Observation Gate
4	8352-310	2	Lamp
5	8352-320	2	Lamp Socket
6	9500-26	1	Light Shield
7	259E-17	1	Solder Lug
8	9500-54	2	Plain Truck
9	9513-150	1	Pick-up Assembly
10	9500-18	2	Coupler
11	8240-71	2	Screw (Coupler Mtg.)
12	9700-20	2	Plastic Truck Rivet

PASSENGER CAR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

BODY

DRAWING

ROOF

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY	REF. NO.	PART NUMBER	QUANTITY
				PER UNIT			PER UNIT
9521	Combine Car - Penna.	1	9521-3	1	2	9521-17	1
9522	Combine Car - Milw.	1	9522-3	1	2	9522-17	1
9523	Combine Car - B&O	1	9523-3	1	2	9523-17	1
9524	Margaret Corbin B&O	1	9524-3	1	2	9516-17	1
9525	Emerald Brook B&O	1	9525-3	1	2	9516-17	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9516-14	2	Vestibule (Combine Car)
4	8352-310	2	Lamp
5	8352-320	2	Lamp Socket
6	9500-26	1	Light Shield
7	259E-17	1	Solder Lug
8	9500-54	2	Plain Truck
9	9513-150	1	Pick Up Assembly
10	9500-18	2	Coupler
11	8240-71	2	Screw (Coupler Mtg)
12	9700-20	2	Plastic Truck Rivet
13	9150-175	1	Axle Contact Assembly

PASSENGER CAR - GENERAL

SECTION ROLLING STOCK

DATE 10-78

REFERENCE
DRAWING

BODY

CAT. NO.	DESCRIPTION	BODY			QUANTITY			QUANTITY		
		REF. NO.	PART NUMBER	PER UNIT	REF. NO.	PART NUMBER	PER UNIT	REF. NO.	PART NUMBER	PER UNIT
6-9551	General W&ARR Baggage Car	1	9551-3	1						
6-9552	General W&ARR Passenger Car	1	9552-3	1						

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
2	9060-6	2	Smokestack
3	9551-44	4	Ventilator 2 Used on 9551
4	1865-5	1	Window Shell
5	8205T-50	1	Screw #4 x 5/16
6	1865-10	2	Brakewheel
7	9160-20	2	Lamp Socket W/Lead
8	161-300	2	Lamp
9	9551-60	1	Step Frame
10	9551-80	2	Operating Coupler Truck
11	1865-8	2	Wire Truss
12	9700-20	2	Plastic Truck Rivet

PASSENGER CAR WITH OPERATING TRUCK

SECTION ROLLING STOCK
DATE 5-77
REFERENCE
DRAWING ROOF

CAT. NO.	DESCRIPTION	BODY			ROOF		
		REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9530 (B)	Joel Chandler Harris (So)	1	9530-3	1	2	9530-17	1
9531 (C)	Andrew Pickens (So)	1	9531-3	1	2	9531-17	1
9532 (P)	P.G.T. Beauregard (So)	1	9532-3	1	2	9531-17	1
9533 (P)	Stonewall Jackson (So)	1	9533-3	1	2	9531-17	1
9534 (O)	Robert E. Lee (So)	1	9534-3	1	2	9531-17	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9531-12	2	Vestibule (Note-Observation Car - 1 Required)
4	9502-20	1	Gate (Observation Car Only)
5	8352-310	2	Lamp
6	8352-320	2	Lamp Socket
7	9150-175	1	Axle Contact Assm.
8	9500-50	2	Operating Coupler Truck - (4 wheel)
9	566-16	2	Rivet (Alternate - (9700-20))
10	9513-150	1	Pick Up Assm.
11	9506-28	1	Light Shield (optional) alternate 9500-26
12	9516-22	1	Drum Head
13	4045-15	1	Nut

PASSENGER CAR WITH 6 WHEEL OPERATING TRUCK

SECTION ROLLING STOCK

DATE 5-77

REFERENCE

DRAWING ROOF

BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9536 (B)	Barnard (JC)	1	9536-3	1	2	9536-17	1
9537 (C)	Halley (JC)	1	9537-3	1	2	9537-17	1
9538 (P)	Faye (JC)	1	9538-3	1	2	9537-17	1
9539 (P)	Westphal (JC)	1	9538-3	1	2	9537-17	1
9540 (O)	Tempe1 (JC)	1	9540-3	1	2	9537-17	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9537-12	2	Vestibule (Observation Car - 1 Required)
4	9502-20	1	Gate
5	8352-310	2	Lamp
6	8352-320	2	Lamp Socket
7	9536-50	1	6 Wheel Passenger Truck w/Axle Pick-up (ground strap)
8	9536-80	1	6 Wheel Passenger Truck w/Axle Pick-up (ground strap)
9			
10	9537-22	1	Drum Head
11	9540-10	1	Decal - "The Blue Comet"
12	9500-26	1	Light Shield (optional)
13	9551-44	3	Ventilator (for 9586 & 9599 only)

Rev. 6/92

PASSENGER CAR WITH
6 WHEEL OPERATING TRUCK

SECTION ROLLING STOCK
DATE 11/80

BODY REFERENCE DRAWING ROOF

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9581	Chessie - Baggage	1	9581-7	1	2	9523-17	1
9582	Chessie - Combo	1	9582-7	1	2	9516-17	1
9583	Chessie - Passenger	1	9583-7	1	2	9516-17	1
9584	Chessie - Passenger	1	9584-7	1	2	9516-17	1
9585	Chessie - Observation	1	9585-7	1	2	9516-17	1

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9581-14	2	Vestibule
4	9502-20	1	Gate - 9585
5	8352-310	2	Lamp
6	8352-320	2	Lamp Socket
7	9536-50	1	6 Wheel Truck w/Pick Up
8	9536-80	1	6 Wheel Truck
9	Not Used		
10	9516-22	1	Drum Head
11	9585-10	1	Decal - Chessie
12	9500-26	1	Light Shield (Optional)

STREAMLINED PASSENGER CAR

SECTION ROLLING STOCK

DATE 5-77

BODY

REFERENCE
DRAWING

ROOF

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
6403	Amtrak Vista Dome	1	6403-3	1	2	6403-17	1
6404	Amtrak Pullman	1	6404-3	1	2	6404-17	1
6405	Amtrak Pullman	1	6405-3	1	2	6404-17	1
6406	Amtrak Observation	1	6406-3	1	2	6406-17	1
6410	Amtrak Pullman	1	6410-3	1	2	6404-17	1
6411	Amtrak Pullman	1	6411-3	1	2	6404-17	1
6412	Amtrak Vista Dome	1	6412-3	1	2	6403-17	1

COMMON COMPONENTS

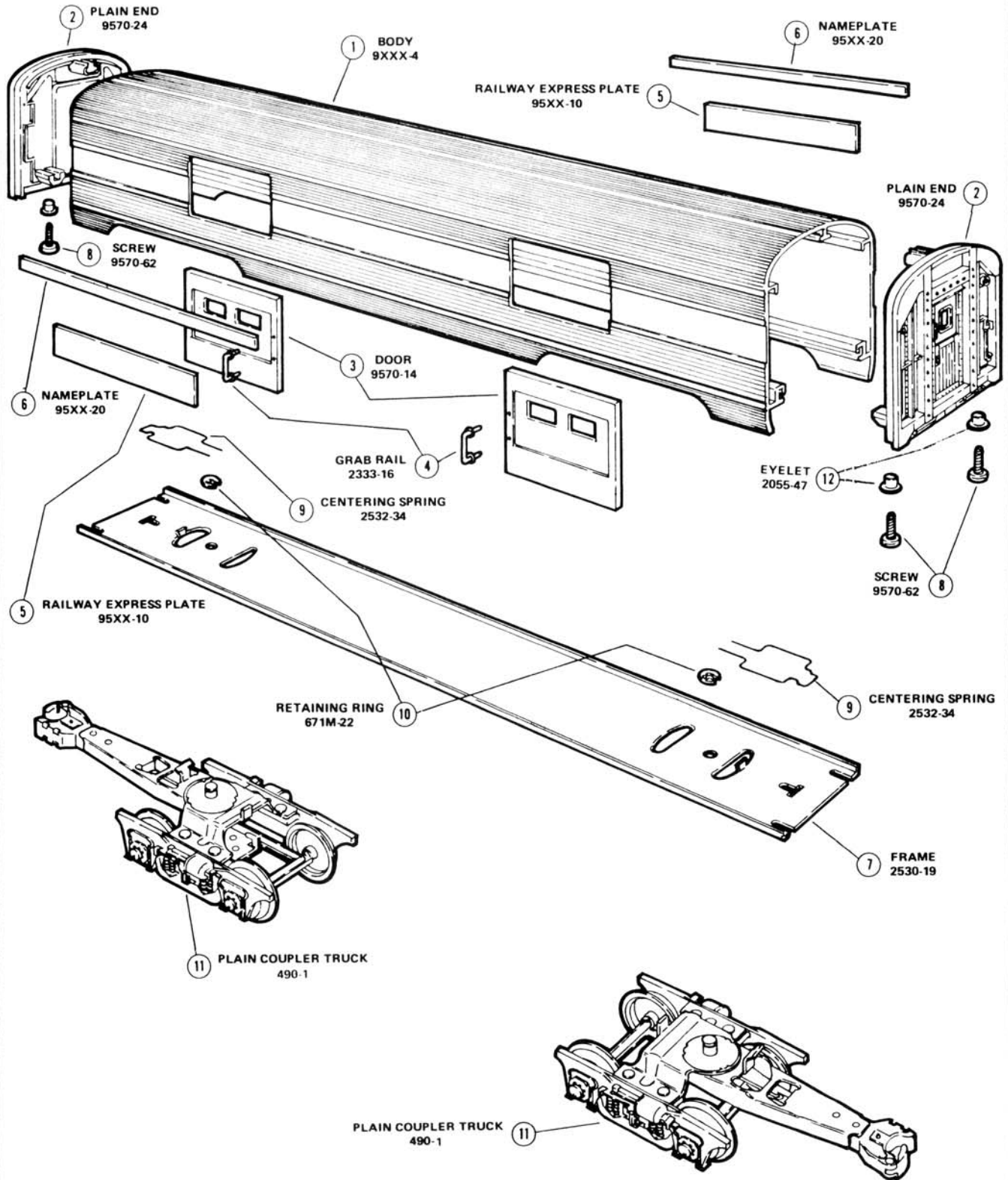
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	8240-71	2	Screw
4	1666E-20	1	Lens (Obser. Roof)
5	2432-5	1	Window Shell (Vista Dome Roof)
6	6400-29	1	Window Strip (Observation)
7	6400-28	2	Window Strip (Pullman Vista Dome)
8	8352-310	2	Lamp
9	8352-320	2	Lamp Socket
10	6403-50	2	Operating Coupler Truck
11	9500-54	1	Plain Truck (Obser. Car)
12	9150-175	1	Axle Contact Assem.
13	9513-150	1	Pick-up assembly
14	9700-20	2	Plastic Truck Rivet

9541 BAGGAGE/MAIL CAR

SECTION ROLLING STOCK
DATE 11/80

REF. NO.	PART NUMBER	QUANTITY PER		DESCRIPTION
		UNIT		
1	9541-3	1		Body
2	9060-6	2		Smokestack
3	9551-44	2		Ventilator
4	1865-5	1		Window Shell
5	8205T-50	1		Screw #4x5/16
6	9541-60	1		Step Frame
7	9541-80	2		Operating Coupler Truck
8	566-16	2		Truck Rivet
9	1865-8	2		Wire Truss

ALUMINUM BAGGAGE CAR



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

ALUMINUM BAGGAGE CAR

9570

SECTION ROLLING STOCK

DATE 1/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-4	1	Body
2	9570-9	2	Plain End, drilled - silver
3	9570-14	4	Door, silver
4	2333-16	4	Grab Rail
5	9570-10	2	Railway Express Plate, PRR only
6	95XX-20	2	Nameplate
7	2530-19	1	Frame
8	9570-62	2	Screw
9	2532-34	2	Centering Spring
10	671M-22	2	Retaining Ring
11	490-1	2	Plain Coupler Truck
12	8803-300	2	Screw, 4/40x1/4 Pan Hd.

ALUMINUM COMBINATION CAR

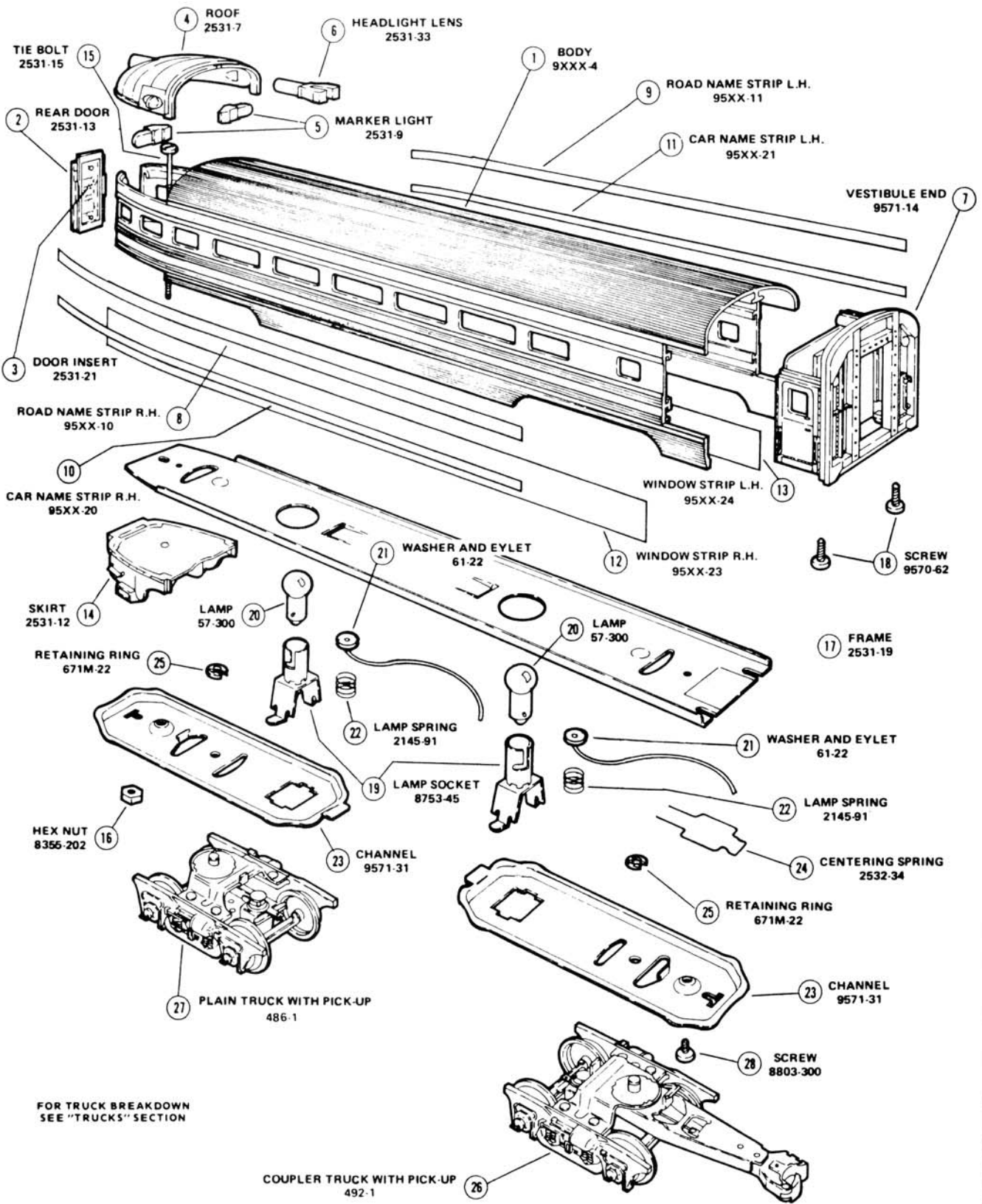
9563 NW
9569 PRR
9590 SP

SECTION ROLLING STOCK

DATE 5/83

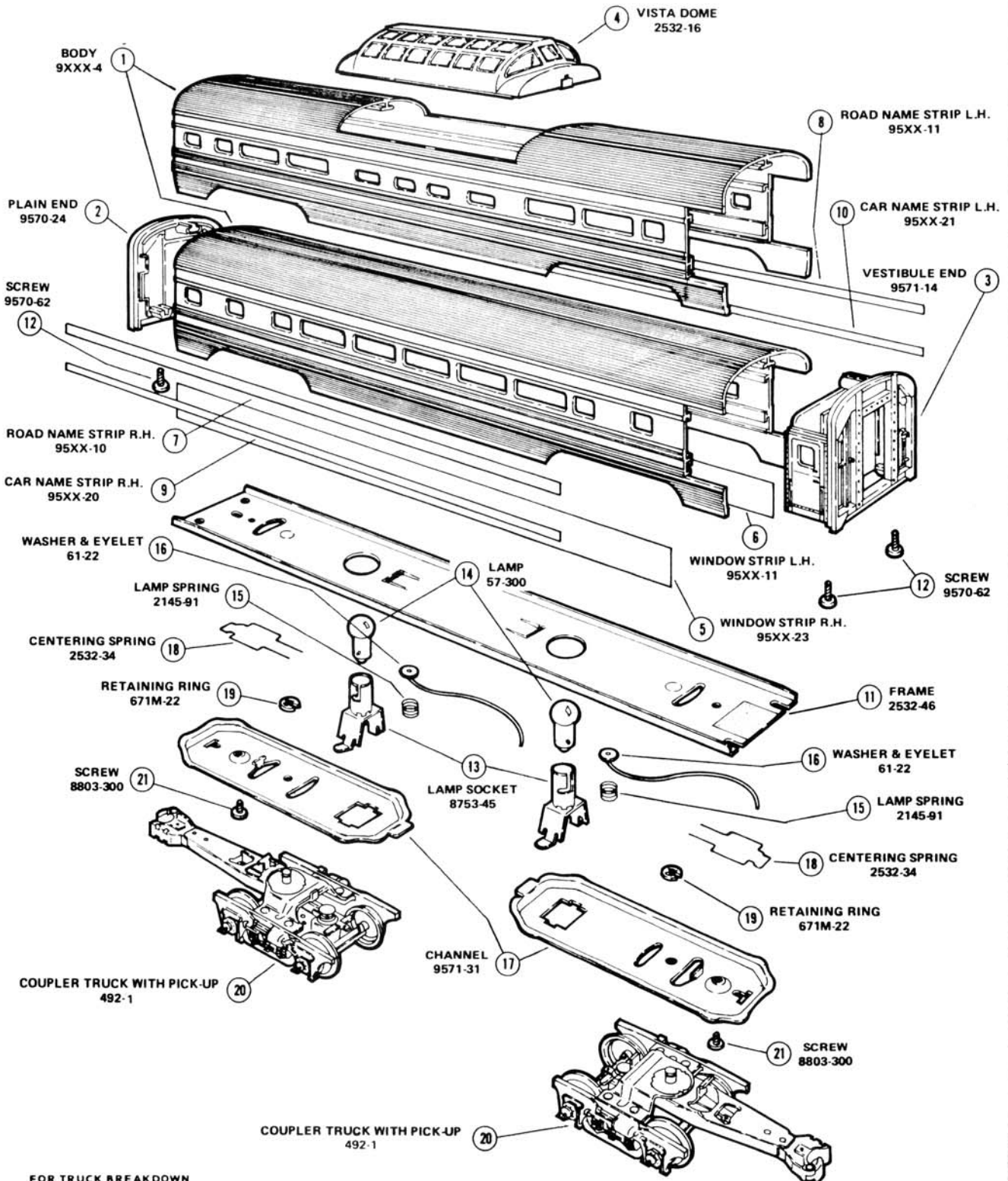
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-006	1	Body, taped - N & W, SP
1	9XXX-054	1	Body, PRR
2	9XXX-009	2	End, drilled - PRR, SP
2	9XXX-024	2	End, painted - N & W
3	9XXX-014	2	Door
4	2333-016	2	Grab rail
5	95XX-010	2	Plate - Railway Express - PRR
5	9XXX-010	2	Plate - Train Name - N & W, SP
6	95XX-020	2	Name plate - PRR, SP
7	9563-019	1	Frame
8	8701-104	4	Screw, body mount, #6x $\frac{1}{2}$ "
9	2532-034	2	Centering spring, wire
9	9589-065	2	Centering spring, plastic
10	671M-022	2	Retaining ring
11	0490-001	1	Coupler truck
12	0492-001	1	Coupler truck with pickup
13	95XX-023	1	Window strip, R.H.
14	95XX-024	1	Window strip, L.H.
15	9563-022	1	Light shield
16	8753-045	1	Light socket and bracket assembly
17	0057-300	1	Lamp
18	2055-47	4	Eyelet

ALUMINUM OBSERVATION CAR



LIONEL

ALUMINUM PASSENGER CAR ALUMINUM VISTA DOME CAR



FOR TRUCK BREAKDOWN
SEE "TRUCKS" SECTION

LIONEL

ALUMINUM PASSENGER CAR
 ALUMINUM VISTA DOME CAR

SECTION ROLLING STOCK

DATE 1/79

REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9XXX-4	1	Body, Aluminum
2	9570-24	1	Plain end, silver
3	9571-11	1	Vestibule end, silver
4	2532-16	1	Vista Dome, silver
5	95XX-23	1	Window strip RH
6	95XX-24	1	Window strip LH
7	95XX-10	1	Road name strip RH, PRR
8	95XX-11	1	Road name strip LH, PRR
9	95XX-20	1	Car name strip RH, PRR
10	95XX-21	1	Car name strip LH, PRR
11	2532-46	1	Frame
12	9570-62	2	Screw
13	8753-45	2	Lamp Socket
14	57-300	2	Lamp
15	2145-91	2	Lamp spring
16	61-22	2	Washer & eyelet
17	9571-31	2	Channel
18	2532-34	2	Centering spring
19	671M-22	2	Retaining ring
20	492-1	2	Coupler truck w/pick-up
21	8803-300	2	Screw - 4/40x1/4 Pan Head
22	9570-107	2	Washer - truck to channel

9321 SANTA FE - SINGLE DOME TANK CAR
 9324 TOOTSIE ROLL
 9331 UNION ' 76

SECTION ROLLING STOCK
 DATE 3/79
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9153-4	1	Body
1	9324-4	1	Body
1	9331-4	1	Body
2	9321-58	1	Dome
3	9324-56	1	Dome
3	9331-58	1	Dome
4	9321-57	2	Ends
4	9331-57	2	Ends
5	9324-57	2	Ends
6	9321-10	2	Decal (SF - Large)
7	8900-10	2	Decal (SF - Small)
8	9324-10	2	Decal
9	9331-10	1	Decal

9334 HUMBLE OIL - LARGE SINGLE DOME

SECTION ROLLING STOCK
 DATE 3/79
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9334-7	1	Body
2	9152-55	2	Tank End
3	6315-6	1	Dome Platform
4	6315-7	2	Handrail
5	6315-10	2	Ladder
6	9138-12	1	Chassis
7	9020-10	1	Brakewheel
8	566-16	2	Truck Rivet - Metal
9	9550-50	2	Die Cast Operating Coupler Truck
10	8040-172	2	Screw - 4x5/16 RH
11	9775-350	2	Spacer Bushing

SUNOCO TANK CAR (#9050)

SECTION ROLLING STOCK
 DATE 5-77
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9050-3	1	Body
2	9050-12	1	Frame
3	9150-50	1	Operating Coupler Truck
4	9150-75	1	Dummy Coupler Truck
5	566-16	2	Truck Rivet
6	9020-10	1	Brakewheel

9082 DOW CHEMICAL TANK CAR

SECTION ROLLING STOCK
 DATE 3/79
 REFERENCE
 DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9082-7	1	Body
2	9040-10	1	Frame
3	9150-50	1	Operating Coupler Truck
4	9150-75	1	Dummy Coupler Truck
5	566-16	2	Metal Truck Rivet
6	9020-10	1	Brakewheel

2 - DOME TANK CAR

SECTION ROLLING STOCK

DATE 3-84

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
	00-63XX-007	1	Body
	00-63XX-015	2	Tank ends
	00-6465-006	1	Frame
	00-9150-050	1	Operating truck
	00-9150-075	1	Dummy truck
	00-0566-016	2	Rivet, truck mount

CAT. NO.	DESCRIPTION	BODY			ENDS		
		REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
6310	Shell		6310-7	1		6310-15	2
6312	C & O		6312-7	1		6312-15	2
6317	Gulf		6317-7	1		6317-15	2

TANK CAR - 3 DOME

SECTION ROLLING STOCK

DATE 11/80

TANK END

BODY

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9148	Dupont	1	9148-7	1	2	9148-57	3
9250	GMX	1	9250-3	1	2	9250-57	3
9279	Magnolia	1	9279-7	1	2	9279-57	3
9327	Bakelite	1	9327-7	1	2	9344-57	2
9344	Citgo	1	9344-7	1	2	9344-57	2
9353	Crystal Car Lines	1	9353-7	1	2	9353-57	2
9138	Sunoco	1	9138-7	1	2	9138-56	2

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	6415-7	2	Handrail
4	6415-8	2	Ladder
5	8141-22	1	Screw
6	9138-12	1	Frame - Die Cast Trucks
	6415-10	1	Frame - Plastic Trucks
7	9020-10	1	Brakewheel
8	9150-50	2	Operating Coupler Truck
	9550-50	2	Die Cast Coupler Truck
9	9700-20	2	Plastic Truck Rivet
10	8040-172	2	Screw 4/40x5/16 - Die Cast Truck
11	9775-350	2	Spacer - Die Cast Trucks
	9344-10	2	Decal - not shown

9313 GULF 3 DOME TANK CAR

SECTION ROLLING STOCK

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9313-4	1	Body
2	9313-26	3	Dome
3	9313-57	2	Tank End
4	9313-10	2	Decal
5	6415-8	2	Ladder
6	6417-7	2	Handrail
7	8701-104	1	Screw #6 x 1/4 Pan Hd.
8	9138-12	1	Frame
9	9020-10	1	Brakewheel
10	9550-50	2	Operating Die Cast Coupler Truck
11	8040-172	2	Screw - #4 x 5/16 RH
12	9775-350	2	Spacer Bushing

BARREL CAR

SECTION ROLLING STOCK

DATE 5-77

REFERENCE
DRAWING

BODY

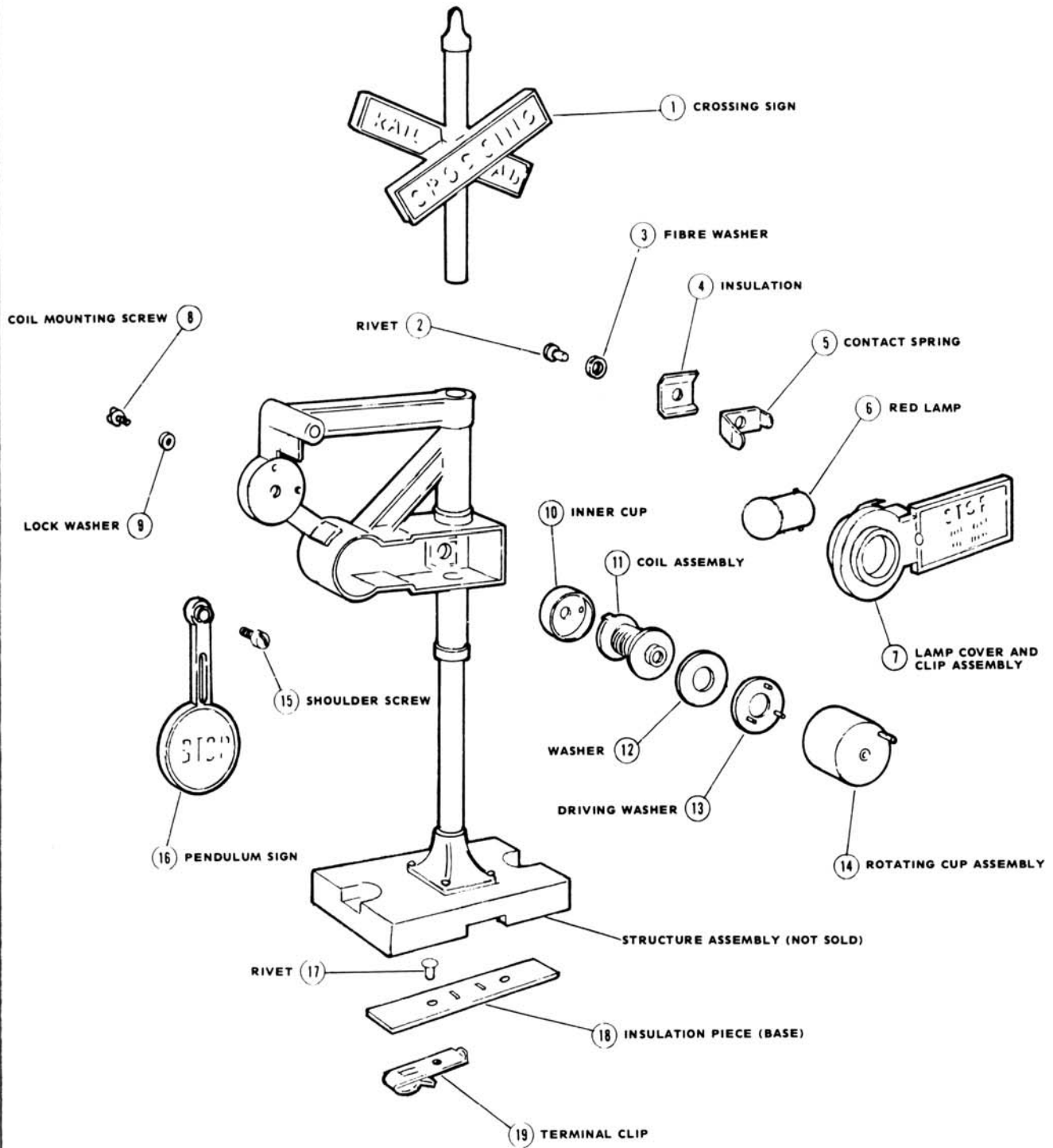
LOAD

CAT. NO.	DESCRIPTION	REF. NO.	PART NUMBER	QUANTITY PER UNIT	REF. NO.	PART NUMBER	QUANTITY PER UNIT
9128	Pickle Car	1	9128-5	1	2	9128-7	4
9132	Pineapple Car	1	9132-3	1	2	9132-7	4
9146	Mogen David Car	1	9146-3	1	2	9146-7	4

COMMON COMPONENTS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
3	9020-10	1	Brakewheel
4	6356-19	1	Frame
5	9150-50	2	Operating Coupler Truck
6	566-16	2	Truck Rivet
6	9700-20	2	Plastic Truck Rivet
7	9700-25	1	Screw

2140 AUTOMATIC BANJO SIGNAL



LIONEL

2140 - AUTOMATIC BANJO SIGNAL

SECTION ACCESSORIES

DATE 5-77

REFERENCE

DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	140-39	1	Crossing Sign
2	140-11	1	Rivet (Lamp Contact)
3	140-9	1	Fibre Washer
4	140-10	1	Insulation (Lamp Contact)
5	140-8	1	Lamp Contact Spring
6	53-301	1	Red Lamp
7	140-12	1	Lamp Cover & Clip Assembly
8	348-187	1	RH Coil Mounting Screw-3-48 NCZ x 1/4" R.H.
9	140-35	1	Lockwasher
10	140-33	1	Inner Cup
11	140-19	1	Coil Assembly
12	0197-35	1	Washer
13	140-32	1	Driving Washer
14	140-28	1	Rotating Cup Assembly
15	226E-33	1	Shoulder Screw (Pendulum)
16	140-41	1	Pendulum - Sign
17	1695-22	2	Rivet
18	140-52	1	Insulation Piece (Base)
19	771C-6	2	Terminal Clip
	153C-1	1	Contact (NOT SHOWN)
	140-37	1	Adhesive Washer (NOT SHOWN)

2494 ROTARY BEACON

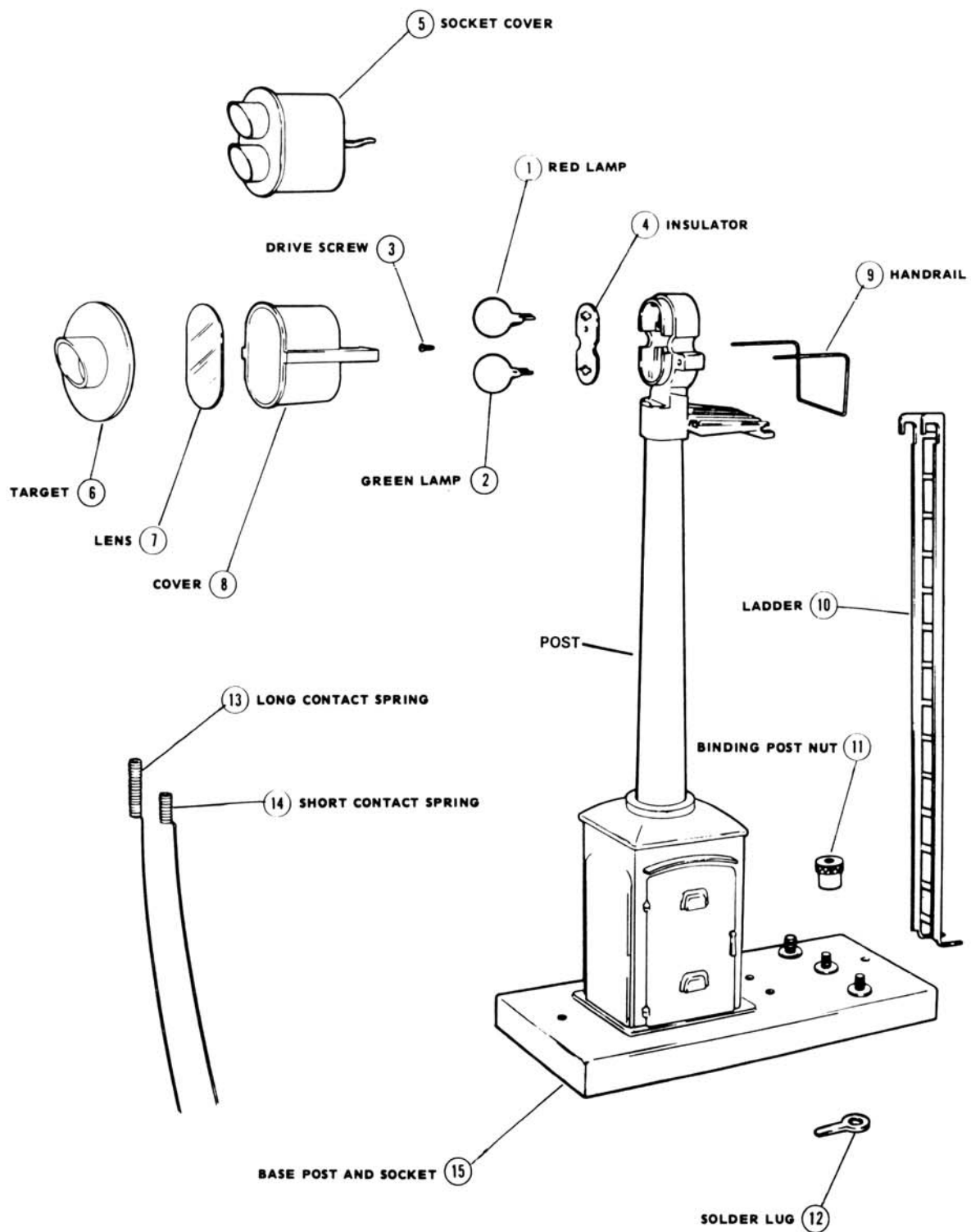
SECTION ACCESSORIES

DATE 5-77

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	53-300	1	Lamp
2	394-17	1	Center Terminal Rod
3	395-29	1	Terminal Insulation
4	395-30	2	Terminal Clip
5	395-33	1	Ladder
6	2494-10	1	Nameplate
7	494-14	1	Insulating Bushing
8	494-15	1	Contact Spring
9	2494-17	1	Lens Housing Assembly
10	494-40	1	Coil & Socket Assembly
11	2494-50	1	Driving Washer
12	2494-76	1	Steel Washer (Driving Washer)
13	2494-101	1	Coil Shield
			NOTE: STRUCTURE NOT AVAILABLE SEPARATELY.

2163 AUTOMATIC TARGET SIGNAL



2163 - AUTOMATIC BLOCK TARGET SIGNAL

SECTION ACCESSORIES

DATE 5-77

REFERENCE

DRAWING - 1-9

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	19-301	1	2 Pin 14 V Red Lamp
2	19-302	1	2 Pin 14 V Green Lamp
3	253-8	1	Drive Screw
4	253-9	1	Insulator (Socket)
5	450-13	1	Socket Cover & Spring Assembly
6	163-5	1	Target
7	163-6	1	Lens
8	163-4	1	Socket Cover
9	253-20	1	Handrail
10	253-5	1	Ladder
11	88-2	3	Binding Post Nut
12	152-46	3	Solder Lug
13	353-5	1	Long Contact Spring
14	353-6	1	Short Contact Spring
15	2163-5	1	Base & Post Assembly
	153C-1	1	Contactor (NOT SHOWN)
16	253-7	1	Post
17	153-4	3	Binding Post (not shown)

Rev. 6/92

2260-1 BUMPER - ILLUMINATED

SECTION ACCESSORIES
 DATE 5-77
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	261-3	1	Bumper Case
2	260-15	1	Plunger
3	26-8	1	Plunger Spring
4	260-16	1	Rivet
5	RW-27	1	Red Jewel
6	261-4	1	Lamp Bracket
7	260-20	1	Base Assembly
8	53-300	1	Lamp
9	8240-71	1	Screw - #4 x 1/4"
10	2260-25	4	Slotted Screw

2290 LIGHTED BUMPER

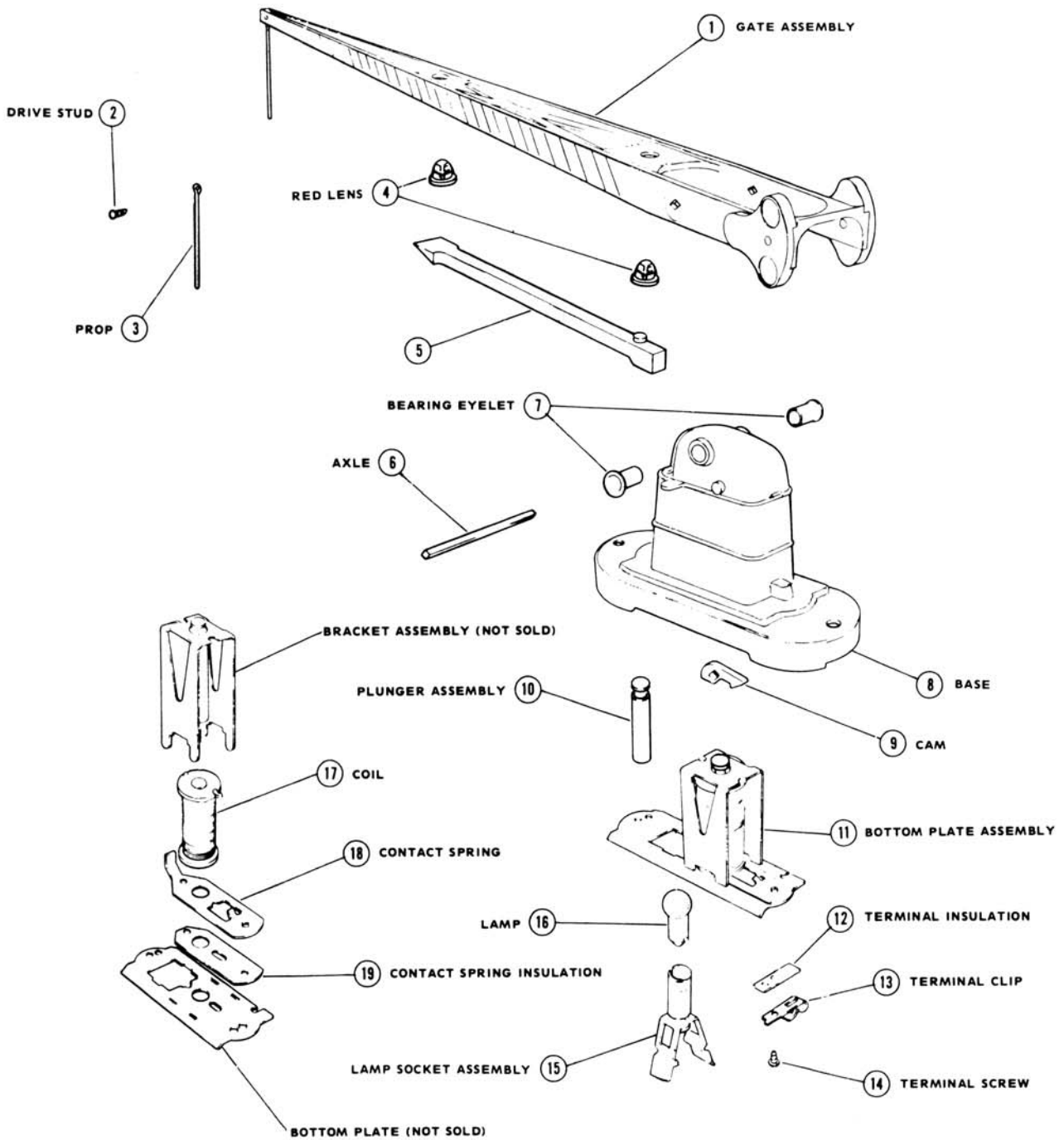
SECTION ACCESSORIES

DATE 5-78

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	2290-5	1	Bumper Body
2	2290-10	1	Center Rail Contact
3	2290-17	1	Side Contact
4	2290-20	1	Red Lamp

2152 AUTOMATIC CROSSING GATE



LIONEL

2152 - AUTOMATIC CROSSING GATE

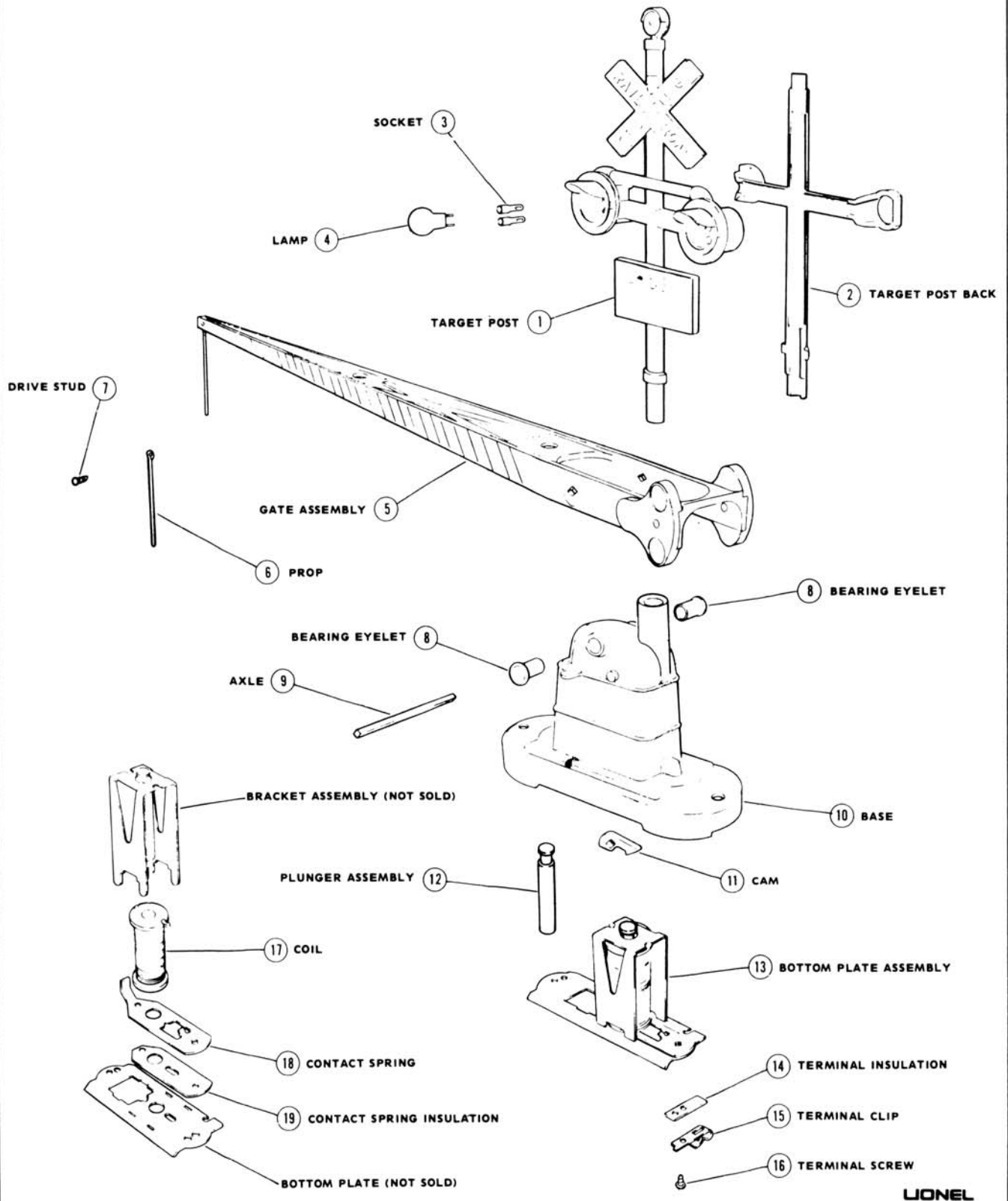
SECTION ACCESSORIES

DATE 5-77

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	252-77	1	Gate w/Counterweight & Prop Only (Obsolete - See Below)
2	3656-153	1	Drive Stud
3	252-16	1	Prop
4	252-11	2	Red Lens
5	252-10	1	Light Shaft
6	252-74	1	Axle
7	6512-8	2	Bearing Eyelet (Base)
8	252-5	1	Base
9	252-59	1	Cam
10	252-65	1	Plunger Assembly
11	252-17	1	Bottom Plate Assembly (With Coil)
12	252-28	2	Insulation (Terminal Clip)
13	771C-6	2	Terminal Clip
14	8240-71	2	#4 x 1/4" Screw (Terminal Clip)
15	8753-45	1	Lamp Socket Assembly
16	363-300	1	14 V Lamp
17	252-52	1	Coil
18	252-26	1	Contact Spring
19	252-27	1	Contact Spring Insulation
	153C-1	1	Contactor (NOT SHOWN)
1A	252-9	1	Gate
1B	252-14	2	Counter weight

2162 CROSSING GATE AND FLASHER



LIONEL

2162 - CROSSING GATE & FLASHER

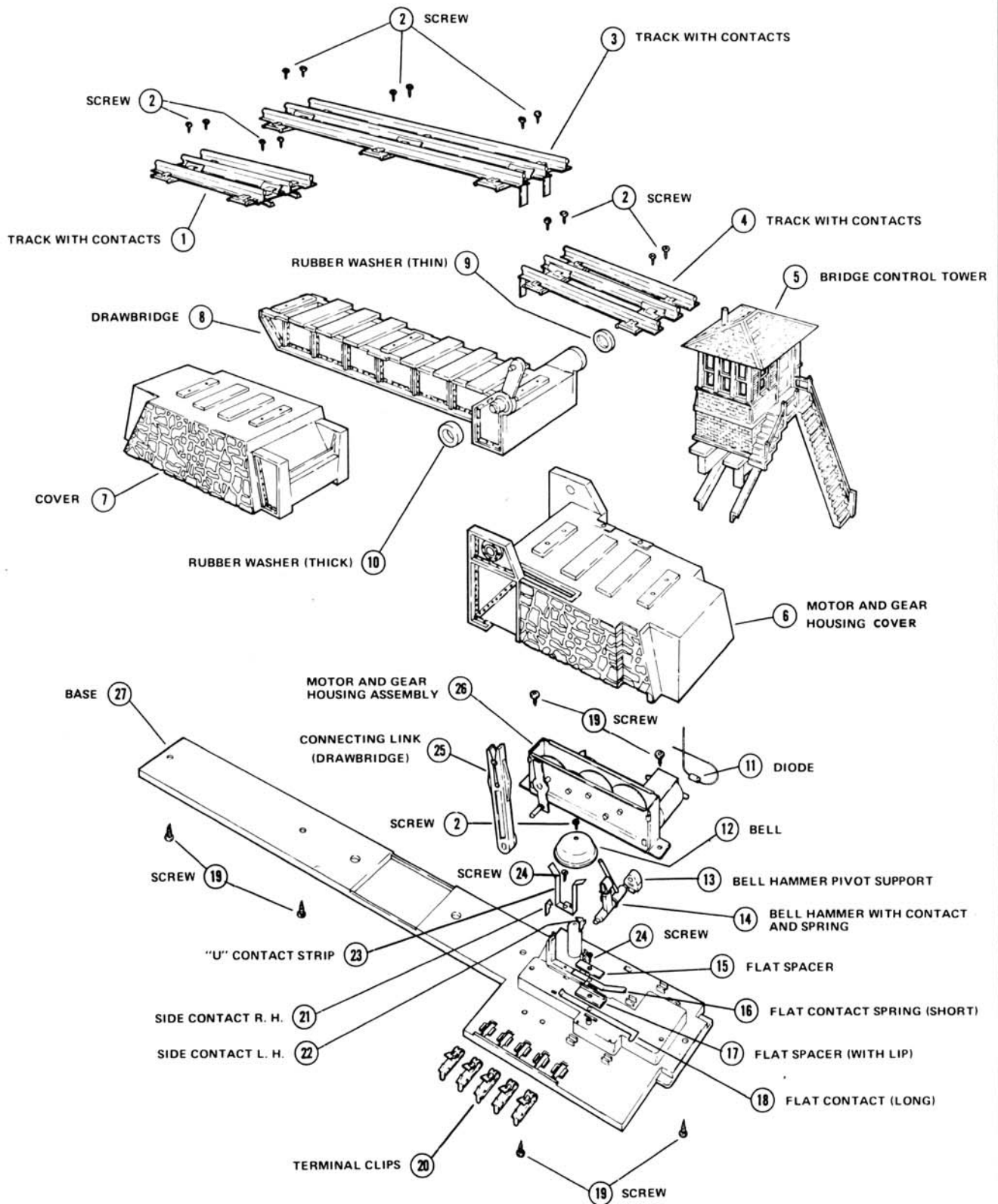
SECTION ACCESSORIES

DATE 5-77

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	262-10	1	Crossing Sign - Target Post
2	262-4	1	Rear Cover - Target Post Back
3	0565-45	4	Socket Contact
4	19-301	2	14 V Red Lamp (2 Pin)
5	262-16	1	Gate W/Weights & Prop (Obsolete - See Below)
6	252-16	1	Prop
7	3656-153	1	Drive Stud
8	6512-8	2	Bearing Eyelet
9	252-74	1	Axle
10	262-2	1	Base
11	252-59	1	Cam
12	252-65	1	Plunger Assembly
13	252-17	1	Bottom Plate Assembly W/Coil
14	252-28	2	Insulation - Terminal Clip
15	771C-6	2	Terminal Clip
16	8240-71	2	Terminal Clip Screw - #4 x 1/4"
17	252-52	1	Coil
18	252-26	1	Contact Spring
19	252-27	1	Contact Spring Insulation
20	153C-1	1	Contactactor (NOT SHOWN)
21	262-13	2	Rivets (NOT SHOWN)
5A	2162-3	1	Gate - Stamped Red
5B	262-12	2	Counter Weight

2317 AUTOMATIC-REMOTE CONTROL DRAWBRIDGE



LIONEL

2317 - AUTOMATIC - REMOTE
CONTROL DRAWBRIDGE

SECTION ACCESSORIES
DATE 6-77
REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	2317-15	1	Track W/Contacts (Cover)
2	2317-18	15	Screw (Track and Bell)
3	2317-16	1	Track W/Contacts (Drawbridge)
4	2317-14	1	Track W/Contacts (Motor Cover)
5	2317-75	1	Bridge Control Tower
6	2317-4	1	Motor and Gear Housing
7	2317-5	1	Cover
8	2317-6	1	Drawbridge
9	2317-11	1	Rubber Washer (Thin)
10	2317-10	1	Rubber Washer (Thick)
11	2317-30	1	Diode
12	2317-29	1	Bell
13	2317-28	1	Bell Hammer Pivot Support
14	2317-27	1	Bell Hammer W/Contact and Spring
15	2317-33	1	Flat Spacer
16	2317-32	1	Flat Contact Spring (Short)
17	2317-34	1	Flat Spacer W/Lip
18	2317-31	1	Flat Contact (Long)
19	2317-12	6	Screw (Base and Motor and Gear Assy.)
20	2317-50	5	Terminal Clip
21	2317-23	1	Side Contact R.H.
22	2317-24	1	Side Contact L.H.
23	2317-25	1	"U" Contact Strip
24	2317-26	2	Screw ("U" Contact and Flat Contact)
25	2317-8	1	Connecting Link (Drawbridge)
26	2317-20	1	Motor & Gear Housing Assembly
27	2317-2	1	Base

2320 FLAG POLE

SECTION ACCESSORIES

DATE 10/83

REF. QUANTITY PER
NO. PART NUMBER UNIT

DESCRIPTION

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	00-0089-003	1	Base
2	00-0089-004	1	Flag pole
3	00-2320-005	1	Flag assembly
4	00-0089-006	1	Hedge (4 sections)

2313 - FLOODLIGHT TOWER

SEE ALSO #2195

SECTION ACCESSORIES

DATE 5-77

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	2313-12	4	Structure, Lionel
2	199-4	1	Base
3	195-48	2	Rod
4	395-30	2	Terminal Clip
5	299-24	1	Platform
6	195-8	8	Reflector
7	2313-300	8	Bulb
8	2313-3	1	Lens Bracket
9	2313-4	1	Rear Cover
10	SE-54	2	Eyelet
11	2313-10	2	Buss Bar Assembly

2156 - ILLUMINATED FREIGHT PLATFORM

SECTION ACCESSORIES
 DATE 5-77
 REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	157-16	1	Platform
2	157-3	1	Roof
3	156-5	2	Fence
4	1970-15	3	Palnut (Roof)
5	1970-16	3	Speednut
6	1970-17	2	Terminal Speed Clip
7	1442-303	2	Lamp
8	1970-6	2	Post W/Socket
9	1970-106	1	Plain Post
10	1970-14	1	Lamp Connector Assembly
11	156-8	1	Insulator

2126 - WHISTLE SHED

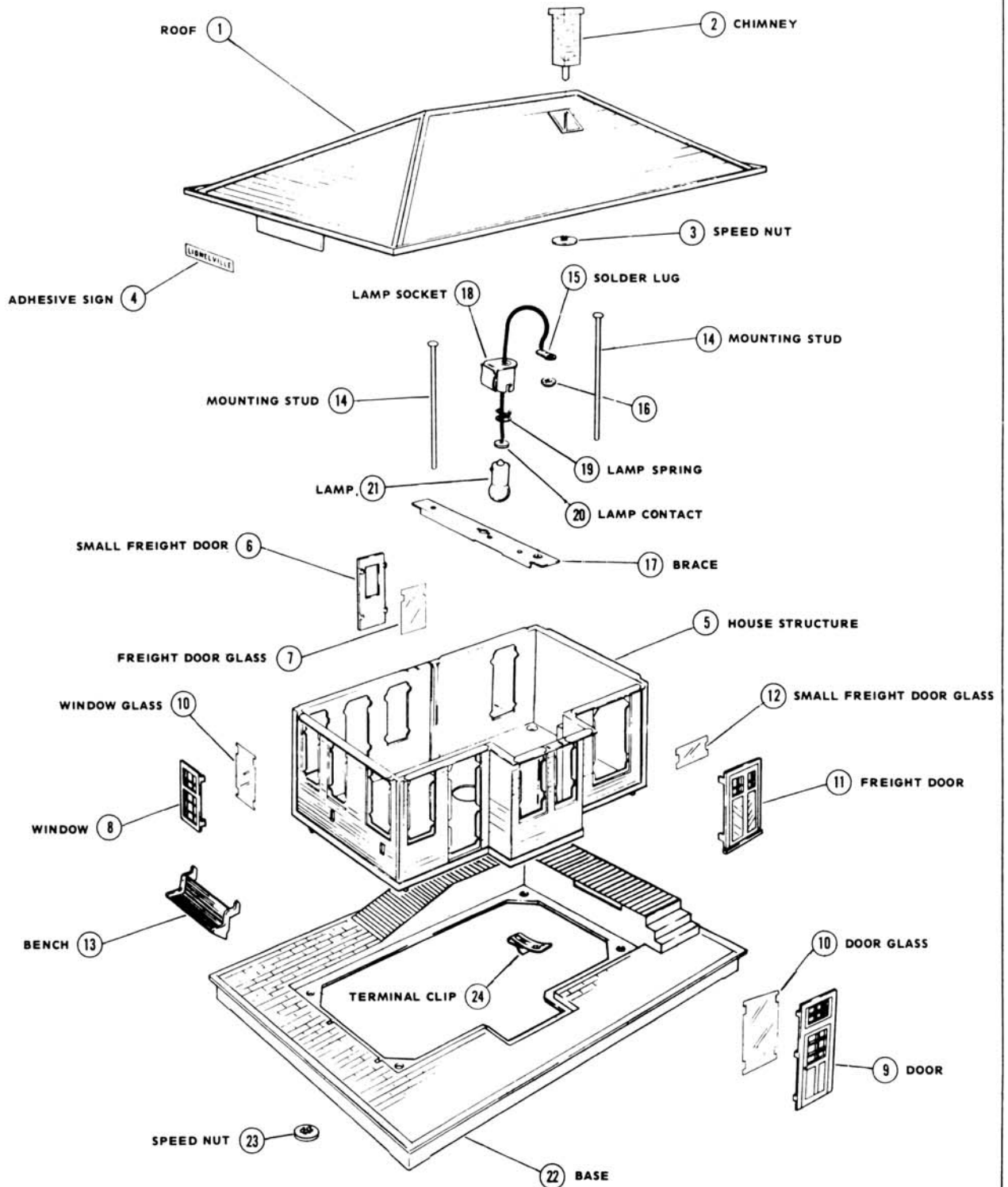
SECTION ACCESSORIES

DATE 4-77

REFERENCE DRAWING

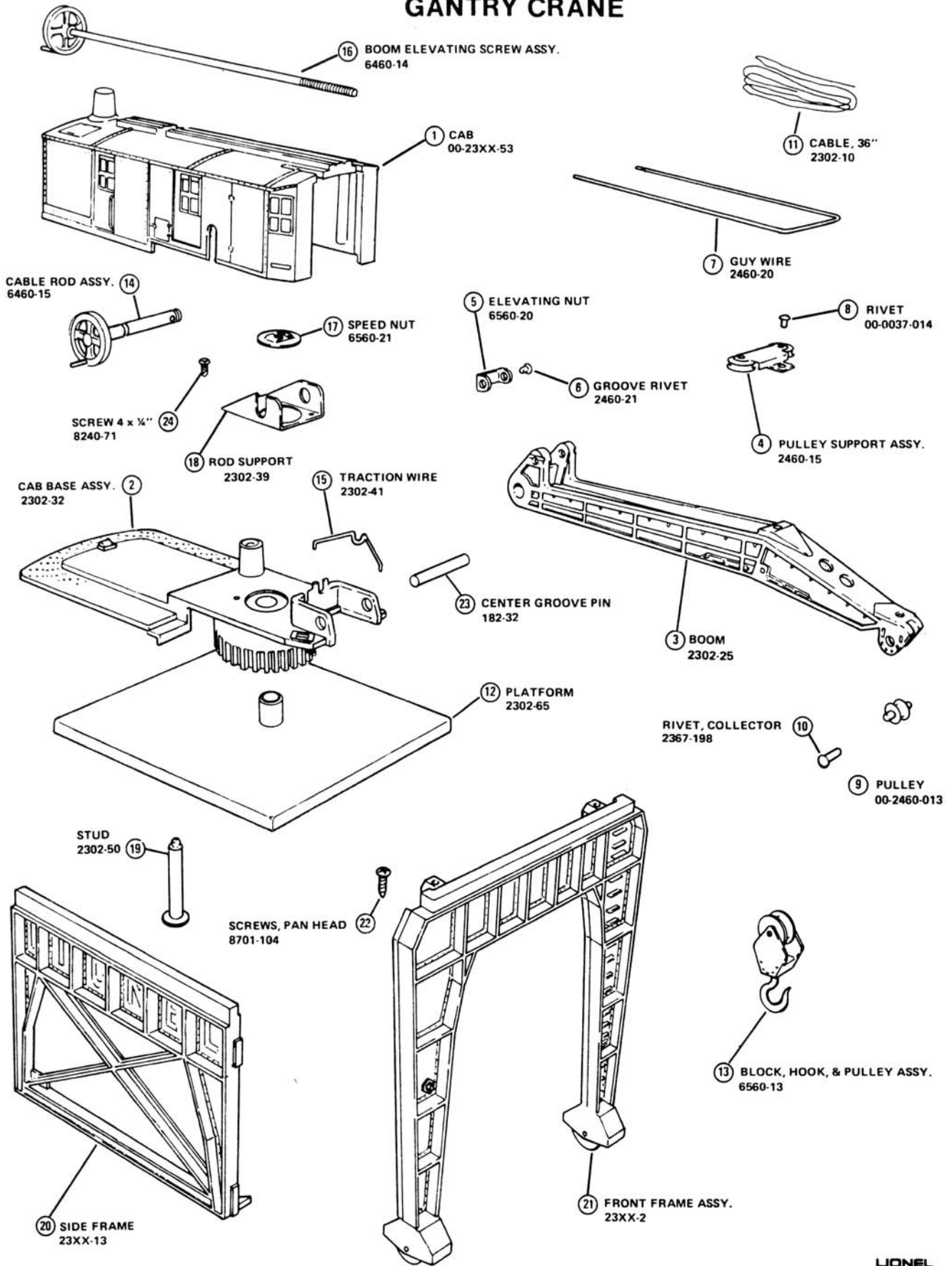
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	2126-17	1	Shed
2	2126-22	1	Roof
3	2126-7	1	Door
4	145-24	1	Door Glass
5	2126-18	2	Window Frame
6	145-13	2	Window Glass
7	2126-23	1	Tool Box Cover
8	145-21	2	Mounting Stud
9	145-25	1	Nameplate
10	395-30	2	Terminal Clip
11	125-6	2	Adhesive Pad
12	2126-3	1	Platform
13	WS-176	1	Whistle Body
14	2126-50	1	Motor
15	2126-51	1	Impeller
16	2126-52	1	Motor Mounting Plate
17	8251-65	4	Diode
18	2126-45	1	Motor Retainer
19	38-50	1	Solder Lug
20	8400-5	2	Mounting Screw
21	2126-6	2	Plate Screw
22	8355-202	2	Plate Nut

2133 ILLUMINATED FREIGHT STATION



LIONEL

GANTRY CRANE



LIONEL

2302 GANTRY CRANE

SECTION ACCESSORIES
DATE 5/83

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	00-23XX-053	1	Cab
2	00-2302-032	1	Cab base assembly
3	00-2302-025	1	Boom
4	00-2460-015	1	Pulley support assembly
5	00-6560-020	1	Elevating nut
6	00-2460-021	2	Groove rivet
7	00-2460-020	1	Guy wire
8	00-0037-014	2	Rivet
9	00-2303-048	1	Pulley
10	00-2367-198	1	Rivet
11	00-2302-010	1	Cable, 36" long
12	00-2302-065	1	Platform
13	00-6560-013	1	Block, hook & pulley assembly
14	00-6460-015	1	Cable rod assembly
15	00-2302-041	1	Traction wire
16	00-6460-014	1	Boom elevating screw assembly
17	00-6560-021	1	Speed nut
18	00-2302-039	1	Rod support
19	00-2302-075	1	Stud
20	00-23XX-013	2	Side frame
21	00-23XX-002	2	Front frame assembly
22	00-8701-104	4	Screws, platform mount
23	00-0182-032	1	Center groove pin
24	00-8240-071	2	Screws, rod support

2145 - AUTOMATIC GATEMAN

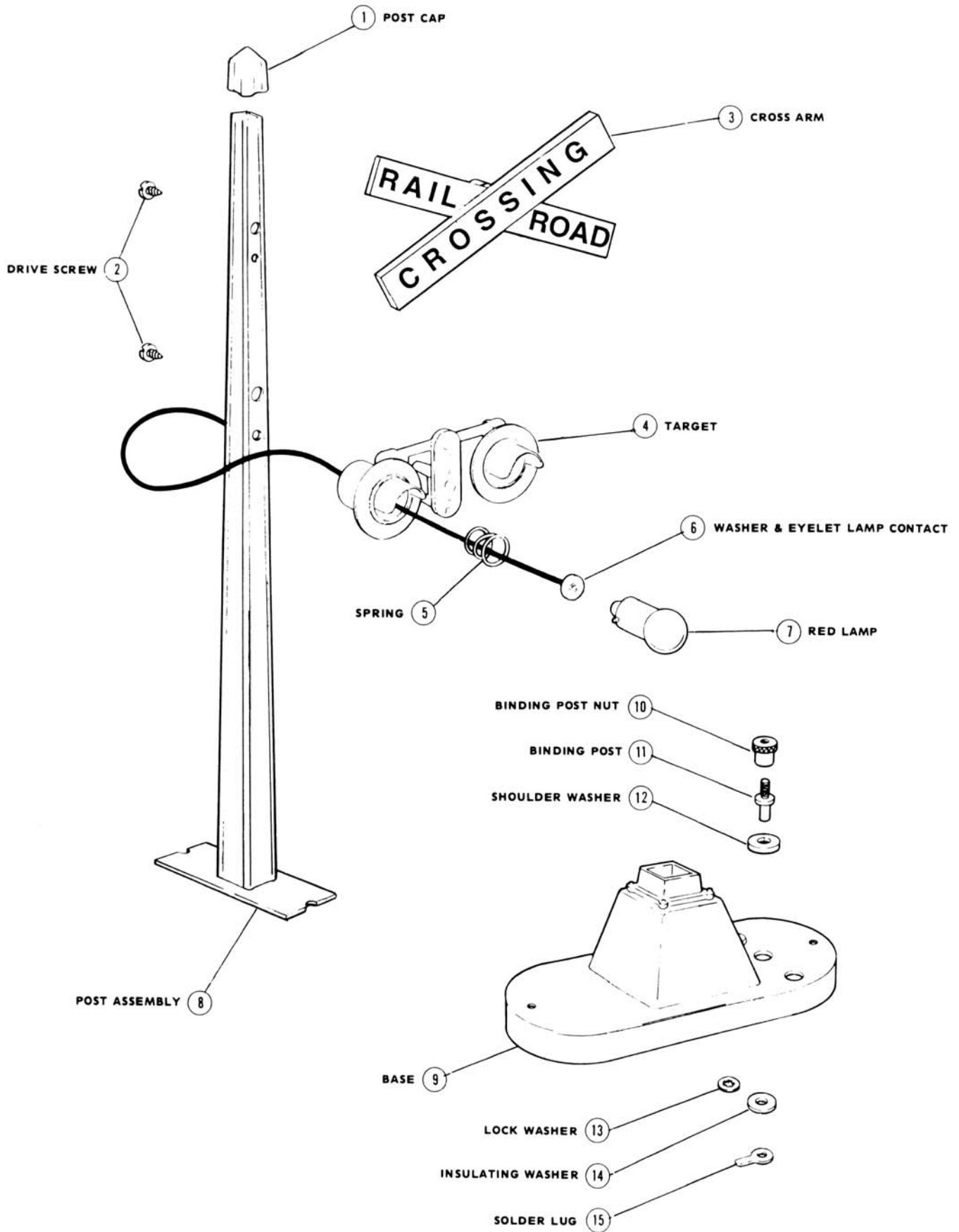
SECTION ACCESSORIES

DATE 4-77

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	45-58	1	Solder Lug
2	45-14	1	Return Spring
3	8142-63	1	#4 Lockwasher
4	61-9	1	4-36 Hex Nut
5	61-22	1	Lamp Contact
6	118L-11	1	Fibre Shoulder Washer
7	145-4	1	Base
8	145-5	1	Coil
9	145-10	1	Gear Pivot Stud (OBSOLETE)
10	145-11	1	Pinion Gear
11	145-13	2	Window Glass
12	145-14	1	Gear Segment
13	145-17	1	House Structure
14	145-18	2	Window Frame
15	2145-90	1	Lamp Socket Assembly
16	145-21	2	Mounting Stud
17	145-22	1	Roof
18	145-23	1	Tool Box Cover
19	145-24	1	Door Glass
20	145-25	1	Adhesive Sign
21	145-27	1	Figure Complete
22	145-31	1	Arm & Lantern Assembly
23	145-35	1	Plunger & Bracket
24	145-12	1	Door Assembly
25	A-34	1	Eyelet (Door Pivot)
26	256-4	1	Short Stud
27	256-30	2	Terminal Clip & Lug
28	309-28	1	Crossing Sign
29	395-30	1	Terminal Clip
30	431-300	1	Lamp
31	480-18	1	Retaining Washer
32	714-16	2	Drive Screw
33	2145-91	1	Lamp Spring
34	RCS-40	1	Washer
35	8205-T50	2	4x5/16 Screw

2154 AUTOMATIC HIGHWAY FLASHER



2154 - AUTOMATIC HIGHWAY FLASHER

SECTION ACCESSORIES

DATE 5-77

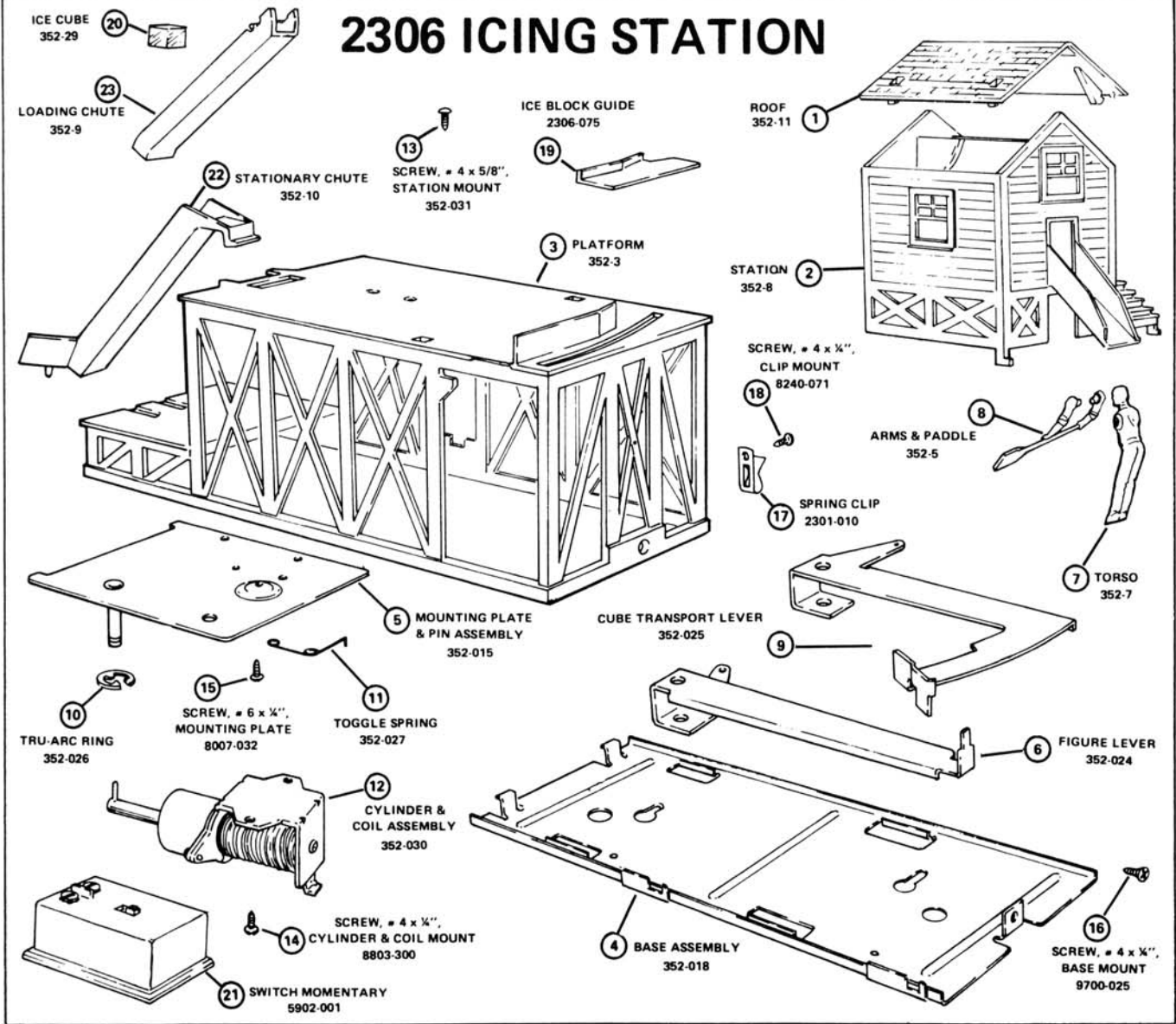
REFERENCE
DRAWING

REF. NO.	QUANTITY PER UNIT		DESCRIPTION
	PART NUMBER		
1	62-3	1	Post Cap
2	153-14	2	Drive Screw
3	154-34	1	Cross Arm
4	154-36	1	Target
5	2145-91	2	Lamp Spring
6	57-25	2	Washer & Eyelet Lamp Contact
7	53-301	2	Red Lamp
8	154-7	1	Post Assembly
9	154-2	1	Base
10	88-2	3	Binding Post Nut
11	153-4	3	Binding Post
12	118L-11	3	Fibre Shoulder Washer
13	81 42-63	3	Lock Washer - #4
14	61-13	3	Insulating Washer
15	152-46	3	Solder Lug
	154C-1	1	Contactor (NOT SHOWN)

REF. NO. PART NUMBER QUANTITY PER UNIT DESCRIPTION

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	2127-17	1	Shed
2	2127-22	1	Roof
3	2127-7	1	Door
4	2127-18	2	Window Frame
5	145-24	1	Door Glass
6	145-13	1	Window Glass
7	2127-23	1	Tool Box Cover
8	145-21	2	Mounting Stud
9	145-25	1	Nameplate
10	395-30	2	Terminal Clip
11	2127-3	1	Platform
12	SE-35	2	Eyelet (Platform)
13	2127-52	1	Battery Clip (Platform)
14	2127-75	1	Circuit Board
15	2127-80	1	Speaker
16	2127-45	1	Retainer Clip (Speaker)
17	2127-50	1	Baffle
18	0190-25	1	Controller
			Note: Horn operated by a 9 Volt transistory battery.

2306 ICING STATION

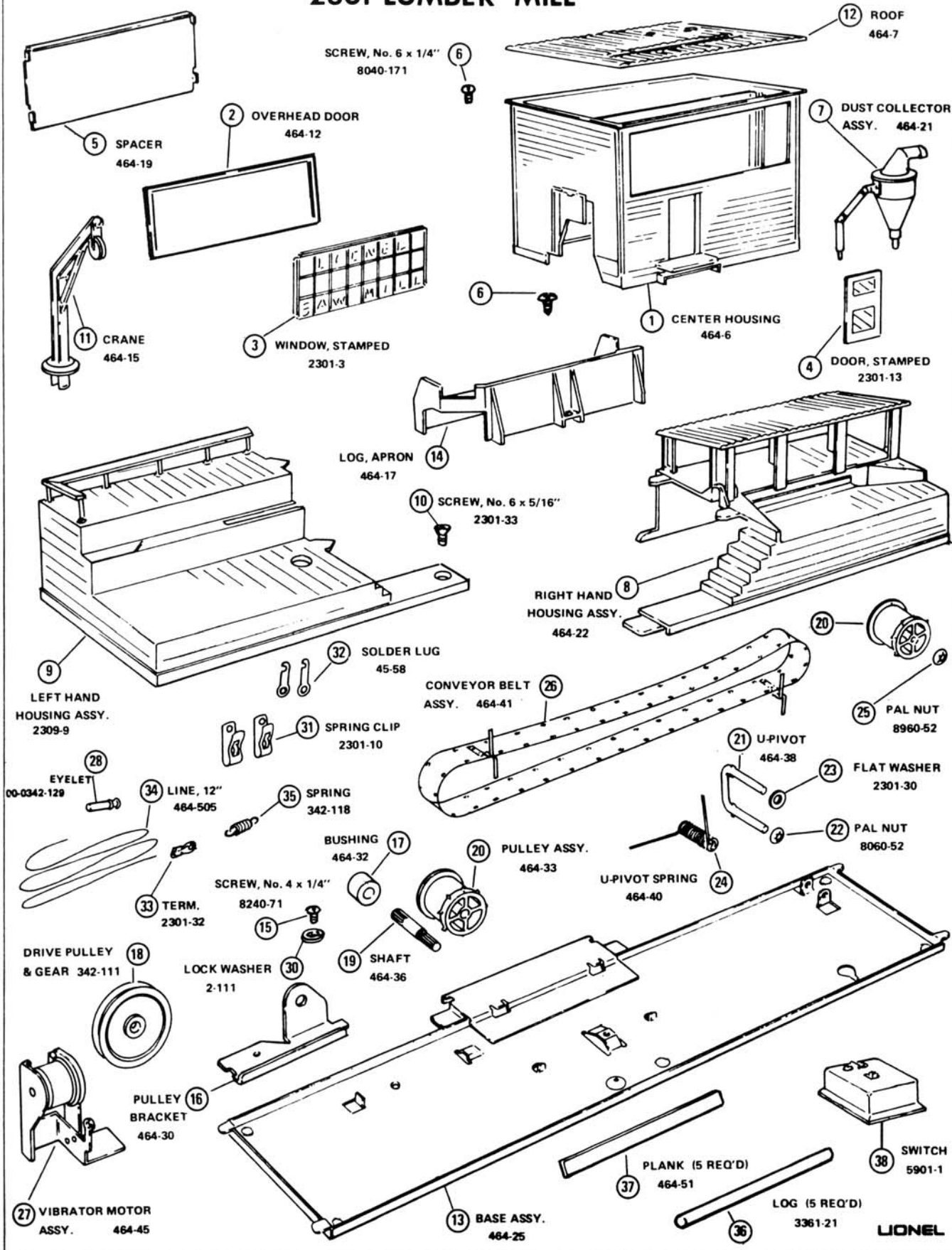


2306 ICING STATION

SECTION ACCESSORIES
DATE 5/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	352-11	1	Roof
2	352-8	1	Station
3	352-3	1	Platform
4	352-018	1	Base assembly
5	352-015	1	Mounting plate & pin assembly
6	352-024	1	Figure lever
7	352-7	1	Torso
8	352-5	1	Arms & paddle
9	352-025	1	Cube transport lever
10	352-026	1	Tru-arc ring
11	352-027	1	Toggle spring
12	352-030	1	Cylinder & coil assembly
13	352-031	1	Screw, #4x5/8", station mount
14	8803-300	2	Screw, #4x1/4", cylinder & coil mount
15	8007-032	1	Screw, #6x1/4", mounting plate
16	9700-025	1	Screw, #4x1/4", base mount
17	2301-010	2	Spring clip
18	8240-071	2	Screw, #4x1/4", clip mount
19	2306-075	1	Ice block guide
20	352-29	13	Ice cube
21	5902-001	1	Switch
22	352-10	1	Stationary chute
23	352-9	1	Loading chute
24	5902-1	1	Momentary switch

2301 LUMBER MILL



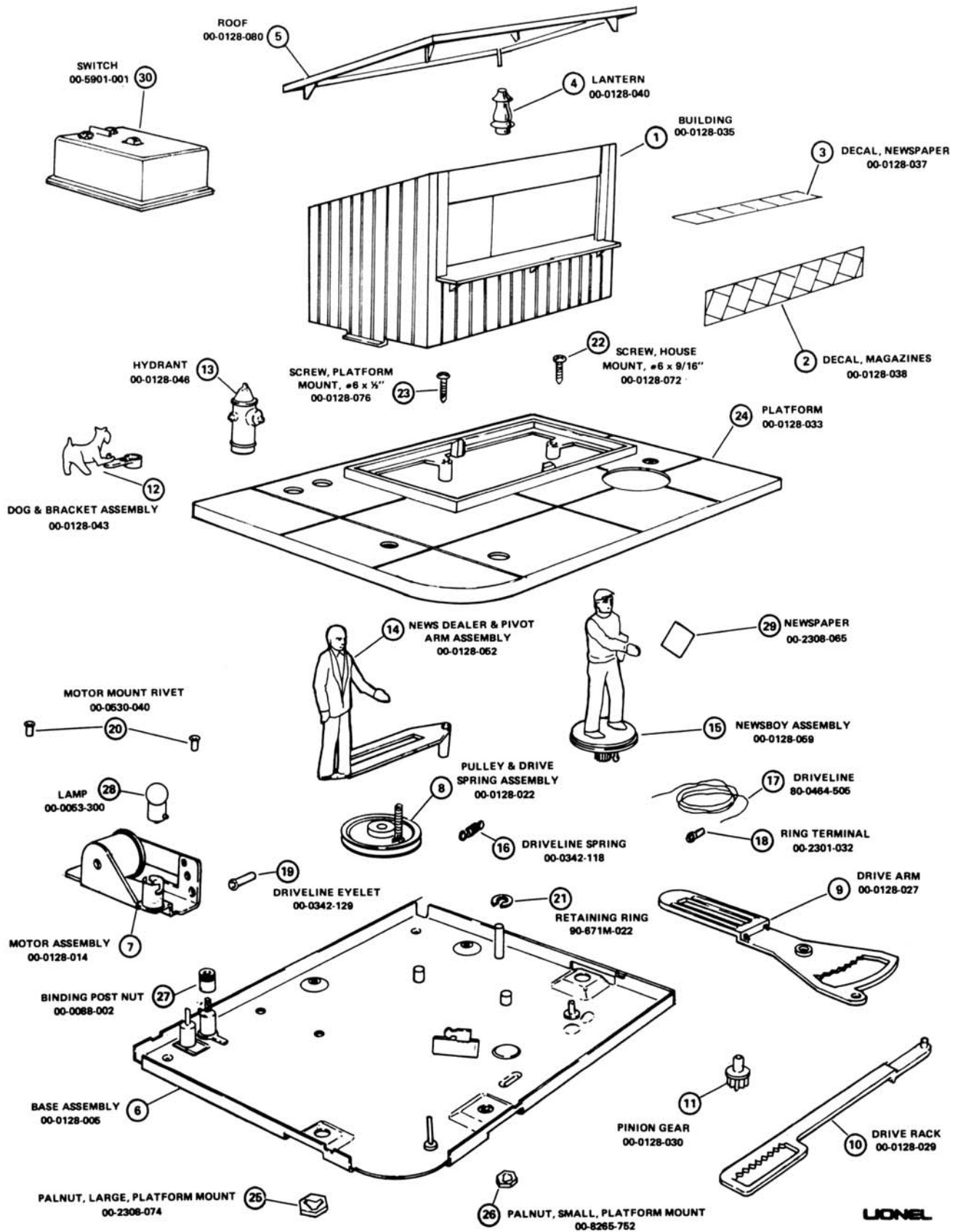
2301 LUMBER MILL

SECTION ACCESSORIES
 DATE 11/81

REFERENCE
 DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	464-6	1	Center Housing
2	464-12	1	Overhead Door
3	2301-3	1	Window, stamped
4	2301-13	1	Door, stamped
5	464-19	1	Spacer
6	8040-171	2	Screw #6x1/4" Housing & Spacer mount
7	464-21	1	Dust Collector Assembly
8	464-22	1	Housing Assembly RH
9	2301-9	1	Housing & Railing Assembly LH
10	2301-33	1	Screw #6x5/16" Housing mount
11	464-15	1	Crane
12	464-7	1	Roof
13	464-25	1	Base Assembly
14	464-17	1	Apron, Log
15	8240-71	1	Screw, #4x1/4"
16	464-30	1	Pulley Bracket
17	464-32	1	Bushing
18	342-111	1	Drive Pulley & Gear
19	464-36	1	Shaft
20	464-33	2	Pulley
21	464-38	1	U-Pivot
22	8960-52	1	Pal Nut
23	2301-30	1	Flat Washer
24	464-40	1	U-Pivot Spring
25	8960-52	1	Pal Nut
26	464-41	1	Conveyor Belt Assembly
27	464-45	1	Vibrator Motor Assembly
28	342-129	1	Eyelet
29	2301-30	1	Flat Washer
30	2-111	1	Lockwasher
31	2301-10	2	Spring Clip
32	45-58	2	Solder Lug
33	2301-32	1	Terminal
34	464-505	1	Nylon Line 12" long
35	342-118	1	Tension Spring
36	3361-21	5	Log
37	464-51	5	Plank
38	5901-1	1	Controller

2308 ANIMATED NEWSSTAND



LIONEL

2308 ANIMATED NEWSSTAND

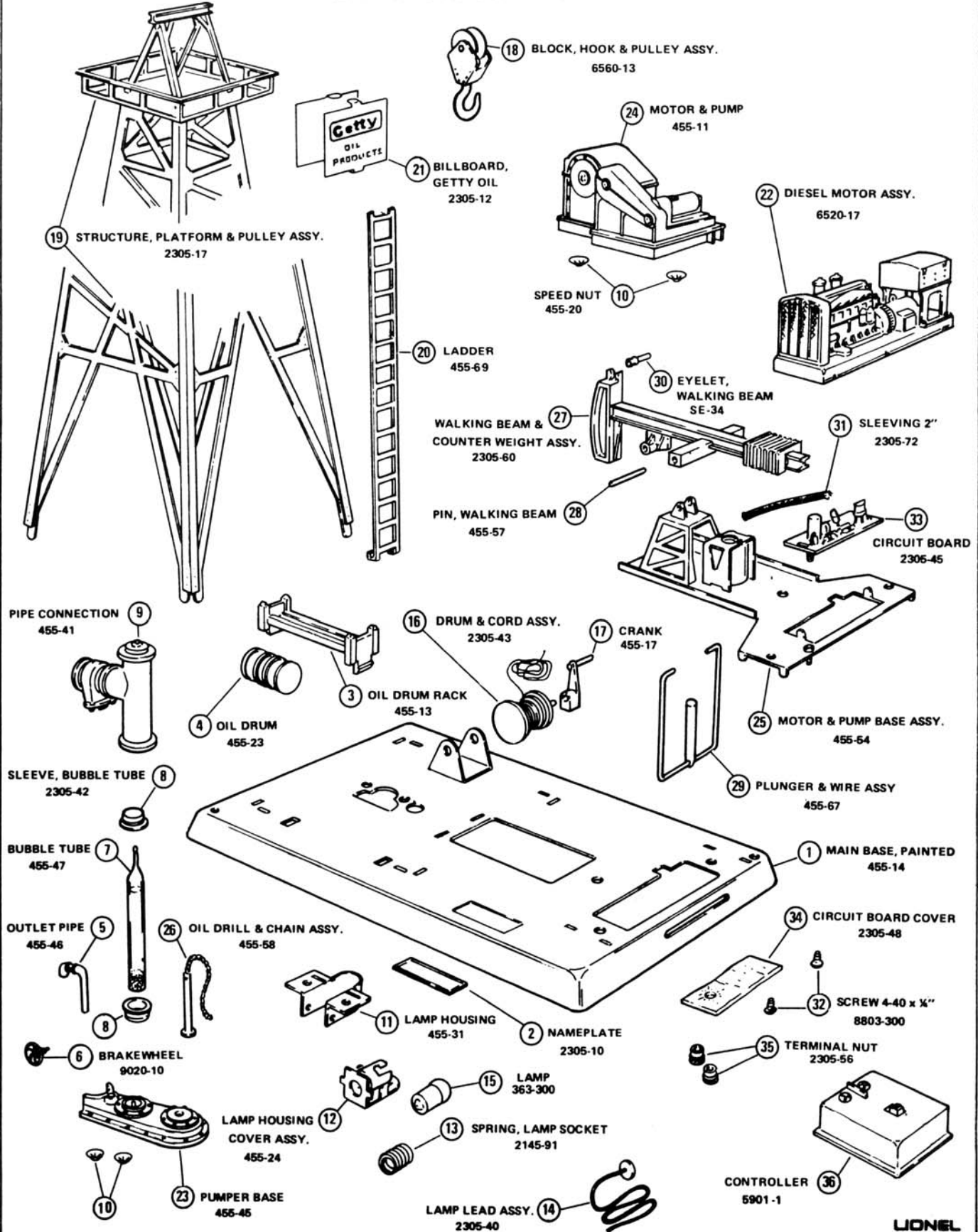
SECTION ACCESSORIES

DATE 4/83

REFERENCE
DRAWING

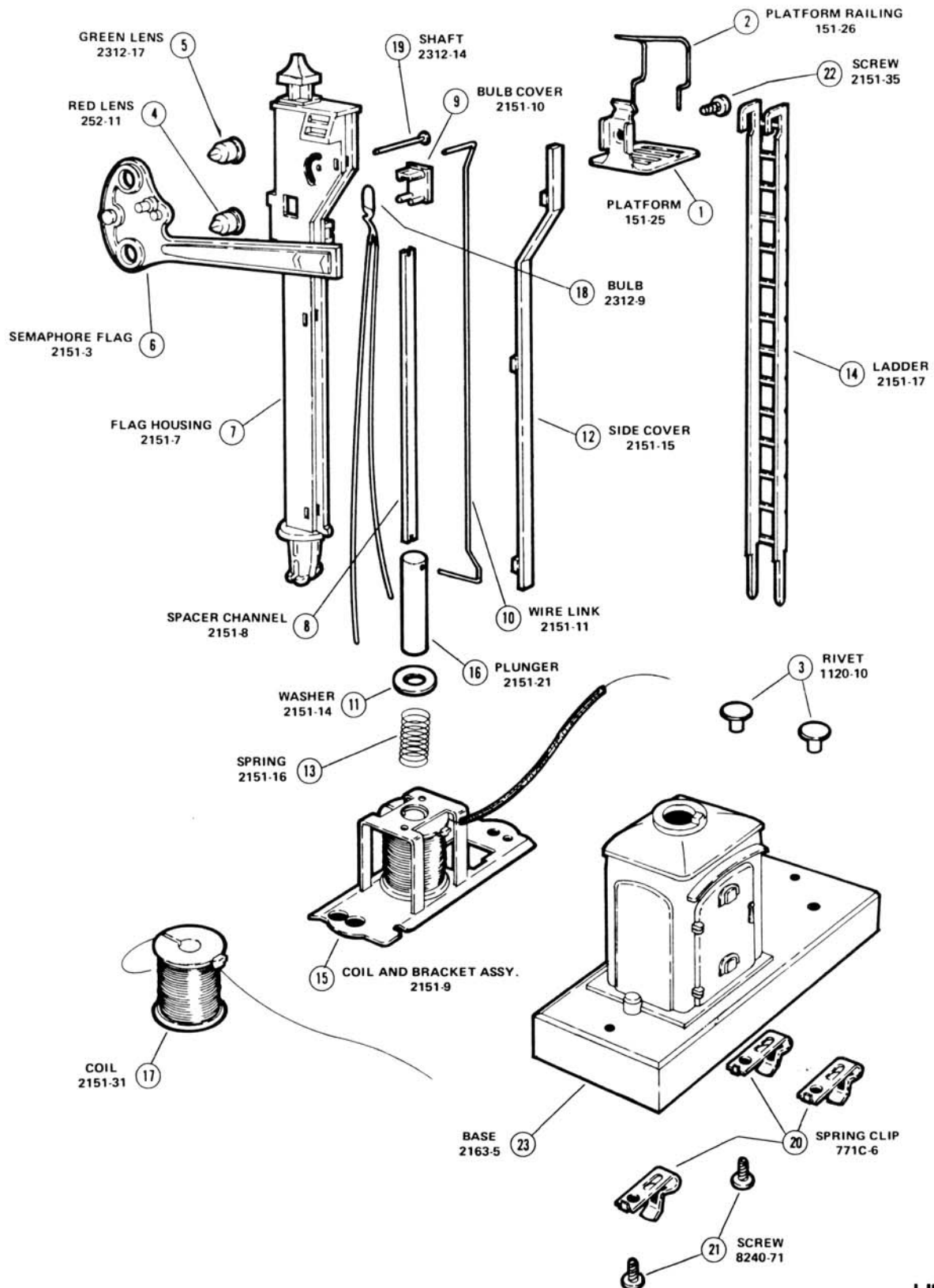
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	00-0128-035	1	Building
2	00-0128-038	1	Decal, magazines
3	00-0128-037	1	Decal, newspaper
4	00-0128-040	1	Lantern
5	00-0128-080	1	Roof
6	00-0128-005	1	Base assembly
7	00-0128-014	1	Motor assembly
8	00-0128-022	1	Pulley & drive spring assembly
9	00-0128-027	1	Drive arm
10	00-0128-029	1	Drive rack
11	00-0128-030	1	Pinion gear
12	00-0128-043	1	Dog & bracket assembly
13	00-0128-046	1	Hydrant
14	00-0128-052	1	News dealer & pivot arm assembly
15	00-0128-059	1	Newsboy assembly
16	00-0342-118	1	Driveline spring
17	80-0464-505	1	Driveline
18	00-2301-032	1	Ring Terminal
19	00-0342-129	1	Driveline eyelet
20	00-0530-040	2	Motor mount rivet
21	90-671M-022	1	Retaining ring
22	00-0128-072	1	Screw, house mount, #6x9/16"
23	00-0128-076	1	Screw, platform mount, #6x $\frac{1}{2}$ "
24	00-0128-033	1	Platform
25	00-2308-074	2	Palnut, large, platform mount
26	00-8265-752	1	Palnut, small, platform mount
27	00-0088-002	2	Binding post nut
28	00-0053-300	1	Lamp
29	00-2308-065	1	Newspaper
30	00-5901-001	1	Switch

2305 OIL DERRICK



LIONEL

2151 OPERATING SEMAPHORE



LIONEL

2151 OPERATING SEMAPHORE

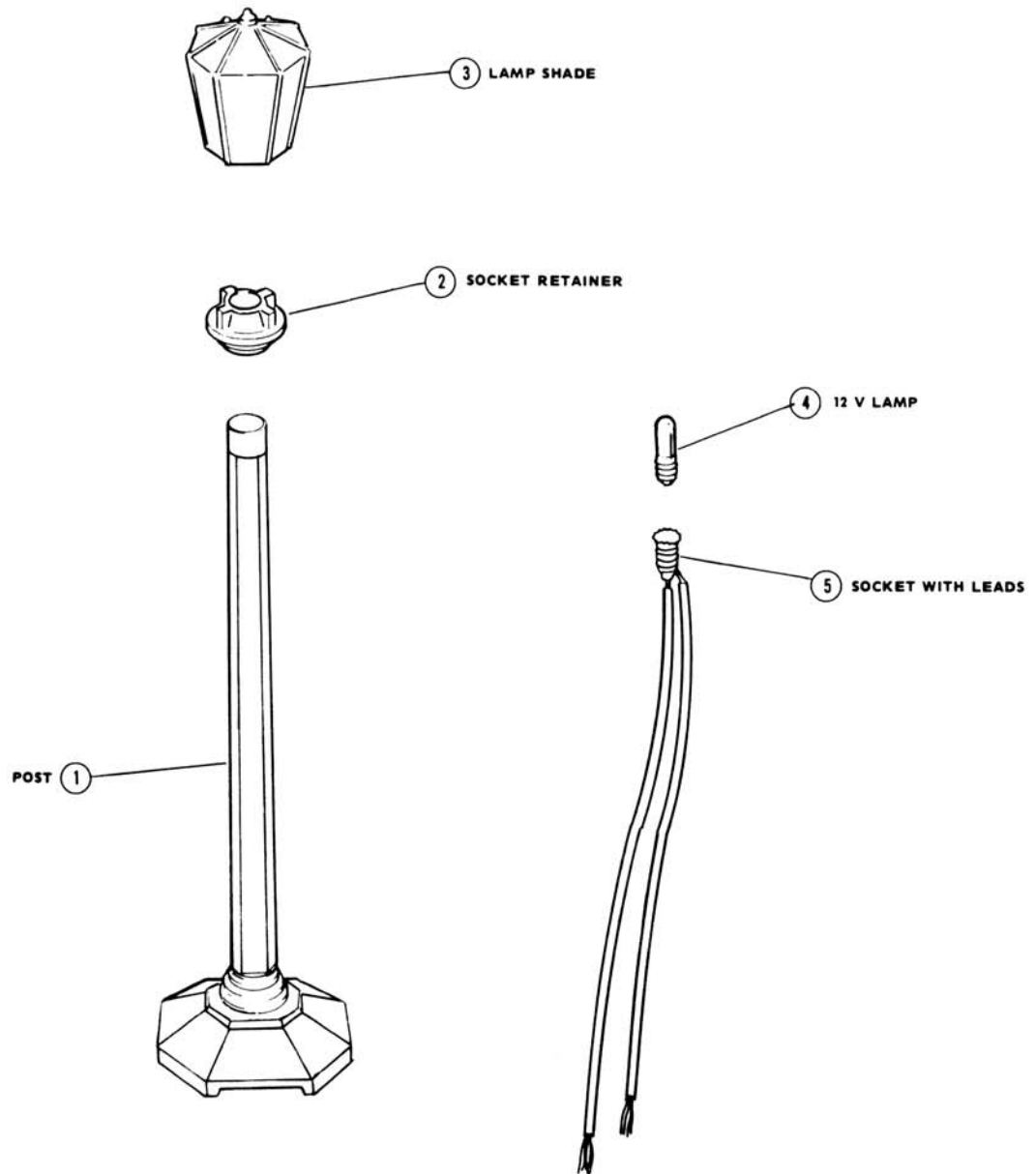
SECTION ACCESSORIES

DATE 6-78

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	151-25	1	Platform
2	151-26	1	Platform Railing
3	1120-10	2	Rivet
4	252-11	1	Red Lens
5	2312-17	1	Green Lens
6	2151-3	1	Semaphore Flag
7	2151-7	1	Flag Housing
8	2151-8	1	Spacer Channel
9	2151-10	1	Bulb Cover
10	2151-11	1	Wire Link
11	2151-14	1	Washer
12	2151-15	1	Side Cover
13	2151-16	1	Spring
14	2151-17	1	Ladder
15	2151-9	1	Coil & Bracket Assembly
16	2151-21	1	Plunger
17	2151-31	1	Coil
18	2312-9	1	Bulb
19	2312-14	1	Shaft
20	771C-6	3	Spring Clip
21	8240-71	2	Screw 4/40 x 1/4 Truss Head
22	2151-35	1	Screw #6 x 5/16 Pan Head
23	2163-5	1	Base

2170 STREET LAMP



LIONEL

2319 - WATCH TOWER

SECTION ACCESSORIES

DATE 4-77

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	445-5	1	House
2	445-7	1	Roof
3	445-12	1	Chimney
4	445-8	1	Base
5	445-38	2	Mounting Stud
6	395-30	2	Terminal Clip
7	445-16	1	Stair Cover
8	445-27	1	Stair Railing
9	22-36	1	Drive Screw (Railing)
10	445-6	1	Steps
11	445-14	2	Long Window Frame
12	445-21	2	Long Window Glass
13	445-18	4	Window Frame
14	145-13	4	Window Glass
15	445-15	2	Door Frame
16	445-22	2	Door Glass
17	445-13	1	Balcony
18	8030-13	1	Lamp Socket
19	161-300	1	Lamp
20	2319-33	1	Lamp Bracket
21	82-43	1	Solder Lug



© Lionel Trains, Inc., Mt. Clemens, MI. 48045

AUTOMATIC OPERATING ACCESSORIES

6-12709, 6-12714, 6-2117, 6-2154, 6-2162, 6-2163

INSTALLATION AND OPERATING INSTRUCTIONS

No. 6-2117 No. 6-2163 AUTOMATIC BLOCK TARGET SIGNAL

The Automatic Single Block Signal uses a No. 153C Contactor which is activated by the weight of the train passing over it.

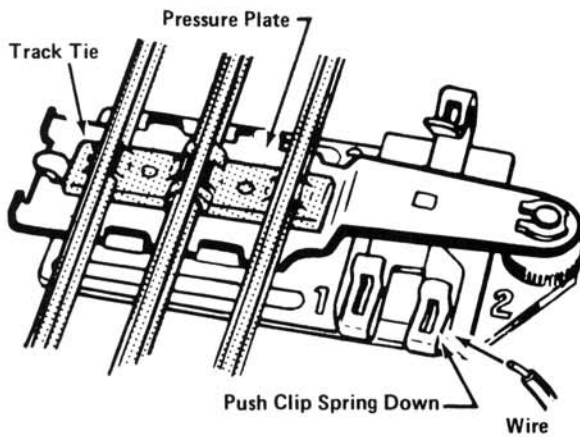
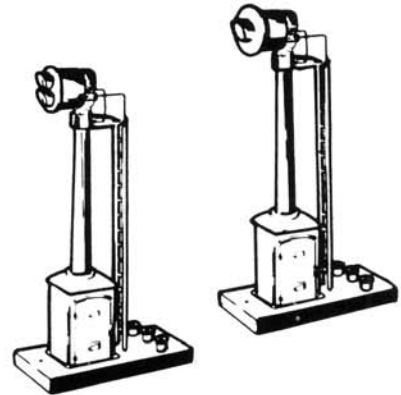


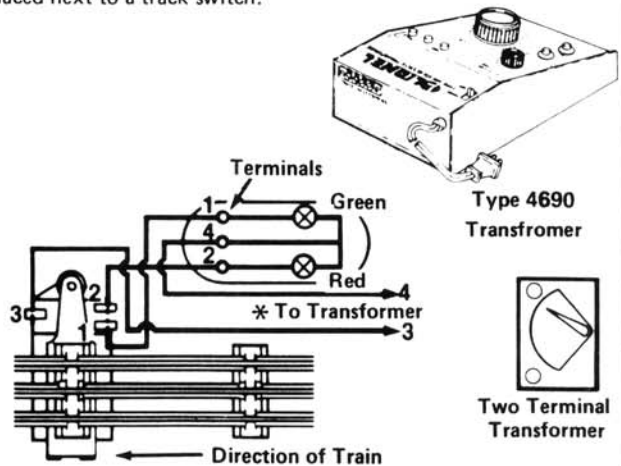
Figure A

INSTALLING THE 153C CONTACTOR

Slide the contactor beneath the track so that one of the track ties rests firmly upon the top pressure plate. (See Figure A). If your layout is fastened to a board or platform, loosen several sections of track on either side of the contactor. The track must be able to bend under the weight of the train. For the same reason, the contactor may not work properly when placed next to a track switch.

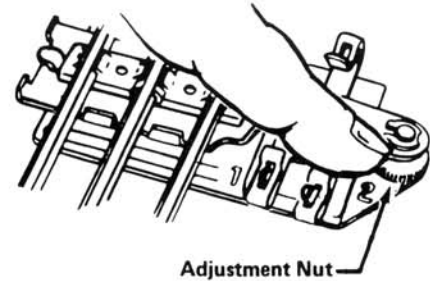
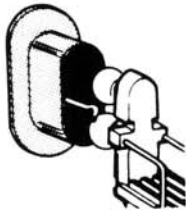
WIRING

Have an adult strip one quarter inch of insulation from both ends of all **four** wires included with your accessory if they have not already been stripped. Connect one end of each of the wires to a terminal on the Block Signal, then connect the other ends to the contactor and transformer, as shown in the illustration. To connect the wire to the contactor terminal clips, press down the springy upper half of the metal loop until the lower half projects through the slot, insert the bare wire end into the loop, and release the upper part of the clip. Spring tension will hold the wire tight.



ADJUSTING THE CONTACTOR

After all the connections are made and transformer is on, the contactor must be adjusted so that the Block Signal operates properly. Stop the train several sections away from the contactor so that it does not press on the contactor plate. Turn the adjustment nut either up or down until the red light goes on. Then back up the adjustment nut just enough to cause the red light to go out and the green light to go on instead. When properly adjusted, the contactor will respond to a light finger pressure on the track and the red light will stay on as long as any part of the train is passing over the contactor plate. If the action of the two lights is reversed, interchange the connection to the outside posts.



LAMP REPLACEMENT

To remove lamp, spread the two pins running along the side of the lamp housing, remove the cover, and pull the bulb straight out. Do not twist the bulb. Replacement bulbs are 19-301 (R) red, and 19-302 (G) green available at authorized Lionel Service Stations.



No. 6-2154 OPERATING HIGHWAY FLASHER

The No. 2154 Highway Flasher can be placed at any grade crossing in your model railroad to give warning when a train is approaching the crossing. Attach the 154C contactor to any section of straight track as shown in Figure A. Press down spring lever. Slide contactor under the rail so that clip 'A' grips the flange of the outside rail. Snap spring clip 'B' over center rail by pressing upward. Then release spring lever so that the contact plate lies flat on top of the outside rail.

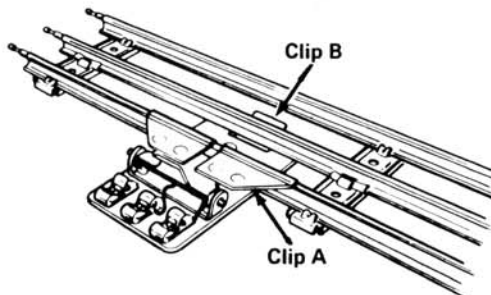
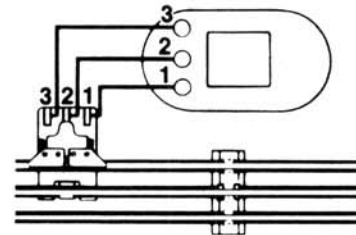


FIG. A

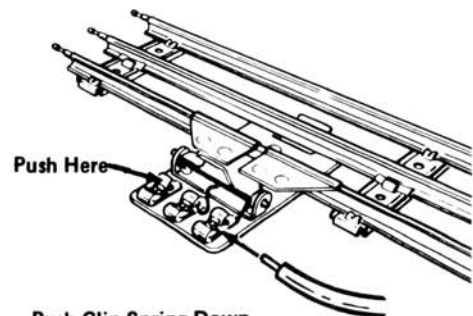


Wiring Diagram

INSTALLING THE 154C CONTACTOR

Have an adult strip one quarter inch of insulation from both ends of the three wires included with your accessory if they have not already been stripped. Connect the wires to the terminals No. 1, 2 and 3 on the Highway Flasher. Then connect the other end of each wire to its corresponding numbered terminal on the No. 154C contactor (See wiring diagram). To connect the wire to the contactor terminal clips, press down the springy upper half of the metal loop until the lower part projects through the slot, insert the bare wire end into the loop, and release the upper part of the clip. Spring tension will hold the wire tight (See illustration). When the track power is on the two lights of the signal will flash alternately as the train wheels cross the contactor. Make sure all connections are clean and tight. Keep the contact surfaces free of rust, oil and dirt.

The underneath surface of the contact plate that lies flat on top of the outside rail must be insulated from the outside rail. If one of the flasher lights remains on after the train passes, the protective insulation may be worn. If this should occur, simply put a single layer of thin cellophane or masking tape on the underneath surface of the contact plate.

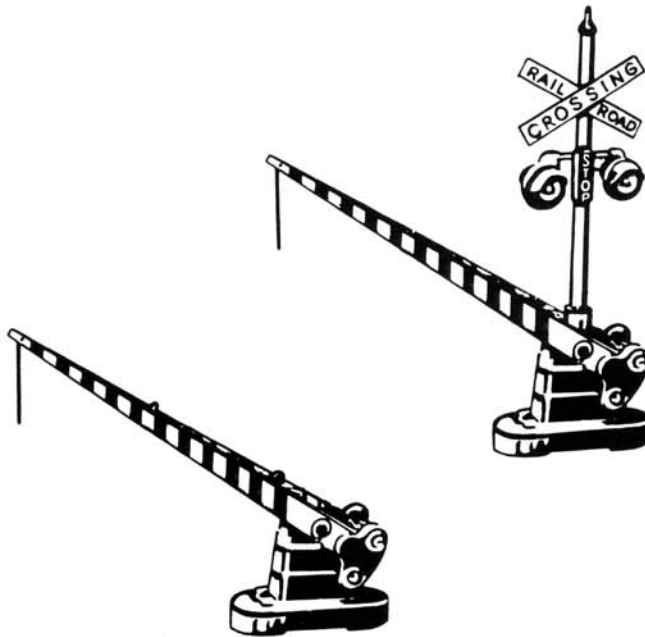


Push Here
Push Clip Spring Down
Insert Wire Into Loop

No. 6-12709 BANJO SIGNAL also 6-2140



No. 6-2162 AUTOMATIC GATE AND SIGNAL



No. 6-12714 AUTOMATIC CROSSING GATE also 6-2152

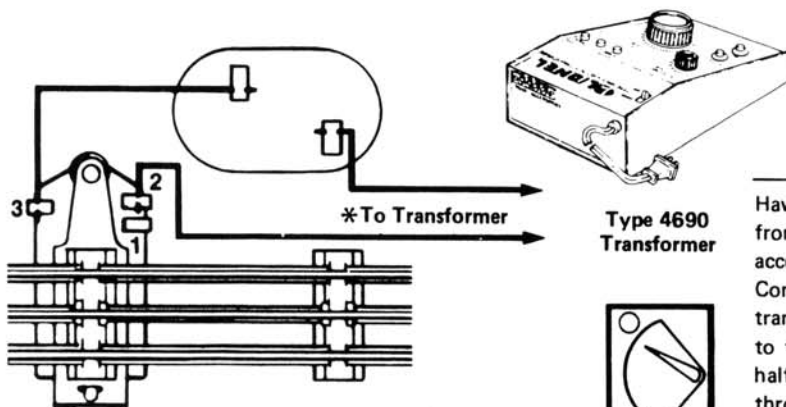
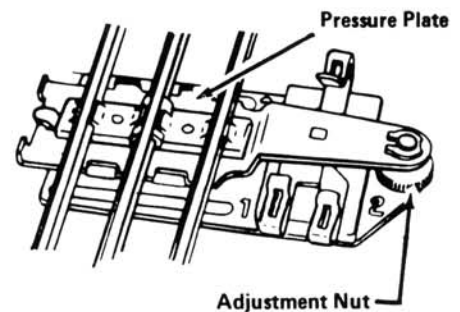
Each of these accessories are operated with the No. 153C Contactor which is activated by the weight of the train passing over that section of the track.

INSTALLING THE 153C CONTACTOR

Refer to and repeat procedures from Automatic Block Target Signal.

ADJUSTING THE CONTACTOR

Refer to and repeat procedures from Automatic Block Target Signal.



WIRING

Have an adult strip one quarter inch of insulation from both ends of the two wires included in your accessory, if they have not already been stripped. Connect the wire to the accessory, contactor and transformer, as shown below. To connect the wire to the terminal clips, press down the springy upper half of the metal loop until the lower part projects through the slot, insert the bare wire end into the loop, and release the upper part of the clip. Spring tension will hold the wire tight.



Two Terminal Transformer

LAMP REPLACEMENT

6-2154 OPERATING HIGHWAY FLASHER

To remove a burned out lamp, press the bulb in and twist to the left, then pull the bulb straight out. Replace with No. 53-301 (R) red lamp available at authorized Lionel Service Stations.

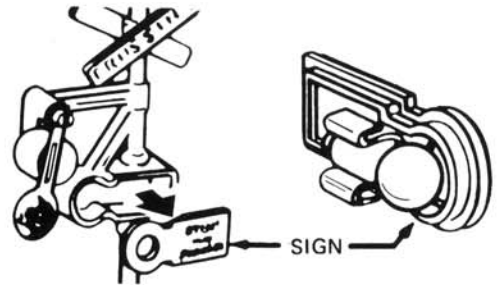
The 6-2154 Operating Highway Flasher DOES NOT OPERATE with trains that have PLASTIC WHEELS.

6-2162 AUTOMATIC GATE AND SIGNAL

To remove a red signal lamp from the 6-2162 Automatic Gate and Flasher, pull it straight out. Do not twist the bulb. Replace with 19-301(R) red lamp available at authorized Lionel Service Stations.

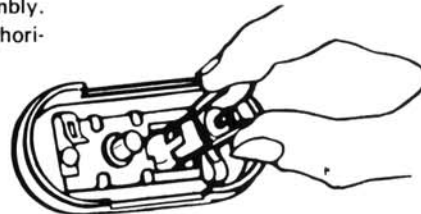
6-12709 BANJO SIGNAL

To remove a lamp from the 6-12709 Banjo Signal, pull the sign from the front of the signal, and snap the bulb from the back of the sign. Replace with 53-301 (R) red lamp available at authorized Lionel Service Stations.



6-12714 AUTOMATIC CROSSING GATE

To remove the lamp from the base of the 6-12714 Crossing Gate, invert the Gate, squeeze the two metal clips together and withdraw the entire assembly, then twist the bulb and pull straight out from the assembly. Replace the bulb with 363-300 bayonet base lamp available at authorized Lionel Service Stations.



LIONEL SERVICE

If service is required within the warranty period, bring the item to the nearest authorized Lionel Trains - Service Center along with the warranty card.

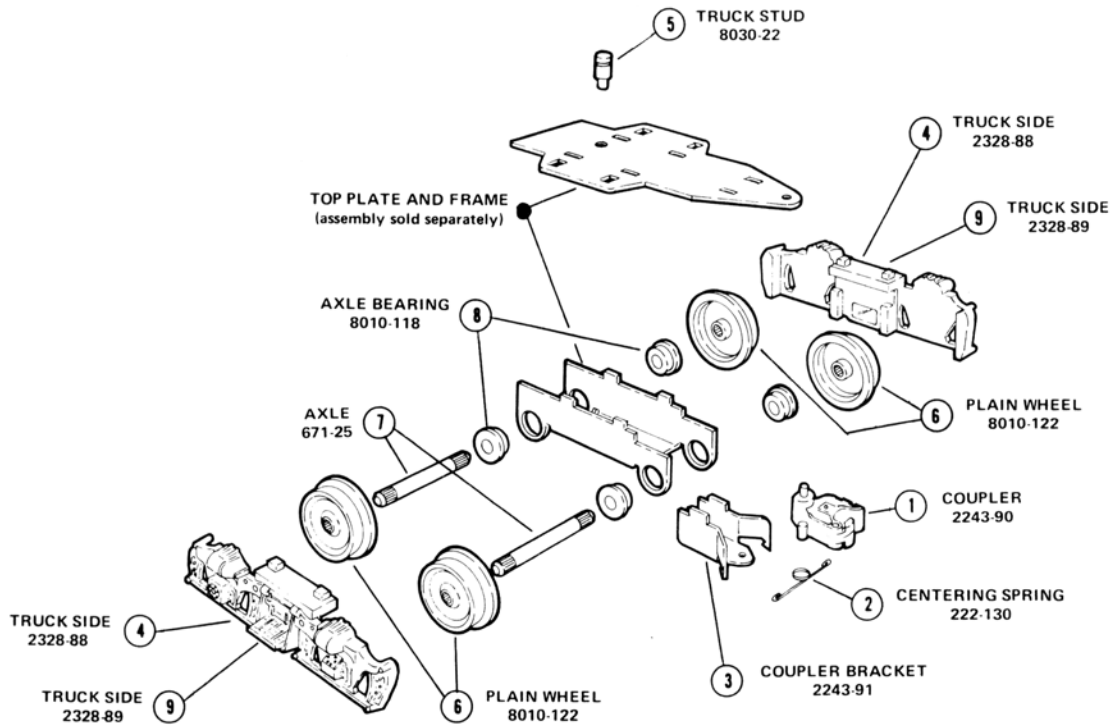
If you prefer to send it back to the factory, you must first write to Lionel Trains, Consumer Service Department, P.O. Box 748, Mt. Clemens, Michigan 48043, stating what the item is, when it was purchased and what seems to be the problem. You will be sent a return authorization and a label to assure your merchandise will be properly handled upon receipt.

CAUTION: Make sure the item is packed so as to prevent damage to the merchandise. The shipment must be prepaid and we recommend that it be insured.

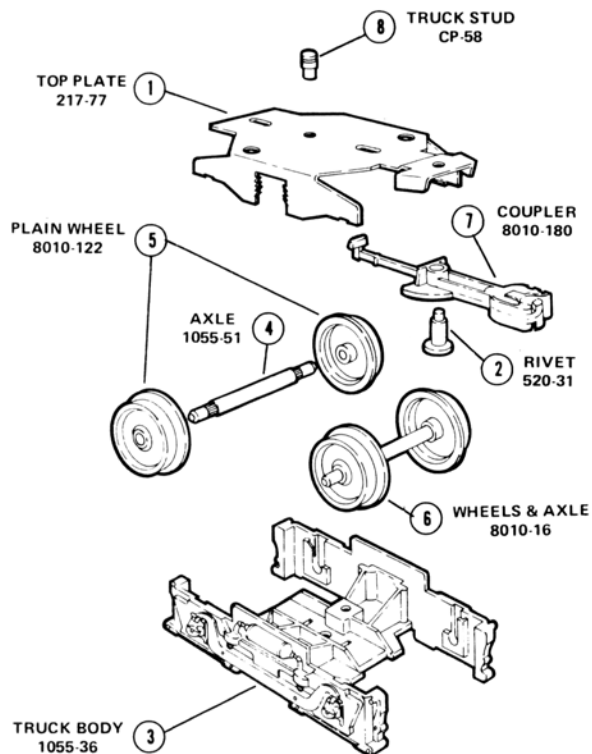
Please make sure you have followed the instructions carefully before returning any merchandise for service.

This warranty gives you special legal rights and you may have others that vary from State to State.

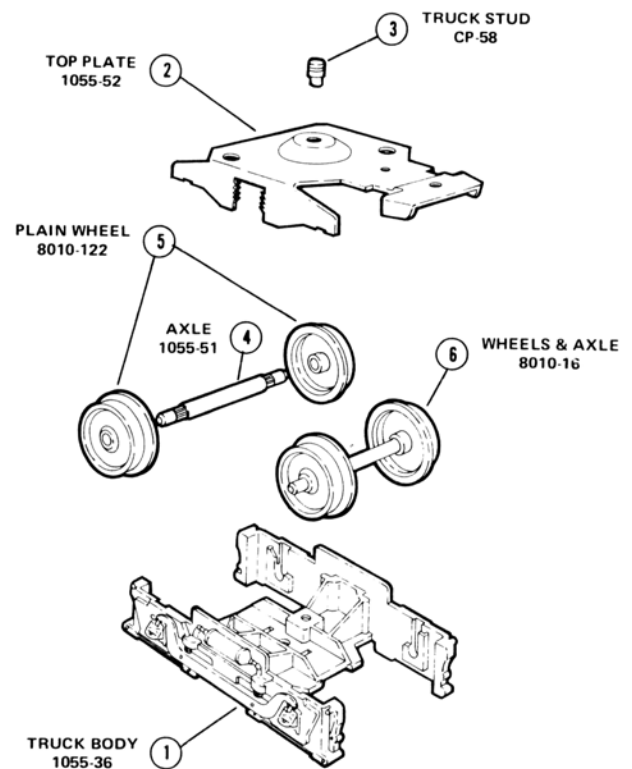
8557-150 PLAIN TRUCK



217-75 PLAIN TRUCK



8252-15 PLAIN TRUCK



LIONEL

226E-88 FRONT TRUCK

SECTION MOTORS/TRUCKS

DATE 5/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
	226E-24	1	Truck frame
	226E-30	1	Spring, long
	2660-25	1	Rivet, long
	671-127	2	Wheel
	1661-8	1	Axle
	1615-93	1	Spring, short
	TT-234	1	Rivet, short

675-19 PILOT TRUCK

SECTION MOTORS/TRUCKS

DATE 5/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	675-20	1	Truck frame
2	671-151	1	Truck spring
3	2660-25	1	Truck rivet
4	1661-8	1	Axle
5	671-127	2	Wheel

486-1 PLAIN LIGHT TRUCK

SECTION MOTORS/TRUCKS

DATE 3/79

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	485-2	1	Truck Frame assembly
2	9050-54 S	2	Wheels & axle (shine)
2	9050-54	2	Wheels & axle (black)
3	CP-58	1	Pivot Stud
4	9T-16	1	Ground washer
5	485-19	1	Bottom frame
6	480-19	1	Roller support rivet
7	481-6	1	Collector roller support assembly
8	9323-20	1	Roller support
9	TT-134	1	Roller bracket
10	481-10	1	Spring rivet
11	TCL-45	1	Concial spring
12	481-11	1	Roller
13	481-12	1	Roller rivet

486-25 PLAIN LIGHT TRUCK

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	485-5	1	Truck Frame
2	485-3	2	Truck Side
3	9050-54S	2	Wheels & Axle (Silver)
3	9050-54	2	Wheels & Axle (Black)
4	9050-52S	4	Wheel (Silver)
4	9050-52	4	Wheel (Black)
5	9050-53	2	Axle
6	CP-58	1	Pivot Stud
7	9T-16	1	Ground Washer
8	490-10	1	Bottom Frame
9	480-19	1	Roller Support Rivet
10	9571-80	1	Collector Roller Support Assembly
11	9323-20	1	Roller Support
12	TT-134	1	Roller Bracket
13	TT-234	1	Spring Rivet
14	TCL-45	1	Concial Spring
15	481-11	1	Roller
16	481-12	1	Roller Rivet
17	485-20	1	Armature Plate

490-1 COUPLER TRUCK

SECTION MOTORS/TRUCKS
DATE 3/79

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9570-75	1	Truck Frame & Drawbar assembly
2	9050-54 S	2	Wheels & Axle (Shine)
2	9050-54	2	Wheels & Axle (Black)
3	485-16	1	Pivot Stud
4	9T-16	1	Ground Washer
5	490-7	1	Coupler & Drawbar
6	485-17	1	Pivot Washer
7	485-11	1	Lock Pin Assembly
8	490-10	1	Bottom Frame
9	485-20	1	Armature Plate
10	TC-23	1	Knuckle Pin
11	480-16	1	Knuckle Spring
12	TC-21	1	Knuckle

490-25 COUPLER TRUCK

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	485-5	1	Truck Frame
2	485-3	2	Truck Side
3	9050-54 S	2	Wheels & Axle (Shine)
3	9050-54	2	Wheels & Axle (Black)
4	9050-52 S	4	Wheel (Shine)
4	9050-52	4	Wheel (Black)
5	9050-53	2	Axle
6	485-16	1	Pivot Stud
7	9T-16	1	Ground Washer
8	490-7	1	Coupler & Drawbar
9	485-17	1	Pivot Washer
10	485-11	1	Lock Pin Assembly
11	490-10	1	Bottom Frame
12	485-20	1	Armature Plate
13	TC-23	1	Knuckle Pin
14	480-16	1	Knuckle Spring
15	TC-21	1	Knuckle

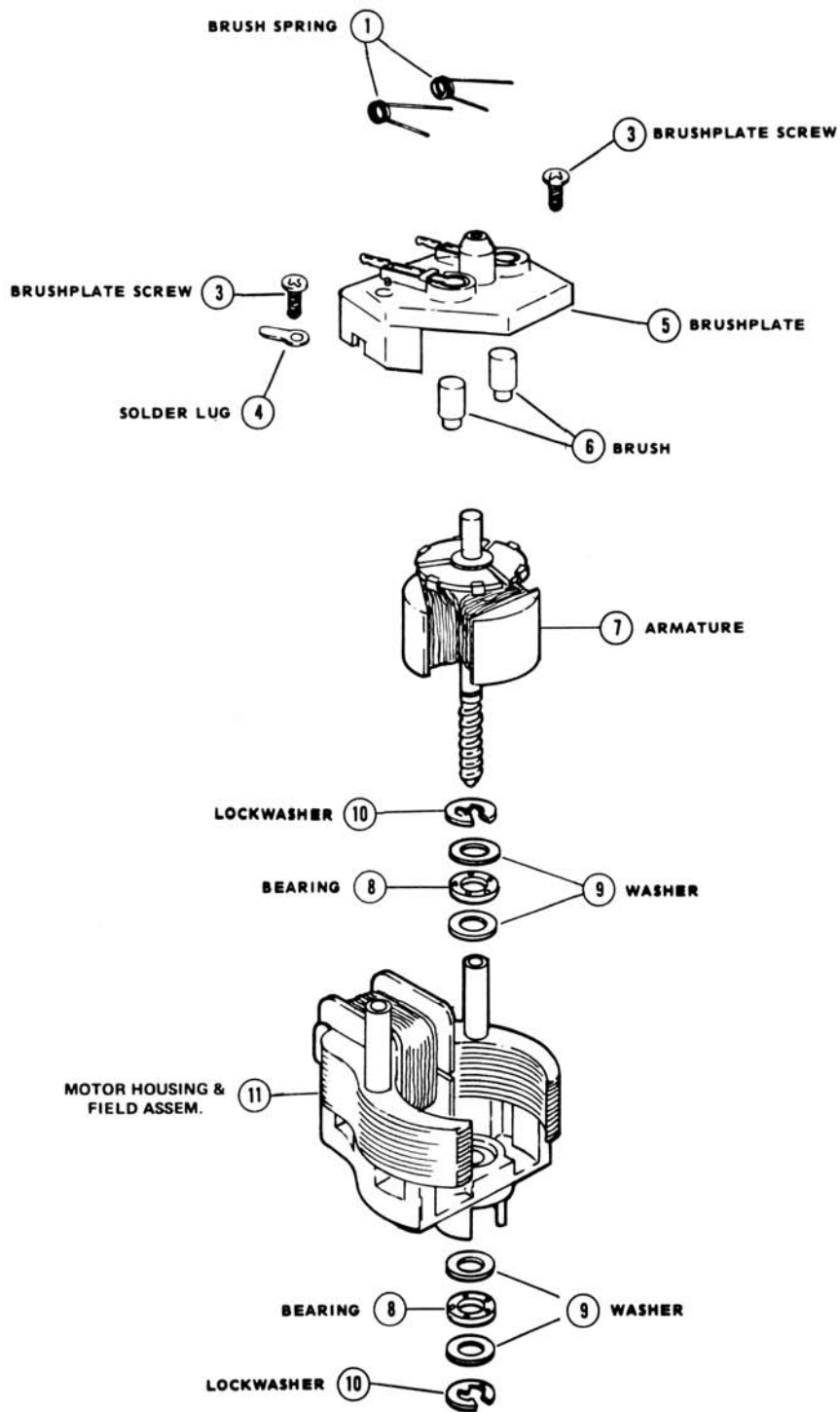
492-1 LIGHT COUPLER TRUCK

SECTION MOTORS/TRUCKS

DATE 3/79

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9570-75	1	Truck Frame & Drawbar assembly
2	9050-54 S	2	Wheels & Axle (Shine)
2	9050-54	2	Wheels & Axle (Black)
3	485-16	1	Pivot Stud
4	9T-16	1	Ground Washer
5	490-7	1	Coupler Drawbar
6	485-17	1	Pivot Washer
7	485-11	1	Lock Pin Assembly
8	490-10	1	Bottom Frame
9	480-19	1	Roller Support Rivet
10	481-6	1	Collector Roller Support Assembly
11	9823-20	1	Roller Support
12	TT-134	1	Roller Bracket
13	481-10	1	Spring Rivet
14	TCL-45	1	Concial Spring
15	481-11	1	Roller
16	481-12	1	Roller Rivet
17	485-20	1	Armature Plate
18	TC-23	1	Knuckle Pin
19	480-16	1	Knuckle Spring
20	TC-21	1	Knuckle

2028-100, F-3 TYPE MOTOR



2028-100 MOTOR
F-3 TYPE MOTOR

SECTION MOTORS/TRUCKS
DATE 2/78

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QTY. PER UNIT	DESCRIPTION
1	622-191	2	Brush Spring
3	8010-165	2	Brushplate Screw
4	259E-17	1	Solder Lug
5	8010-500	1	Brushplate (2028-100)
6	8040-150	2	Motor Brush
7	2028-109	1	Armature
8	681-121	2	Thrust Bearing
9	671M-23	4	Thrust Washer
10	671M-22	2	Retaining Clip
11	2321-500	1	Motor Housing Assembly

Rev. 6/92

2046-22 FRONT TRUCK (Steam Loco)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
	2046-24	1	Truck Frame
	8040-10	4	Wheel
	1661-8	2	Axle
	2046-27	1	Concial Spring
	2046-120	1	Rivet
	2046-26	1	Bushing

2046-87 REAR TRUCK ASSEMBLY (Steam Loco)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	2055-44	1	Truck Frame
2	2055-43	2	Truck Sides
3	2046-45	1	Drawbar
4	2660-25	1	Rivet
5	2055-47	1	Eyelet
6	2055-46	1	Spring
7	2046-88	1	Ashpan Assembly
8	671M-22	1	Retaining Ring
9	671-126	2	Wheel & Axle Assembly
10	226E-21	2	Axle

2055-42 REAR TRUCK (Steam Loco)

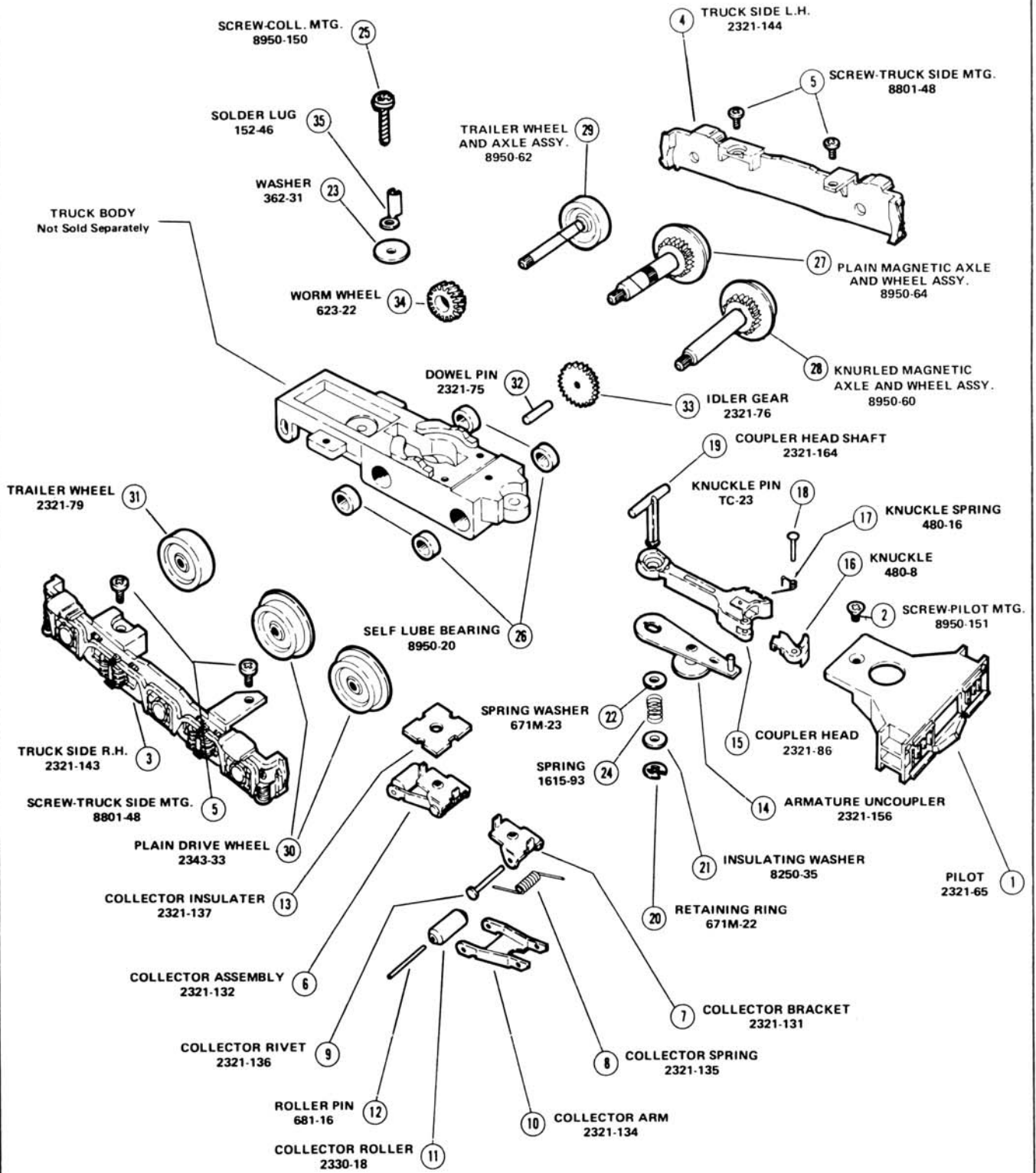
SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

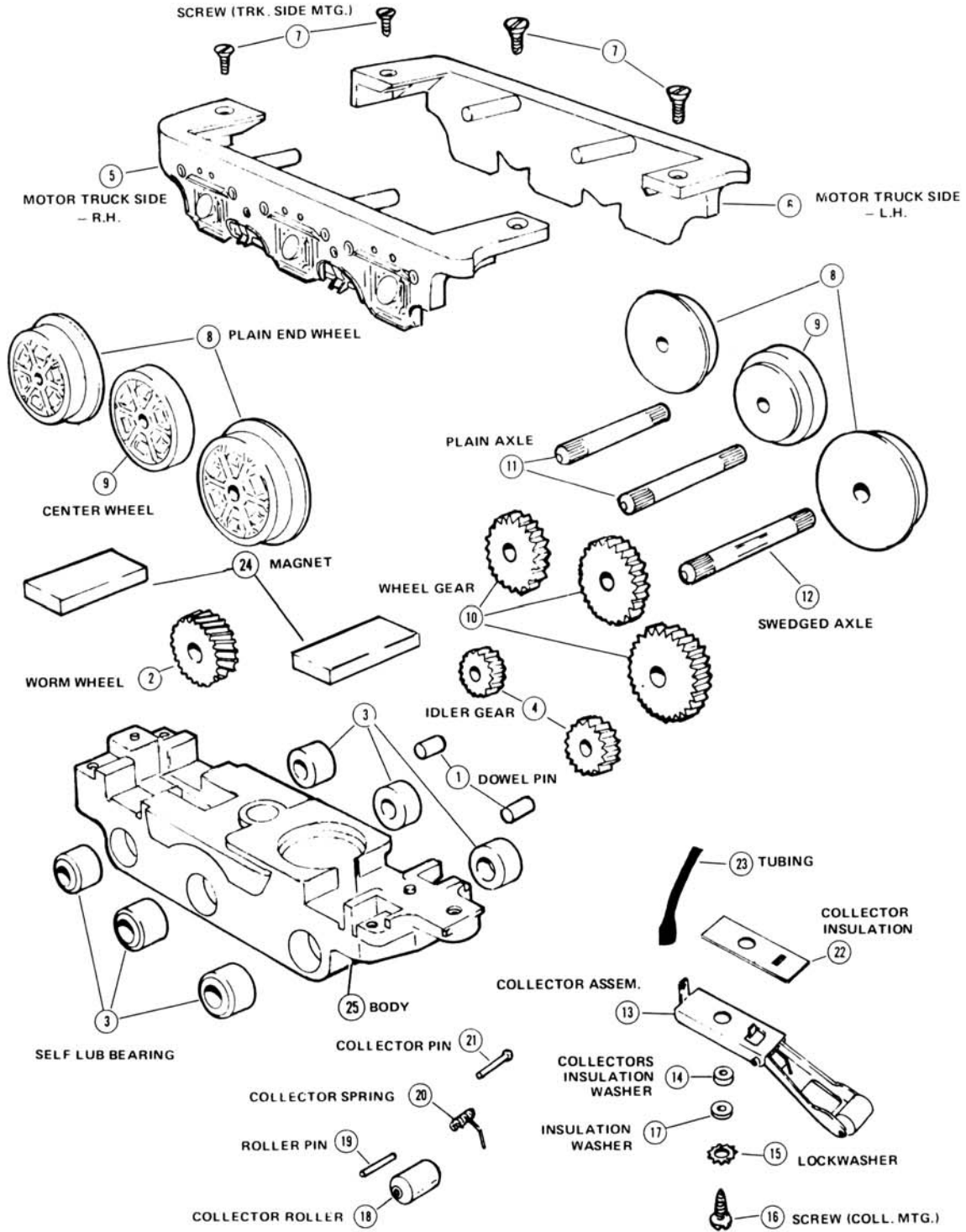
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	2055-44	1	Rear Truck Frame
2	2055-43	2	Truck Side
3	2660-25	1	Spring Rivet
4	2055-61	1	Drawbar
5	2055-47	1	Eyelet
6	2055-46	1	Spring
7	671-127	4	Wheel
8	226E-21	2	Axle

FAIRBANKS MORSE MOTOR TRUCK



LIONEL

2330-25 MOTOR TRUCK (GG-1)



LIONEL

8701T-90 OPERATING COUPLER TRUCK
(METAL WHEELS)

SECTION MOTORS/TRUCKS
DATE 3/79
REFERENCE DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8701-135	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle Pin
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature
6	9050-54	2	Wheels & Axle
7	9050-52	4	Wheel
8	9050-53	2	Axle

6403-50 OPERATING COUPLER TRUCK

SECTION MOTORS/TRUCKS
DATE 3/79
REFERENCE DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	6403-51	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle Pin
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature
6	9050-54	2	Wheel & Axle Assembly
7	9050-52	4	Wheel
8	9050-53	2	Axle
9	6403-60	1	Coupler Arm
10	6403-52	1	Plastic Rivet

8002-100 MOTOR

SECTION MOTORS/TRUCKS

DATE 9/82

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	0681-121	2	Thrust bearing
2	8002-022	1	Brush plate assembly
3	8002-125	1	Armature
4	8002-150	1	Motor housing assembly
5	0681-120	1	Rear bearing
6	2020-M17	1	Front bearing
7	671M-023	4	Washers, spacer
8	671M-022	2	Retaining ring
9	8040-150	2	Brush
10	8753-445	2	Screw, 6-32x1/4"
11	2020-M09	1	Lug, solder

8005T-70 DUMMY COUPLER TRUCK

SECTION MOTORS/TRUCKS

DATE 9/82

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8005T-75	1	Truck Frame
2	9150-54	2	Wheels & Axle
3	9050-60	4	Wheel
4	9050-53	2	Axle

9306-70 OPERATING COUPLER TRUCK

SECTION MOTORS/TRUCKS

DATE 9/82

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8701-135	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle Pin
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature
6	9150-54	2	Wheels & Axle
7	9050-60	4	Wheel
8	9050-53	2	Axle

8007-100 MOTOR BODY

SECTION MOTORS/TRUCKS

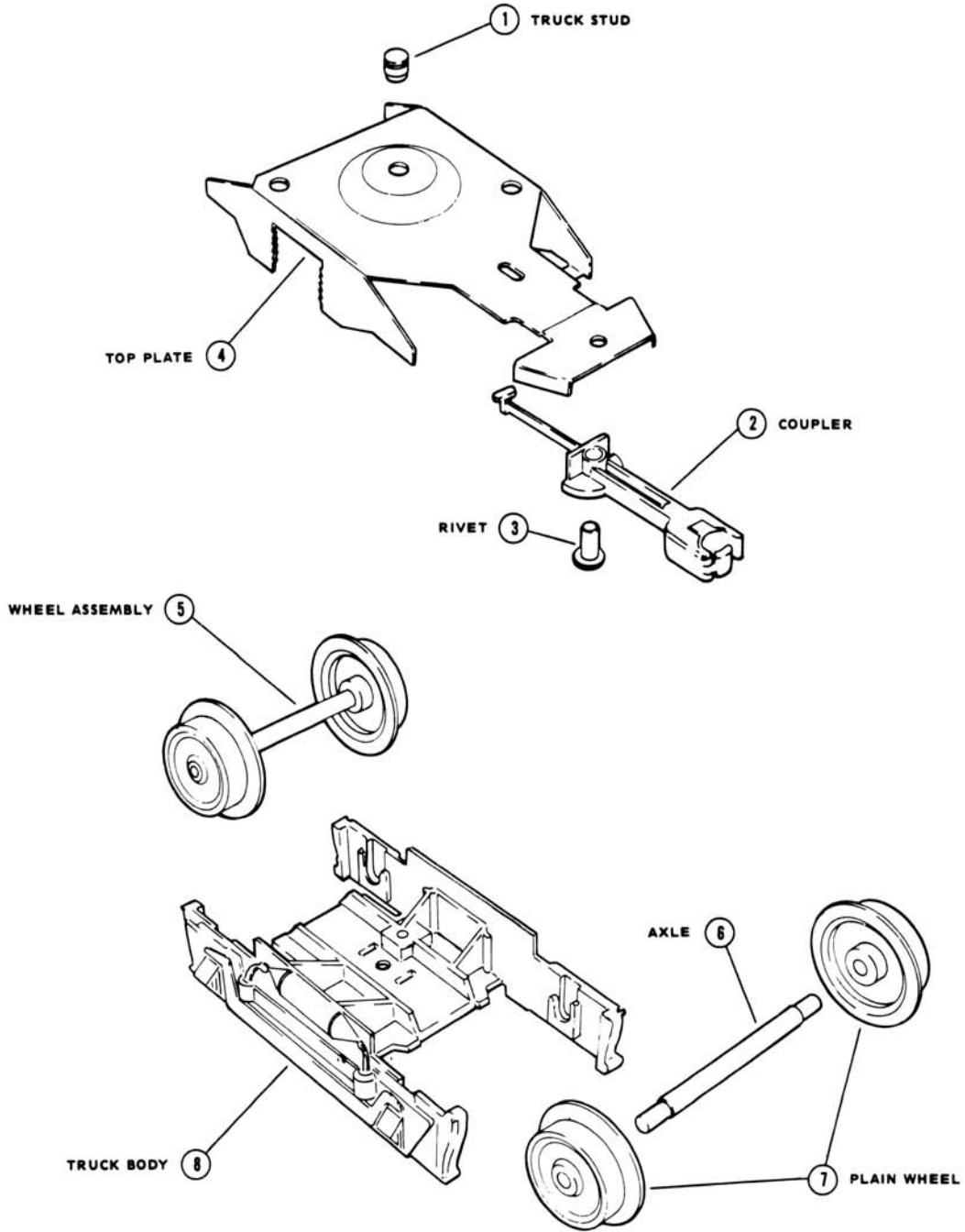
DATE 9/82

REF. QUANTITY PER
NO. PART NUMBER UNIT

DESCRIPTION

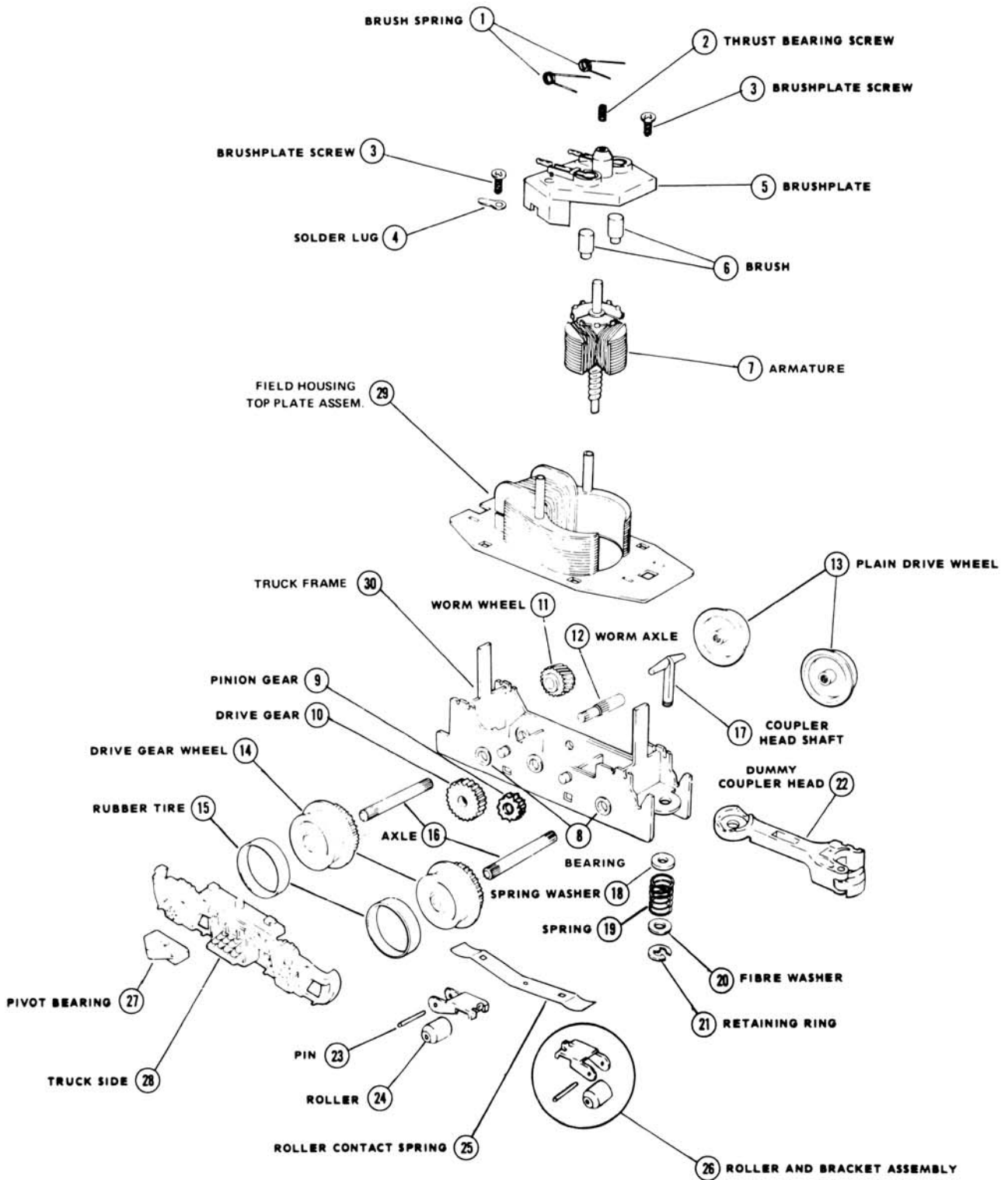
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	2035-167	3	Thrust washer
2	8007-010	1	Gear wheel & axle assembly, undercut
3	8007-021	1	Center wheel & axle assembly
4	8007-031	1	Gear wheel & axle assembly
5	8007-056	2	Plain end wheel
6	8007-057	1	Center wheel, plain
7	8007-137	1	Motor body
8	8600-119	1	Compound gear
9	8600-143	1	2nd intermediate gear

8010-15 PLAIN TRUCK



LIONEL

8010-100 MOTOR TRUCK



LIONEL

8010-100 MOTOR TRUCK
 SW-1 SWITCHER - MANUAL

SECTION MOTORS/TRUCKS

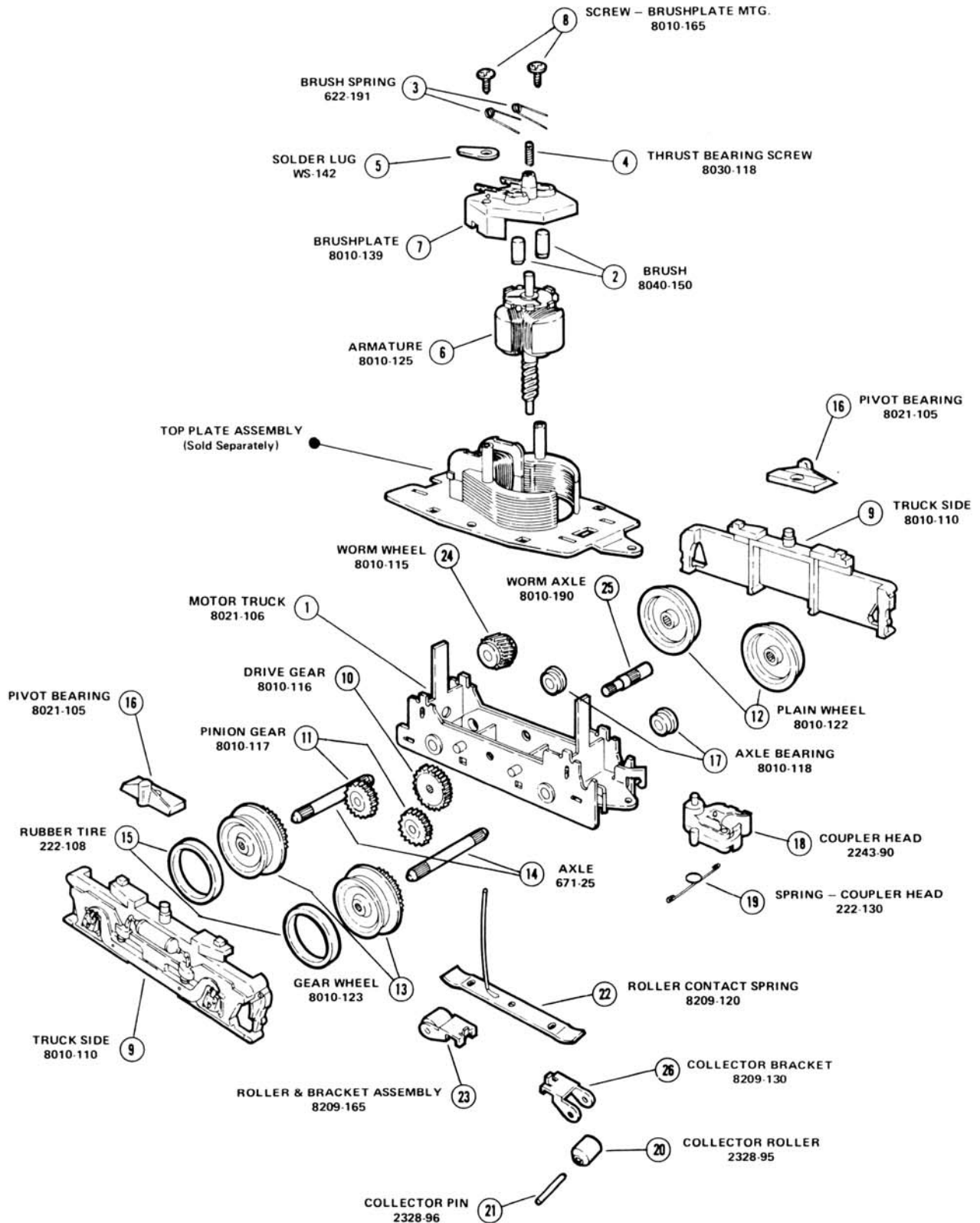
DATE 2-78

REFERENCE
 DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	622-191	2	Brush Spring
2	8030-118	1	Thrust Bearing Screw
3	8010-165	2	Screw (Brushplate Mtg.)
4	WS-142	1	Solder Lug
5	8010-139	1	Brushplate
6	8040-150	2	Brush
7	8010-125	1	Armature
8	8010-118	4	Axle Bearing
9	8010-117	2	Pinion Gear (1 Shown)
10	8010-116	1	Drive Gear
11	8010-115	1	Worm Wheel (Plastic)
12	8010-190	1	Worm Axle
13	8010-122	2	Plain Wheel
14	8010-123	2	Gear Wheel
15	222-108	2	Rubber Tire
16	671-25	2	Axle
17	600-138	1	Coupler Head Shaft
18	671M-23	1	Spring Washer
19	1615-93	1	Spring
20	8250-35	1	Fibre Washer
21	671M-22	1	Retaining Ring
22	625-139	1	Dummy Coupler
23	2328-96	2	Collector Roller Pin
24	2328-95	2	Collector Roller
25	8209-120	1	Roller Contact Spring
26	8209-165	1	Roller & Bracket Assem.
27	8010-105	2	Pivot Bearing
28	8010-110	2	Truck Side
29		1	Field Housing & Top Plate Assm.
30		1	Truck Frame

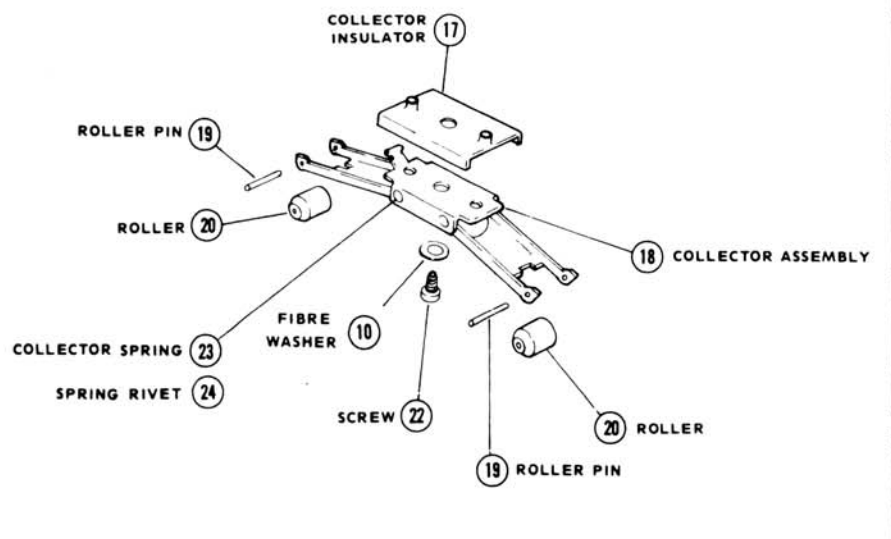
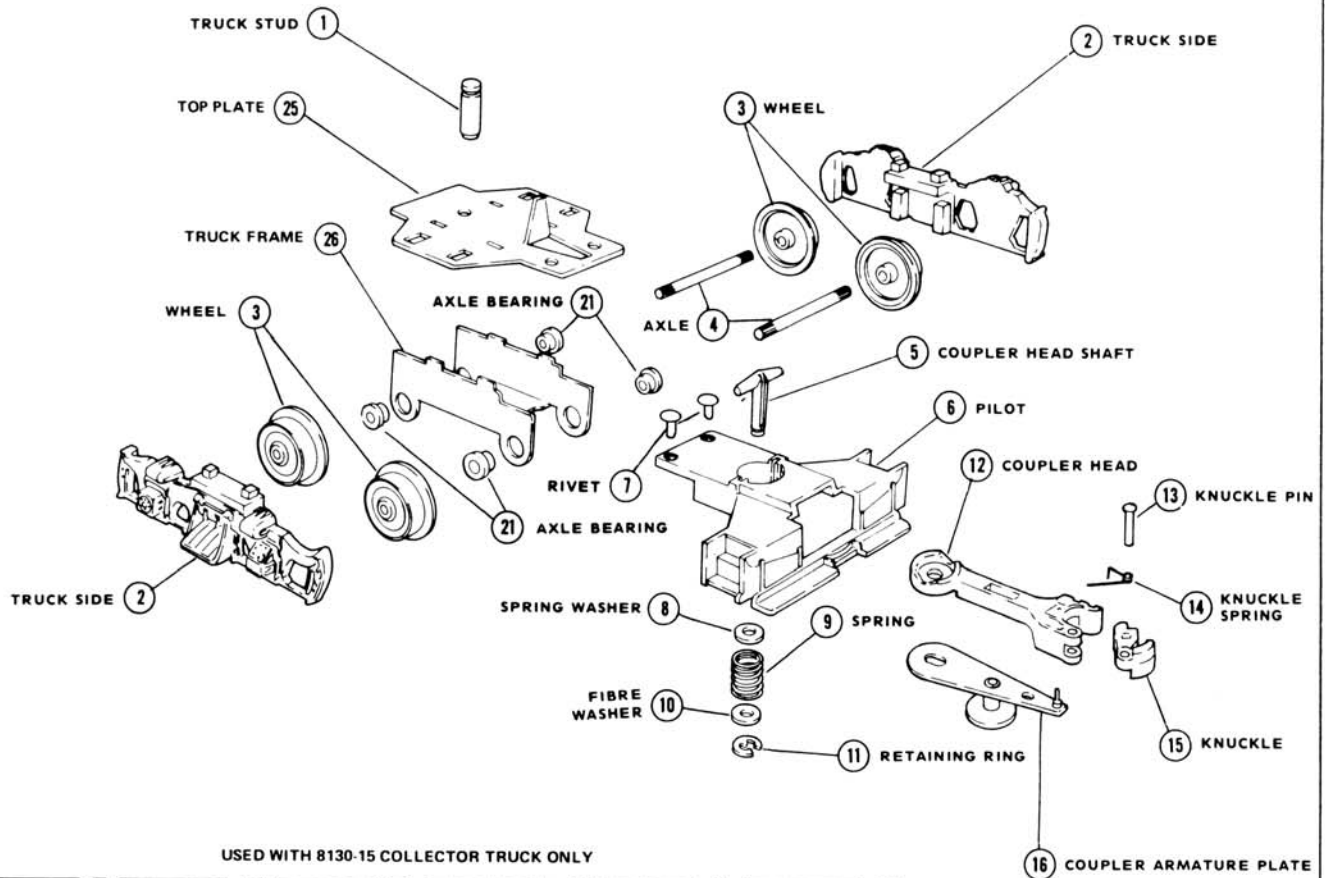
Rev. 6/92

8021-100 MOTOR TRUCK ALCO- 2-POSITION



LIONEL

8030-15 PLAIN TRUCK 8130-15 COLLECTOR TRUCK



LIONEL

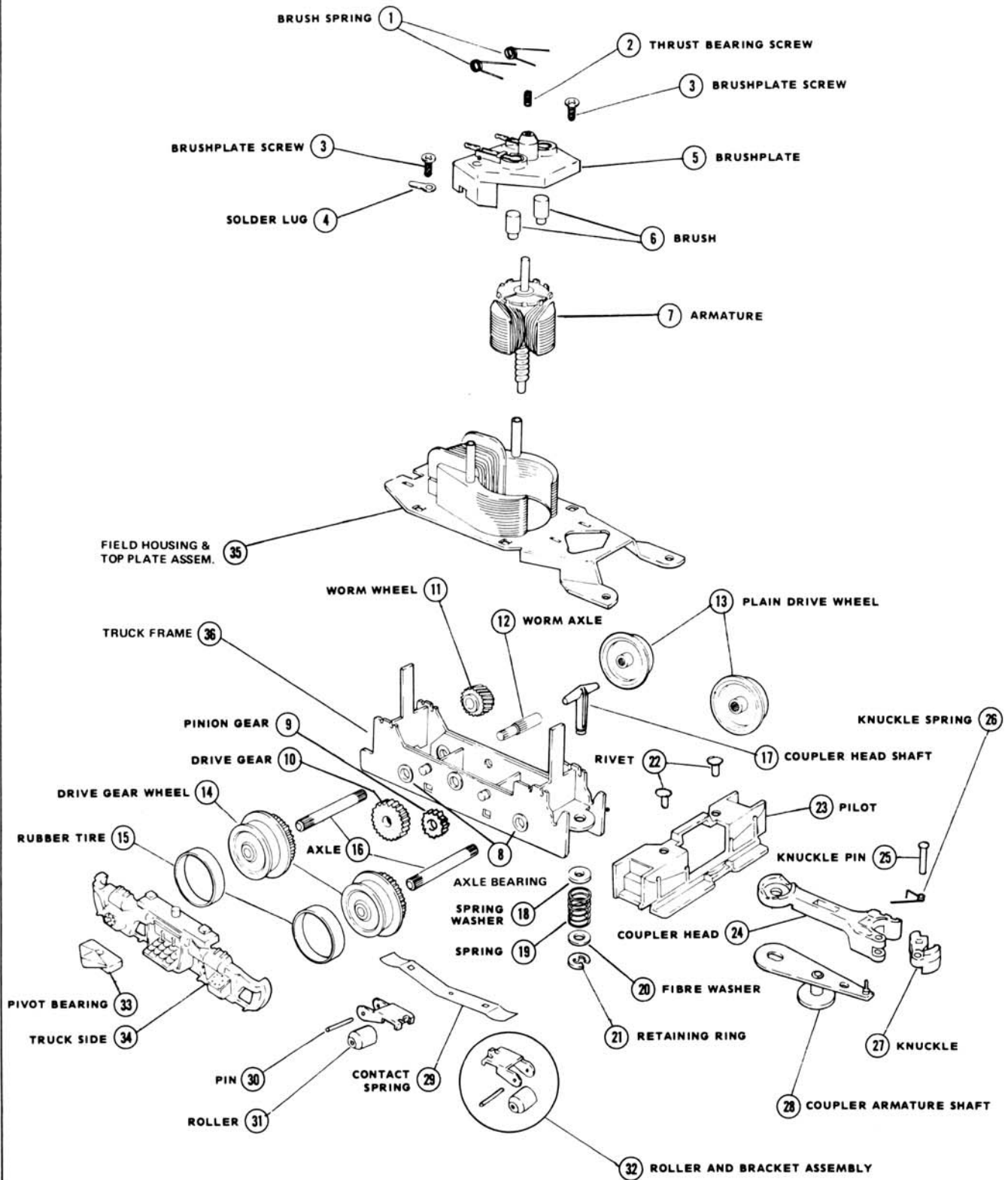
8030-15 PLAIN TRUCK W /BLACK SIDES
8665-15 PLAIN TRUCK W /SILVER SIDES
8130-15 COLLECTOR TRUCK

SECTION MOTORS/TRUCKS
DATE 2-78
REFERENCE
DRAWINGS

REF. QUANTITY PER UNIT (U36B & GP- PLAIN) (BUDD & RECTIFIER - COLLECTOR
NO. PART NUMBER DESCRIPTION

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8030-22	1	Truck Stud
2	2328-88	2	Truck Side (Black)
2	2328-89	2	Truck Side (Silver)
3	8010-122	4	Plain Wheel
4	671-25	2	Axle
5	2321-164	1	Coupler Head Shaft
6	8030-76	1	Pilot
7	530-40	2	Rivet (Pilot Mtg.)
8	671M-23	1	Spring Washer
9	1615-93	1	Spring
10	8250-35	1	Fibre Washer (Coupler & Collector)
11	671M-22	1	Retaining Ring
12	600-132	1	Coupler Head
13	TC-23	1	Knuckle Pin
14	480-16	1	Knuckle Spring
15	480-8	1	Knuckle
16	2321-156	1	Coupler Armature
17	2328-170	1	Collector Insulator (8130-15)
18	2328-171	1	Collector Assem. (8130-15)
19	2328-96	2	Collector Roller Pin (8130-15)
20	2328-95	2	Collector Roller (8130-15)
21	8010-118	4	Axle Bearing
22	8010-165	1	Screw (Collector Mtg. - 8130-15)
23	2321-135	2	Collector Spring (8130-15)
24	2367-198	2	Spring Rivet (Collector - 8130-15)
25		1	Top Plate & Truck Frame Assm.

8030-100, 8665-100 MOTOR TRUCK



LIONEL

GP7 - GP9 - GP20 & U36B MOTOR TRUCK
 (8030-100) (8665-100)

SECTION MOTORS/TRUCKS

DATE 2-78

REFERENCE
DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	622-191	2	Brush Spring
2	8030-118	1	Thrust Bearing Screw
3	8010-165	2	Screw (Brushplate Mtg.)
4	82-43	1	Solder Lug
5	8010-139	1	Brushplate
6	8040-150	2	Brush
7	8010-125	1	Armature
8	8010-118	4	Axle Bearing
9	8010-117	2	Pinion Gear (1 Shown)
10	8010-116	1	Drive Gear
11	8010-115	1	Worm Wheel (Plastic)
12	8010-190	1	Worm Axle
13	8010-122	2	Plain Wheel
14	8010-123	2	Gear Wheel
15	222-108	2	Rubber Tire
16	671-25	2	Axle
17	600-138	1	Coupler Head Shaft
18	671M-23	1	Spring Washer
19	1615-93	1	Spring
20	8250-35	1	Fibre Washer
21	671M-22	1	Retaining Ring
22	530-40	2	Rivet (Pilot Mtg.)
23	627-122	1	Pilot
24	600-139	1	Coupler Head
25	TC-23	1	Knuckle Pin
26	480-16	1	Knuckle Spring
27	480-8	1	Knuckle
28	2321-156	1	Coupler Armature
29	8209-120	1	Roller Contact Spring
30	2328-96	2	Collector Roller Pin
31	2328-95	2	Collector Roller
32	8209-165	2	Roller & Bracket Assem.
33	8010-105	2	Pivot Bearing
34	600-132	2	Truck Side (Black)
34	600-89	2	Truck Side (Silver)
35		1	Field Housing and Top Plate Assembly

Rev. 6/92

8040-15 REAR TRUCK

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	221-22	1	Bushing
2	1661-8	1	Wheel Axle
3	2046-27	1	Concial Spring
4	2660-25	1	Rivet
5	8040-11	2	Wheel
6	8040-25	1	Truck Frame

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

8142-20 FRONT TRUCK

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	1661-8	2	Axle
2	8040-10	4	Wheel
3	8142-22	1	Truck Frame
4	8142-26	1	Truck Bracket
5	8142-60	1	Concial Spring
6	8142-80	1	Washer
7	8142-25	1	Shoulder Rivet

8040-100 MOTOR

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

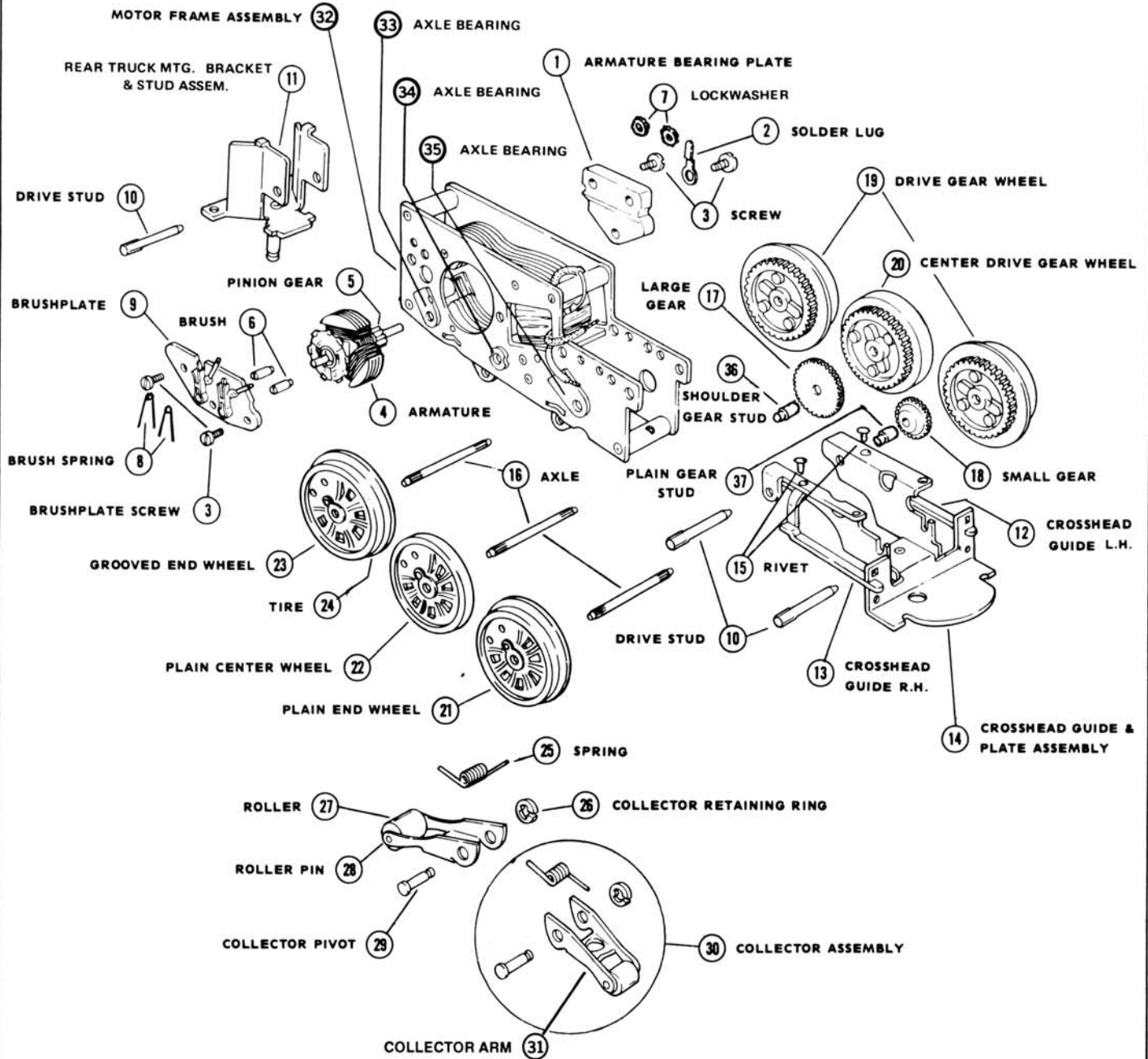
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	242-206	1	Rubber Tire
2	8040-120	1	Armature Bearing Plate
3	8040-128	1	Armature & Pinion
4	1120-127	1	Pinion
5	8040-150	2	Motor Brush
6	8040-157	2	Brush Spring
7	8040-172	3	Screw (Brushplate Mtg.)
8	8209-119	1	Brushplate
9	8040-118	1	Cluster Gear
10	2026-107	2	Axle Bearing
11	2026-122	2	Axle
12	8040-117	1	Pinion Gear
13	8040-123	1	Plain Wheel
14	8040-124	2	Gear Wheel
15	8040-125	1	Undercut Wheel
16	8209-165	2	Roller & Bracket Assembly
17	2328-95	2	Roller
18	2328-96	2	Roller Pin
19	8209-130	2	Roller Bracket

8040-600 MOTOR
8240-600

SECTION MOTORS/TRUCKS
DATE 3/79

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	242-206	1	Rubber Tire
2	8040-120	1	Armature bearing plate
3	8040-128	1	Armature & pinion
4	1120-127	1	Pinion
5	8040-150	2	Motor brush
6	8040-157	2	Brush spring
7	8040-172	3	Screw (brushplate mtg)
8	8209-119	1	Brushplate
9	8040-118	1	Cluster Gear
10	2026-107	2	Axle bearing
11	2026-122	2	Axle
12	8040-117	1	Pinion gear
13	8040-123	1	Plain wheel
14	8040-124	2	Gear wheel
15	8040-125	1	Undercut wheel
16	8507-155	2	Roller housing assembly
17	8209-120	2	Roller contact (8040-600 only)
18	2328-96	2	Roller pin (8040-600 only)
19	8209-130	2	Roller Bracket (8040-600 only)
20	8500-30	2	Collector shoe (8240-600 only)

8206, 8603 HUDSON TYPE MOTOR



8206-100 MOTOR

SECTION MOTORS/TRUCKS

8603-100 MOTOR

DATE 2-78

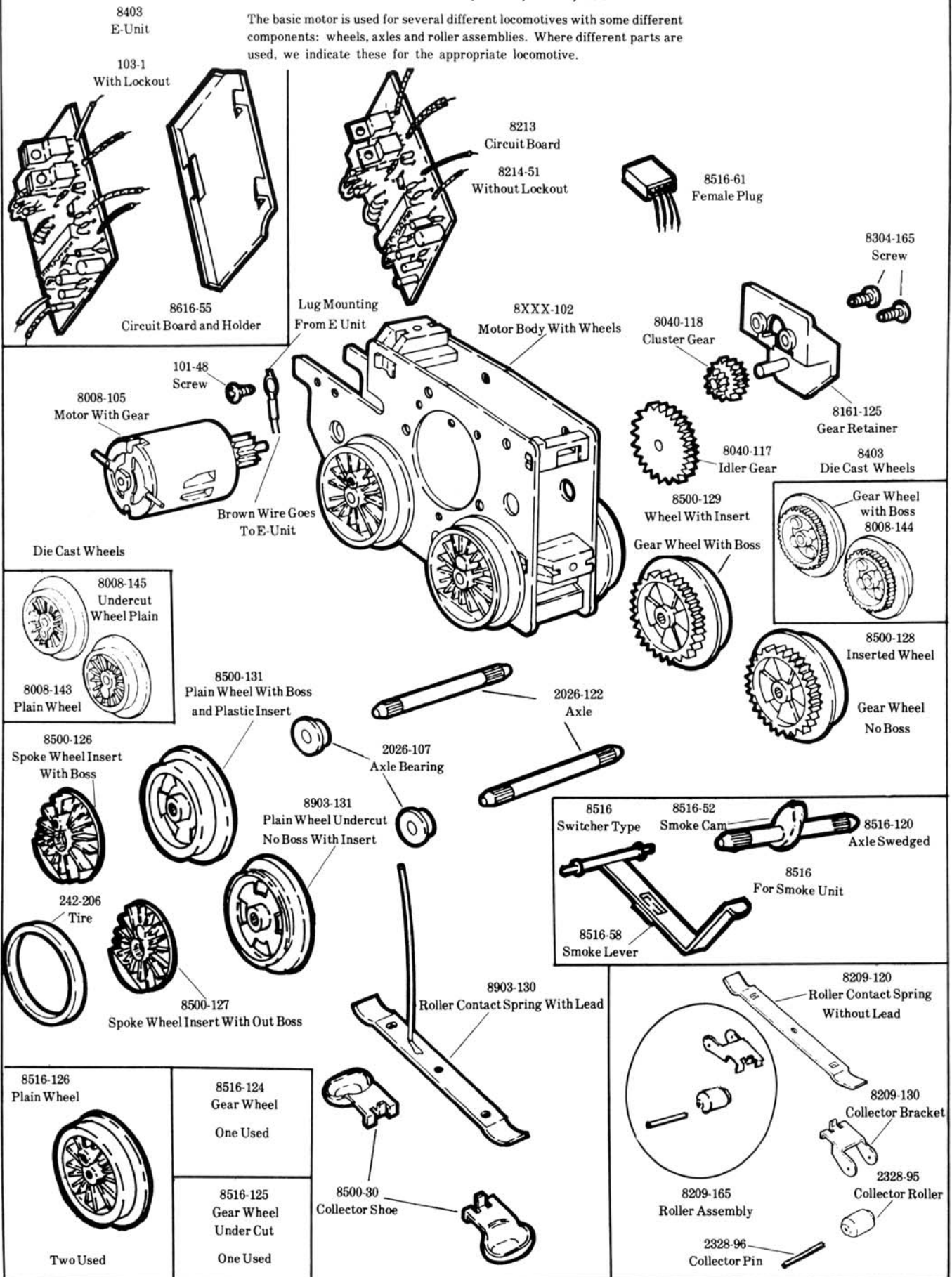
REFERENCE
DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8600-110	1	Armature Bearing Plate
2	82-43	1	Solder Lug
3	2036-164	4	Screw (Brushplate & Bearing Plate)
4	8600-69	1	Armature
5	1001M-28	1	Pinion (Armature)
6	8040-150	2	Brush
7	8142-63	1	Lockwasher
8	2036-157	2	Brush Spring
9	2035-132	1	Brushplate
10	2055-92	3	Drive Stud
11	2055-55	1	Guide Bracket, Rear Truck Mtg. Bkt.
12	2055-25	1	Crosshead Guide LH
13	2055-24	1	Crosshead Guide RH
14	2055-21	1	Crosshead Guide and Plate Assembly
15	711-207	2	Rivet, Crosshead
16	2025-111	3	Axle (8206 & 8603)
17	8600-119	1	Cluster Gear (large)
18	8600-143	1	2nd Intermediate Gear (Small)
19	8603-24	2	Gear End Wheel (8603)
20	8603-22	1	Gear Center Wheel (8603)
20	226E-202	1	Gear Center Wheel (8206)
21	8603-20	1	Plain End Wheel (8203)
21	226E-8	1	Plain End Wheel (8206)
22	8603-21	1	Plain Center Wheel (8603)
22	226E-11	1	Plain Center Wheel (8206)
23	8603-23	1	Grooved End Wheel (8603)
23	8206-59	1	Grooved End Wheel (8206)
24	8206-56	1	Rubber Tire (8206 & 8603)
25	226E-49	2	Collector Spring
26	671M-22	2	Retaining Ring (Collector Pivot)
27	2035-140	2	Collector Roller
28	2023-44	2	Collector Roller Pin
29	226E-90	2	Collector Pivot
30	2046-133	1	Collector Roller and Arm Assembly
31	2035-142	2	Collector Arm and Roller
32	8206-137	1	Motor Frame Assm. (Not Sold Separately)

Rev. 6/92

DC Motor: 8213, 8403, 8516, etc.

The basic motor is used for several different locomotives with some different components: wheels, axles and roller assemblies. Where different parts are used, we indicate these for the appropriate locomotive.



8403-101

8214-101

8616-101

MOTOR CHASSIE ASSEMBLY

SECTION MOTORS/TRUCKS

DATE 4/86

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	101-48	1	Screw E-Unit ground lug
2	242-206	1	Rubber tire
3	8008-105	1	DC motor & pinion gear
4	8040-118	1	Cluster gear
5	8161-125	1	Gear retainer
6	8304-165	2	Screw (gear retainer)
7	8616-55	1	E-Unit bracket alternate 8152-35 foam pad
8	8214-51	1	E-Unit
9	8403-102	1	Motor body & wheels 8402, 8403, 8616, 8617
10	8212-102	1	Motor body & wheels 8213, 8214
11	2026-107	2	Axle bearing
12	8008-143	1	Plain wheel 8402, 8403
13	8008-145	1	Undercut wheel plain 8402, 8403
14	8506-130	2	Gear wheel & axle assy 8402, 8403
15	8008-144	2	Gear wheel 8402, 8403
16	2026-122	2	Axle
17	8040-117	1	Idler gear
18	8209-165	1	Roller bracket assembly
19	8903-130	1	Roller contact w/lead
			8616-102 8212-102 MOTOR BODY w/WHEELS
			8213, 8214, 8216, 8217
1	8500-131	1	Wheel w/boss 8213, 8214, 8216, 8217
2	8903-145	1	Wheel w/undercut no boss 8213, 8214
3	8902-130	2	Gear wheel w/boss & axle assembly 8213, 8214, 8216, 8217
4	8902-120	1	Gear wheel without boss & axle assembly 8213, 8214
5	8500-30	2	Contact shoe 8213, 8214
6	8500-128	1	Gear wheel no boss 8213, 8214
7	8500-129	1	Gear wheel with boss 8216, 8217
8	8500-127	1	Spoke insert no boss 8213, 8214
9	8500-126	1	Spoke insert w/boss 8213, 8214, 8216, 8217
10	8500-120	1	Wheel undercut w/boss 8216, 8217

8263-101 D.C. MOTOR TRUCK

SECTION MOTORS/TRUCKS

DATE 5/83

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	0222-208	2	Tires, traction
2	8263-151	1	Motor truck & wheel assembly
3	8263-100	1	Truck frame
4	0671-025	2	Axle
5	8010-116	2	Drive gear
6	8010-122	2	Plain wheel
7	8010-123	2	Gear wheel, undercut
8	8040-118	1	Cluster gear
9	8008-105	1	D.C. Motor with pinion
10	50-3040-564	2	Screw, #4x3/16" motor mount
11	8263-071	1	Truck side & stud assembly
12	8263-073	1	Pilot
13	8263-055	1	Coupler arm and knuckle assembly
14	9050-057	1	Plunger
15	9150-058	1	Armature
16	8555-035	2	Washer, .030"
17	8960-052	1	Palnut
18	8400-550	3	Screw, #4x7/16", cover mount

8263-250 COLLECTOR TRUCK

SECTION MOTORS/TRUCKS

DATE 5/83

REF. QUANTITY PER UNIT
 NO. PART NUMBER DESCRIPTION

1	8263-152	1	Collector truck & wheel assembly
2	8263-100	1	Truck body
3	0671-025	2	Axle
4	8010-122	2	Plain wheel
5	8350-012	2	Gear wheel
6	8263-045	1	Ground strap assembly
7	8263-122	1	Collector strap assembly
8	8500-030	2	Collector shoe
9	8263-071	1	Truck side & stud assembly
10	8263-073	1	Pilot
11	8263-055	1	Coupler arm & knuckle assembly
12	9050-057	1	Plunger
13	9150-058	1	Armature
14	8555-035	2	Washer, .030"
15	8400-550	3	Screw, #4x5/16", cover mount
16	8803-114	2	Push nut

9174-50 OPERATING COUPLER TRUCK

SECTION MOTORS/TRUCKS

DATE 3/79

REF. QUANTITY PER UNIT
 NO. PART NUMBER DESCRIPTION REFERENCE DRAWING

1	9174-51	1	Truck Frame	
2	6403-60	1	Coupler Arm	
3	9050-56	1	Knuckle	
4	9050-57	1	Uncoupler Plunger	
5	9150-58	1	Uncoupler Armature	
6	TC-23	1	Knuckle Pin	
7	8240-71	1	Screw	
8	9050-54	2	Wheel & Axle Assembly	
9	6403-52	1	Coupler Mounting Piece	

8265-571 MOTOR TRUCK

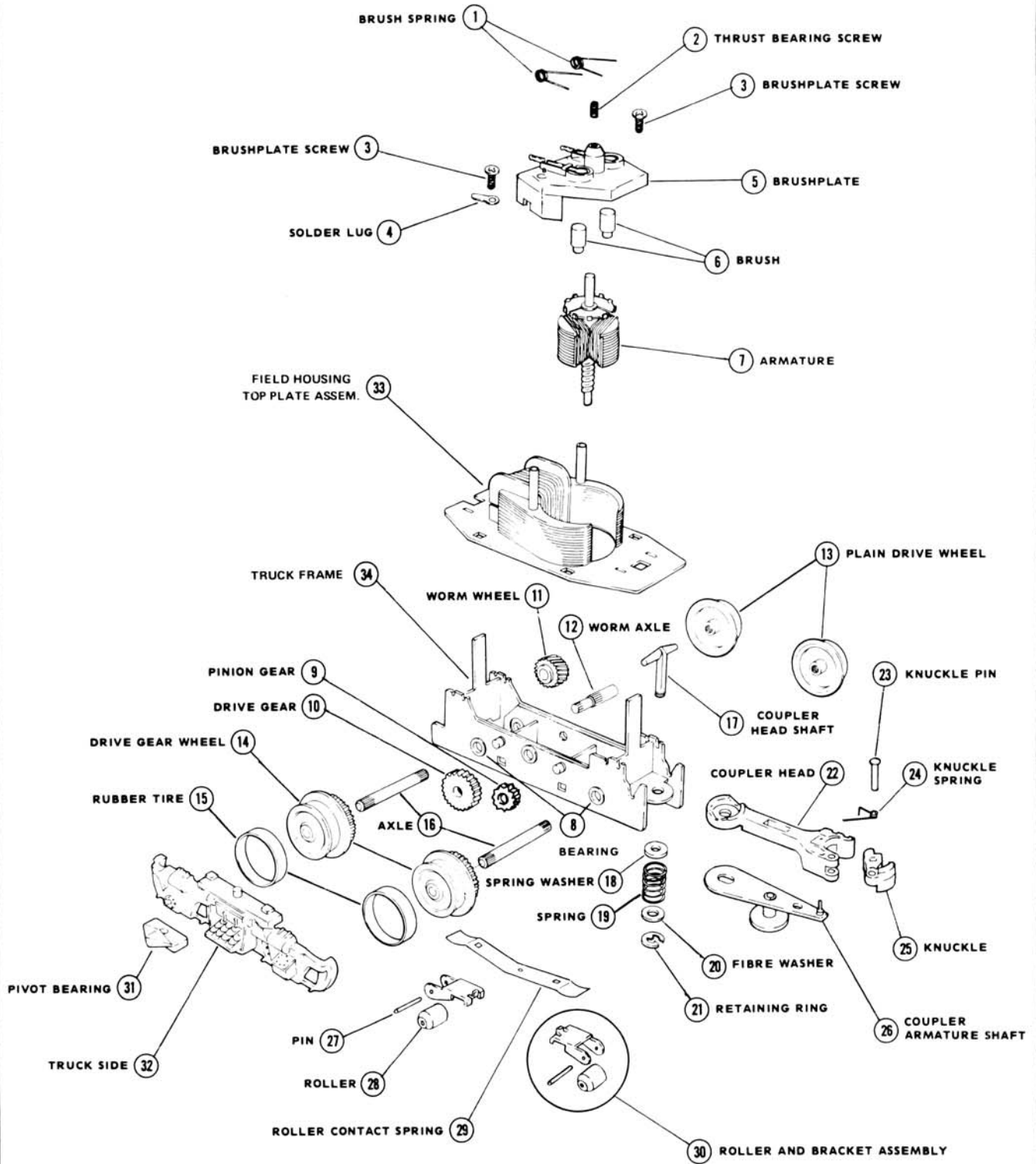
SECTION MOTORS & TRUCKS

DATE 4/83

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
	8265-572	1	Motor body
	8950-064	1	Geared wheel & axle assembly, flanged
	8265-581	1	Geared wheel & knurled axle assembly, no flange
	8265-523	1	Geared wheel & small axle assembly, flanged
	2343-033	2	Flanged wheel, plain
	8265-552	1	No flanged wheel, plain
	8265-577	4	Axle bearing, magnetraction
	8855-118	2	Axle bearing, plain
	8040-117	2	Idler gear
	8265-030	2	Washer, idler gear
	8265-576	1	Worm wheel
	8855-162	1	Armature bearing insert
	8855-225	1	Armature assembly
	8855-050	1	Coupler arm assembly
	8960-051	1	Coupler mounting stud
	1615-093	1	Spring
	90-671M-023	2	Washer
	8960-052	1	Palnut
	8265-515	1	Pilot
	8265-545	1	Snowplow
	8265-074	2	Truck side, silver
	82-043	1	Solder lug
	8010-139	1	Brush plate assembly
	8010-165	2	Screw, 4-40x $\frac{1}{4}$ " , brush plate mount
	8040-150	2	Motor brush
	8265-578	1	Axle spacer

8354-100 MOTOR TRUCK



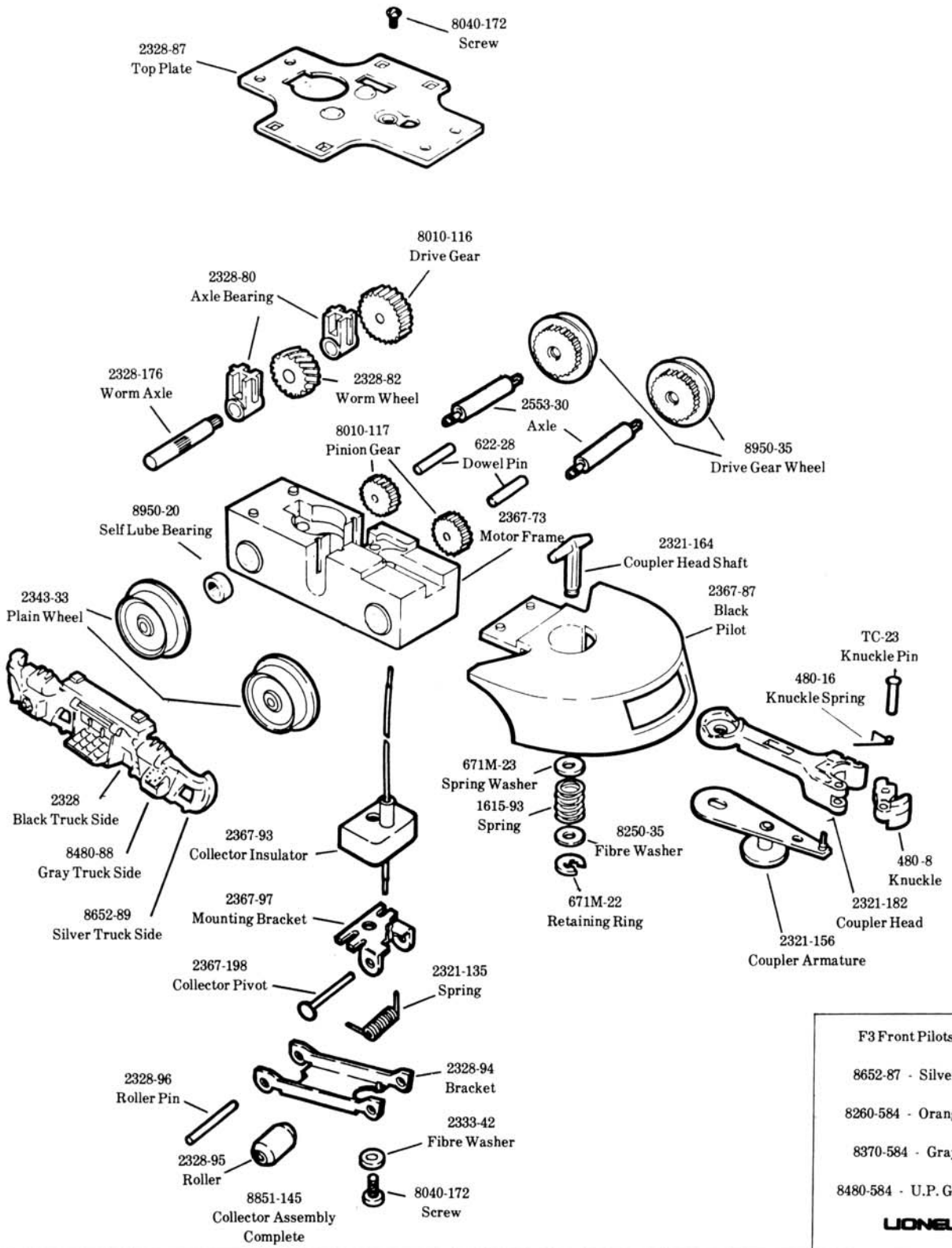
LIONEL

8354-100 MOTOR TRUCK
 SW-1 SWITCHER - 3 POS.

SECTION MOTORS/TRUCKS
 DATE 2-78
 REFERENCE
 DRAWINGS

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	622-191	2	Brush Spring
2	8030-118	1	Thrust Bearing Screw
3	8010-165	2	Screw (Brushplate Mtg.)
4	82-43	1	Solder Lug
5	8010-139	1	Brushplate
6	8040-150	2	Brush
7	8010-125	1	Armature
8	8010-118	4	Axle Bearing
9	8010-117	2	Pinion Gear (1 Shown)
10	8010-116	1	Drive Gear
11	8010-115	1	Worm Wheel (Plastic)
12	8010-190	1	Worm Axle
13	8010-122	2	Plain Wheel
14	8010-123	2	Gear Wheel
15	222-108	2	Rubber Tire
16	671-25	2	Axle
17	600-138	1	Coupler Head Shaft
18	671M-23	1	Spring Washer
19	1615-93	1	Spring
20	8250-35	1	Fibre Washer
21	671M-22	1	Retaining Ring
22	600-139	1	Coupler Head
23	TC-23	1	Knuckle Pin
24	480-16	1	Knuckle Spring
25	480-8	1	Knuckle
26	2321-156	1	Coupler Armature
27	2328-96	2	Collector Roller Pin
28	2328-95	2	Collector Roller
29	8209-120	1	Roller Contact Spring
30	8209-165	2	Roller & Bracket Assem.
31	8010-105	2	Pivot Bearing
32	600-132	2	Truck Side
33		1	Field, Housing & Top Plate Assm.
34		1	Truck Frame

Magnetraction Motor Trucks F-3 And Geep Type



F3 Front Pilots

8652-87 - Silver

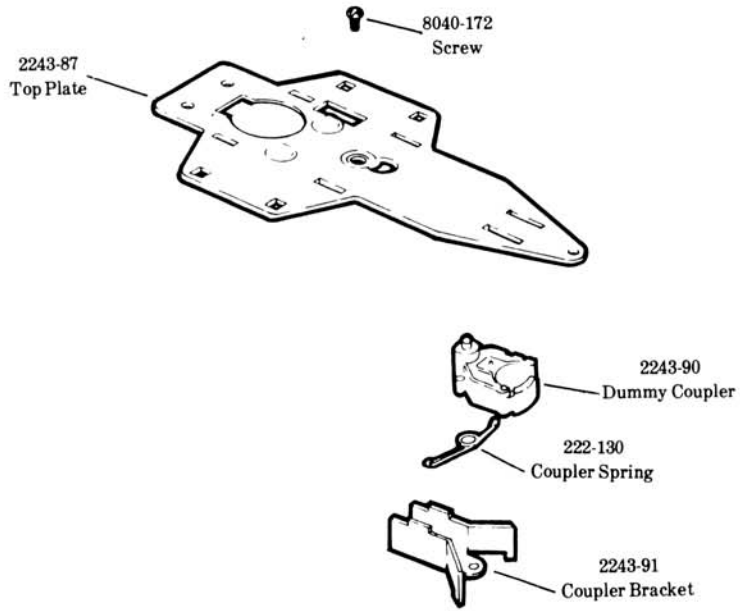
8260-584 - Orange

8370-584 - Gray

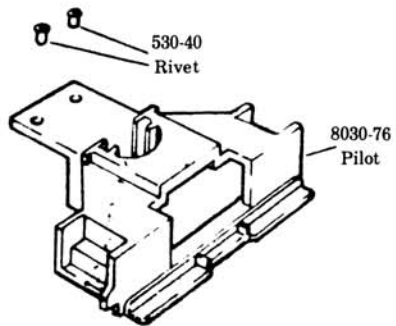
8480-584 - U.P. Gray

LIONEL

F-3 Rear Truck Components 8370-590



Used on Geep Truck 8477-150



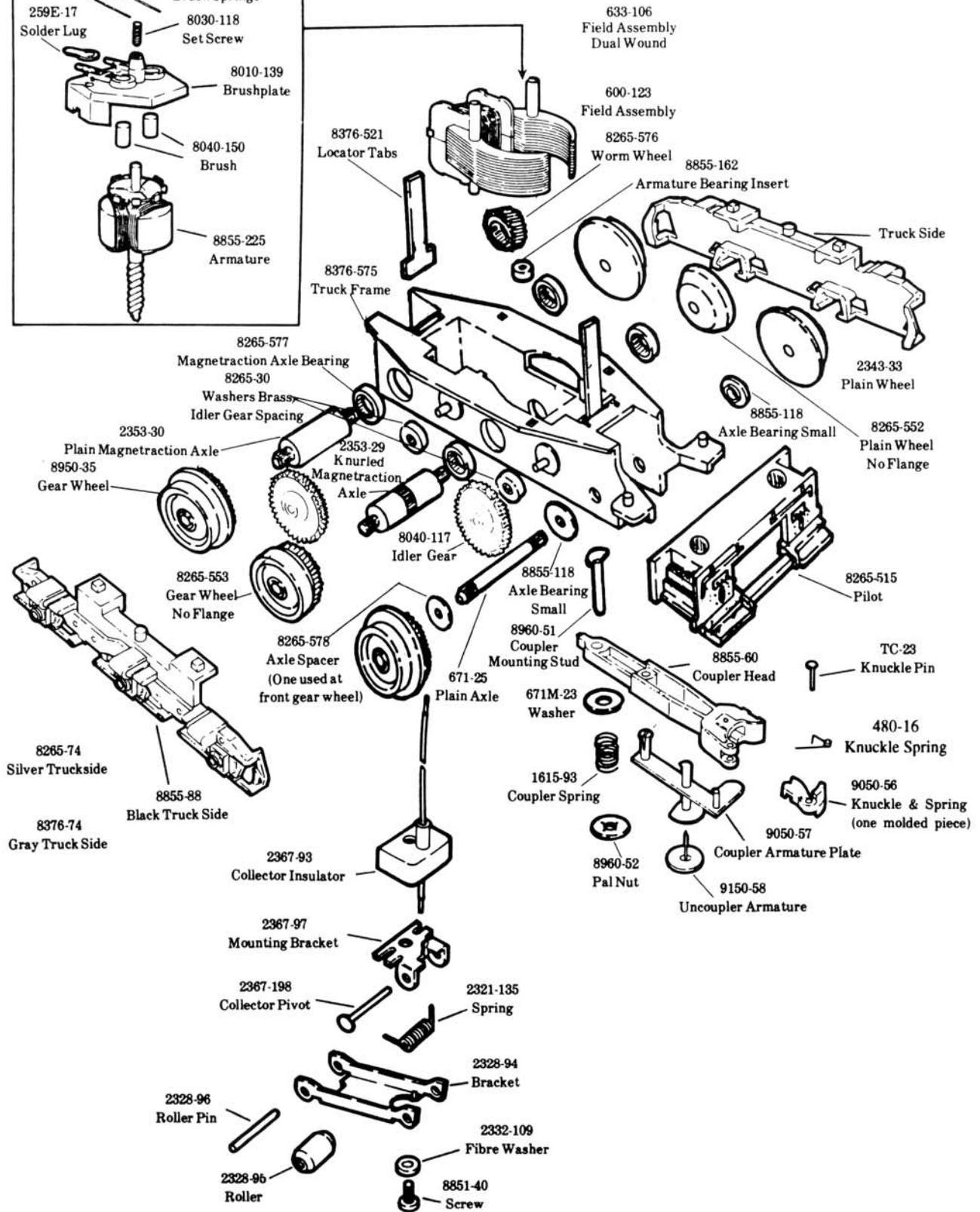
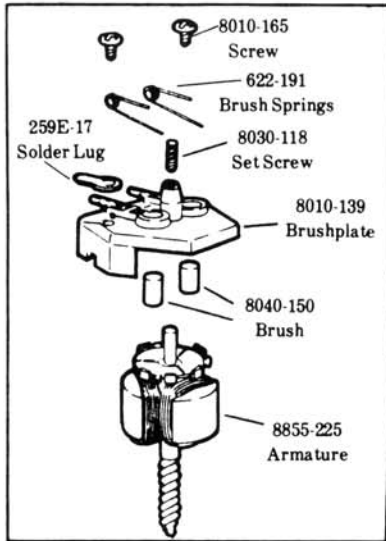
MAGNETRACTION MOTOR TRUCKS F-3 & GEEP TYPE

8477-150 GP-9 MOTOR TRUCK
 8580-570 F-3 FRONT MOTOR TRUCK
 8370-590 F-3 REAR MOTOR TRUCK

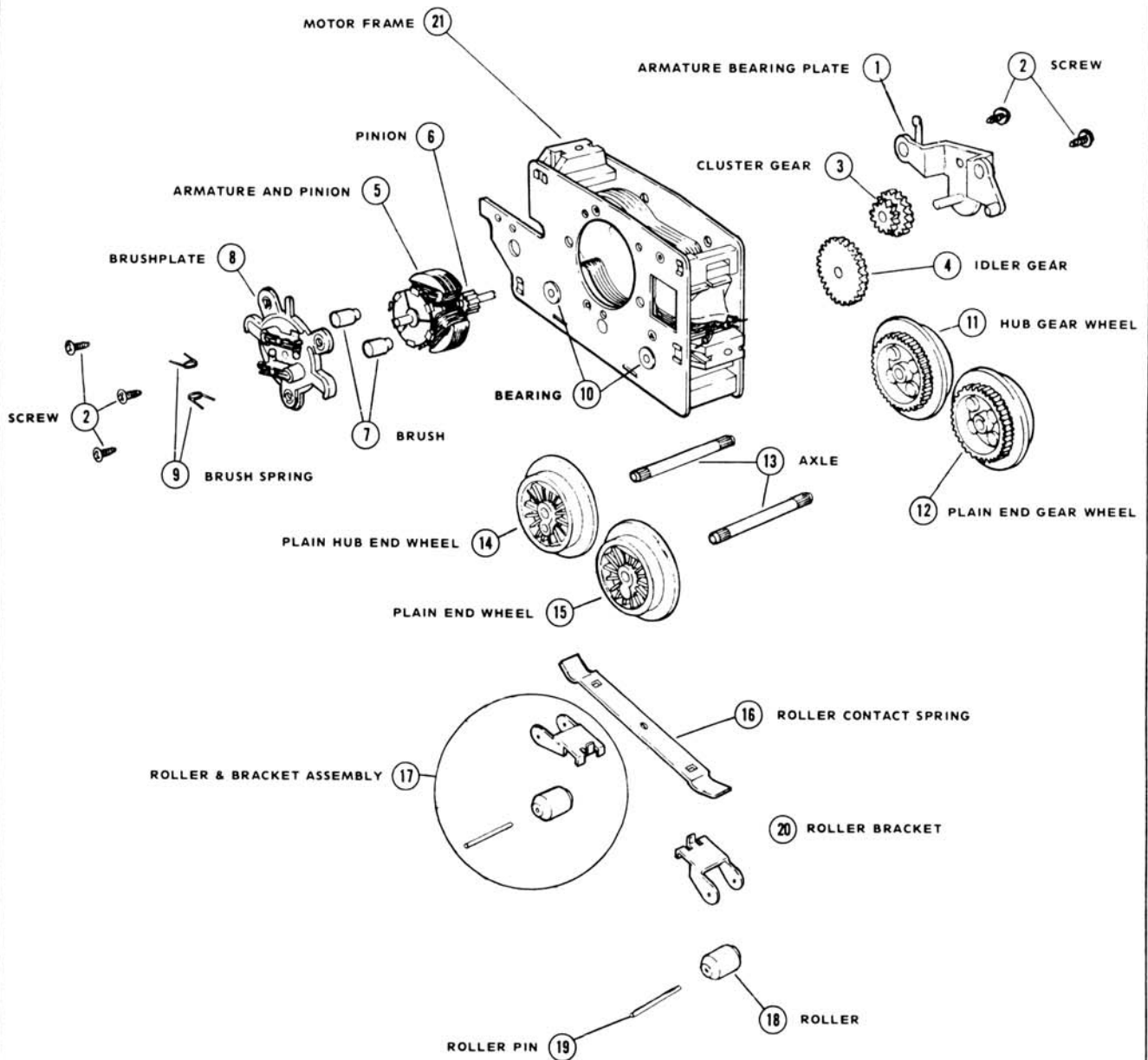
SECTION MOTORS/TRUCKS
 DATE 4/86
 Reference
 Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	622-28	2	Dowel pin
2	1615-93	1	Spring coupler centering 8580-570 & 8477-150
3	2321-86	1	Coupler head assembly 8580-570 & 8477-150
4	2321-156	1	Armature uncoupler assembly 8580-570 & 8477-150
5	2321-164	1	Coupler head shaft 8580-570 & 8477-150
6	2328-80	2	Bushing
7	2328-82	1	Worm gear
8	2328-87	1	Top plate 8580-570 & 8477-150
9	2328-88	2	Truck side
10	2328-176	1	Gear axle
11	2333-42	1	Insulating washer (collector assembly)
12	2343-33	2	Plain wheel
13	2367-73	1	Truck frame
14	2367-87	1	Pilot painted (F-3 only) black
15	2367-93	1	Insulation for collector
16	8010-116	1	Drive gear
17	8010-117	2	Pinion gear
18	8040-172	2	Screw (top plate mounting & collector mounting)
19	8250-35	1	Fiber washer
20	8851-145	1	Collector assembly (F-3 only)
21	8950-20	4	Self lube bearing
22	8950-64	2	Geared wheel & axle assembly
23	671M-22	1	Retaining clip
24	671M-23	1	Washer
25	530-40	2	Rivet (pilot)
26	8030-76	1	Pilot (GP motor truck)
27	222-130	1	Centering spring 8370-590
28	2243-87	1	Top plate 8370-590
29	2243-90	1	Coupler 8370-590
30	2243-91	1	Coupler bracket 8370-590
31	8950-35	2	Gear wheel
32	2353-30	2	Axle magnetraction

8458-571 SD-40 Dual Motor Truck

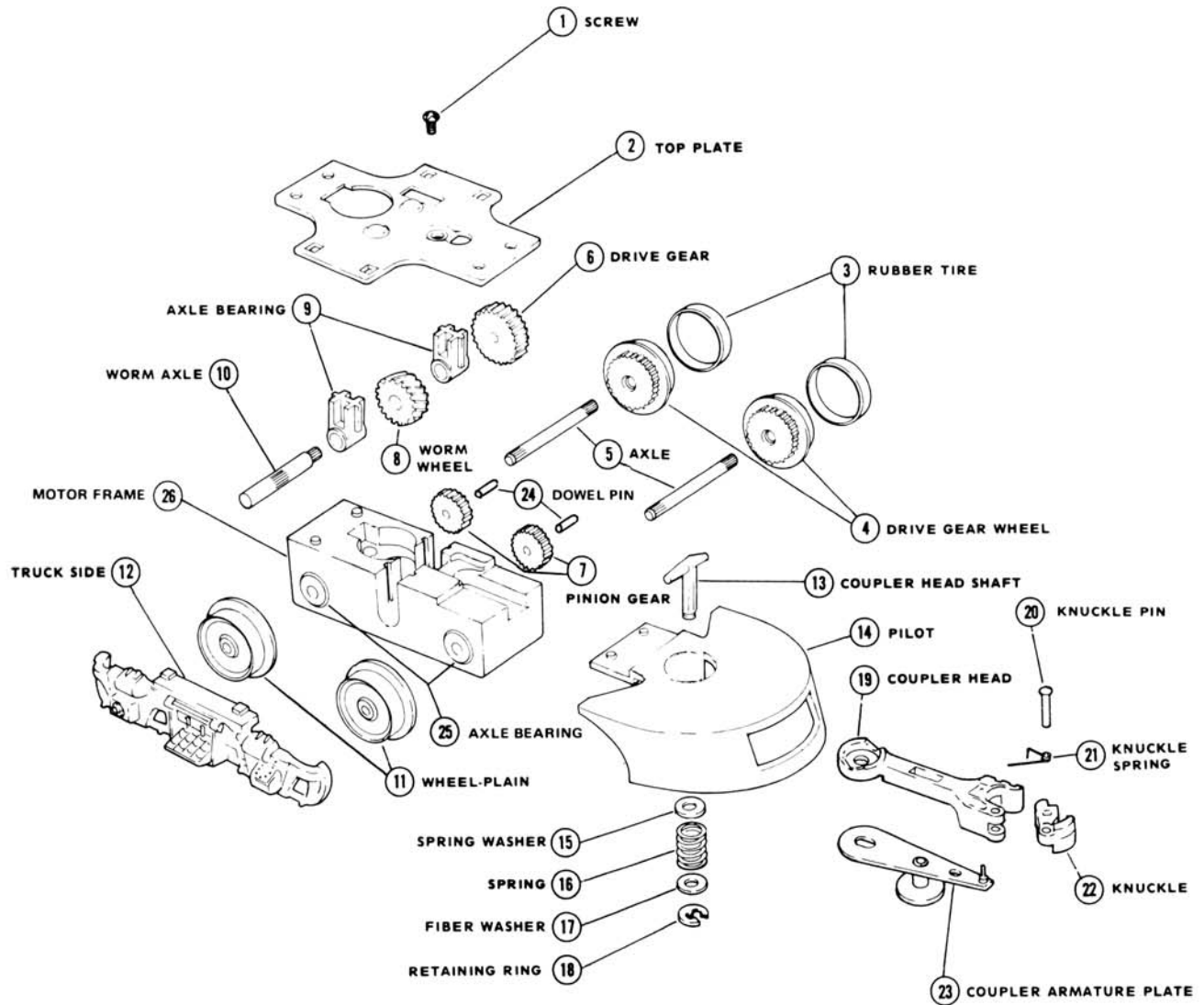


8506-601 MOTOR



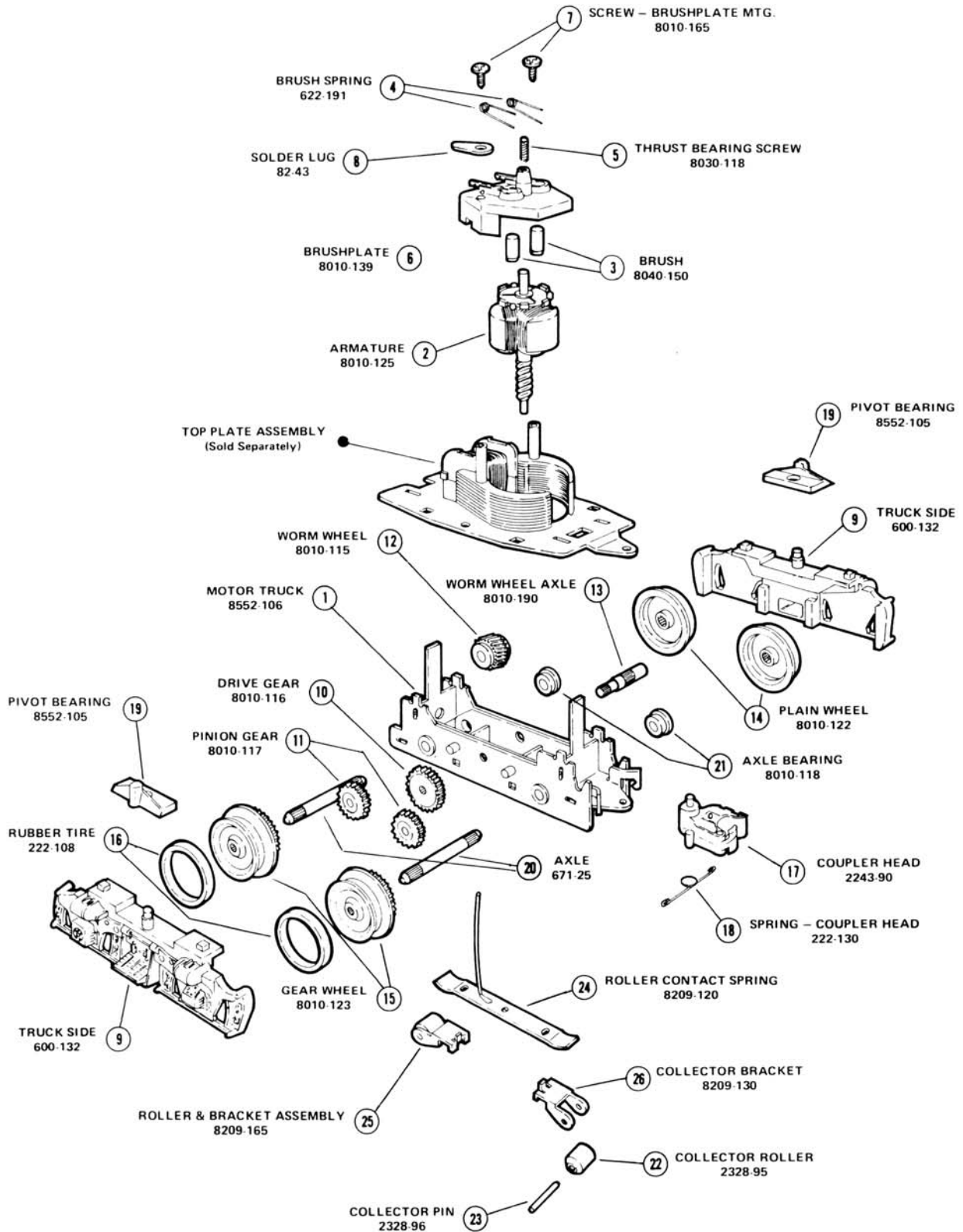
LIONEL

"LITTLE JOE" POWER TRUCK



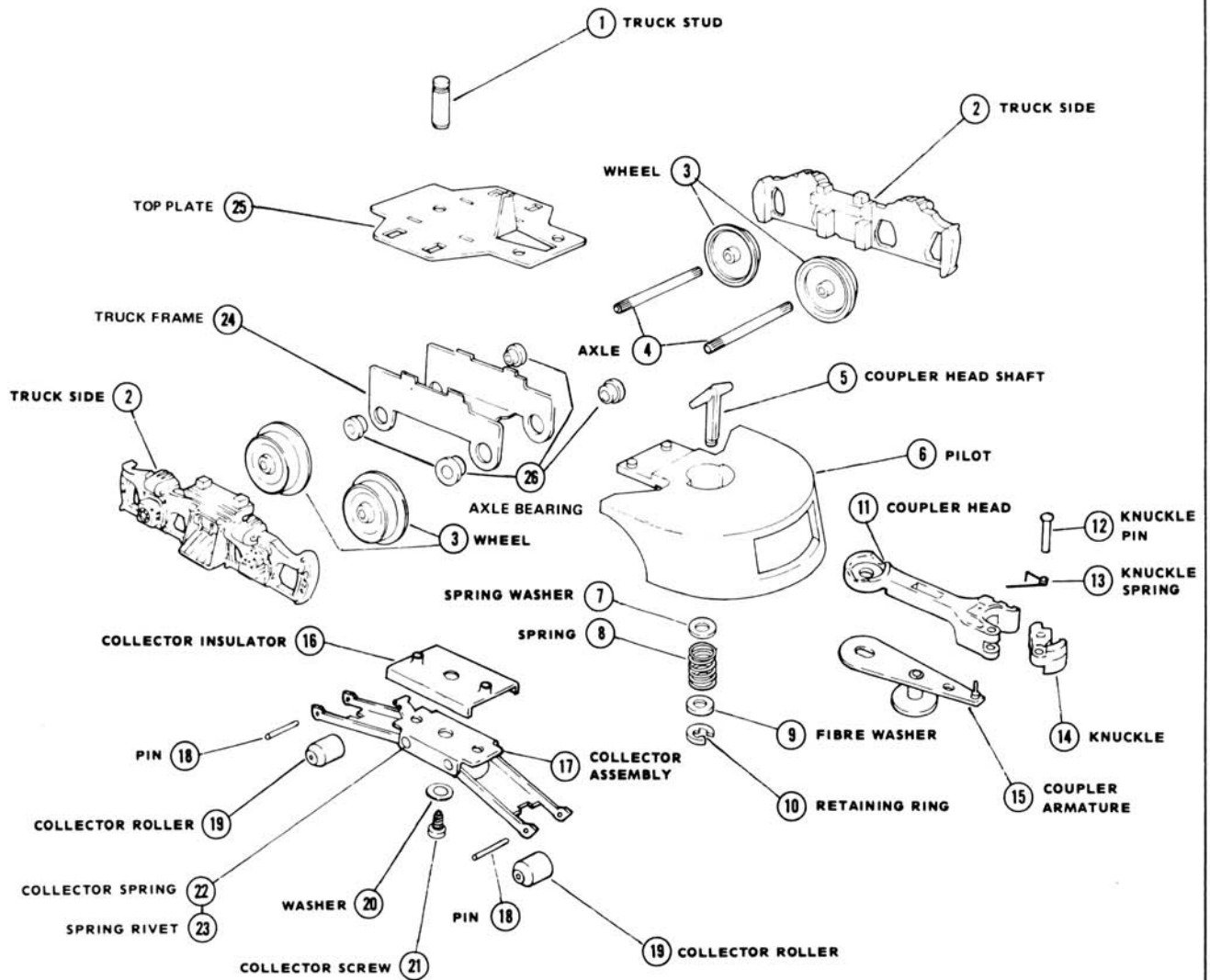
LIONEL

8552-100 MOTOR TRUCK ALCO-3 POSITION



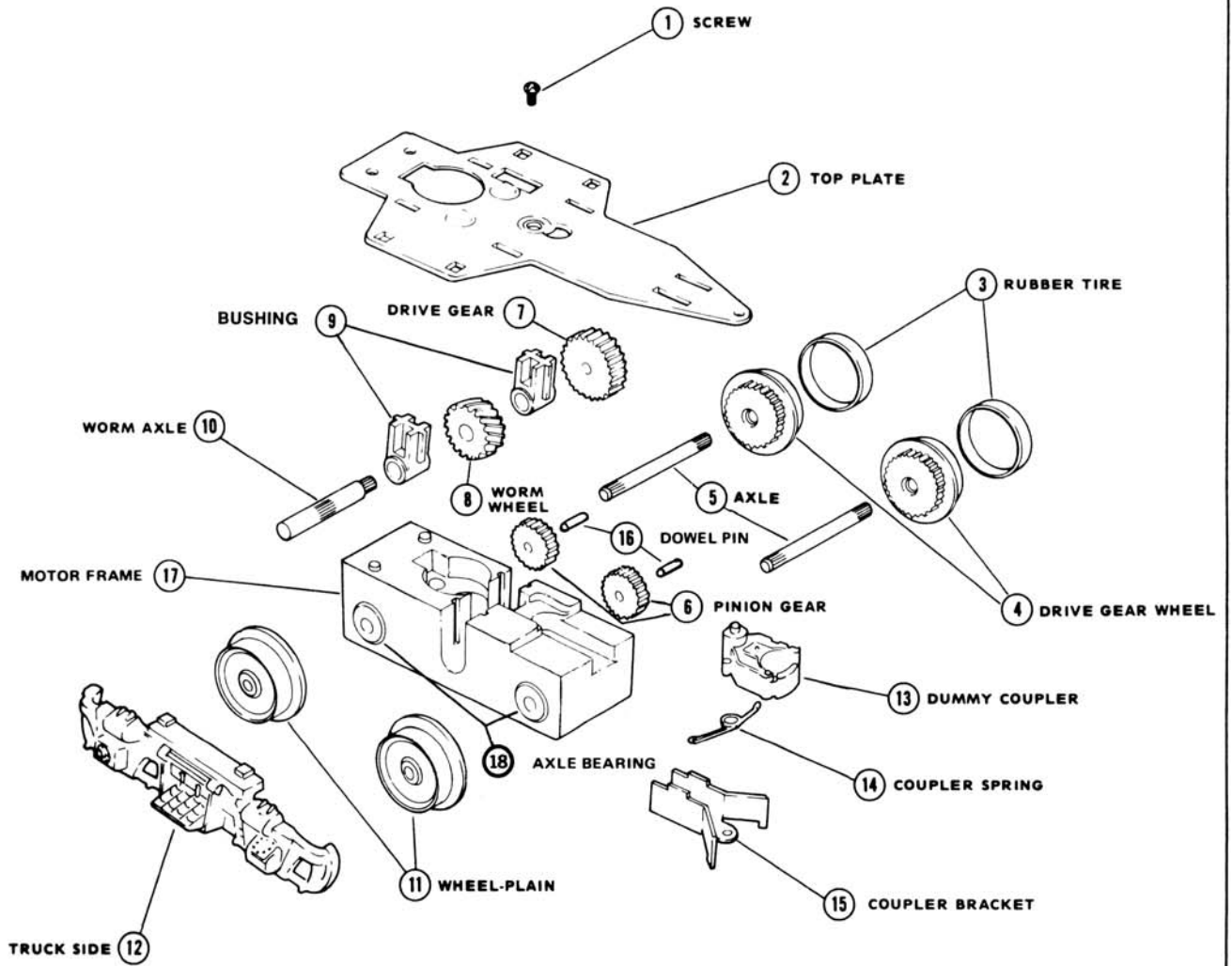
LIONEL

8555-70 8652-70 COLLECTOR TRUCK

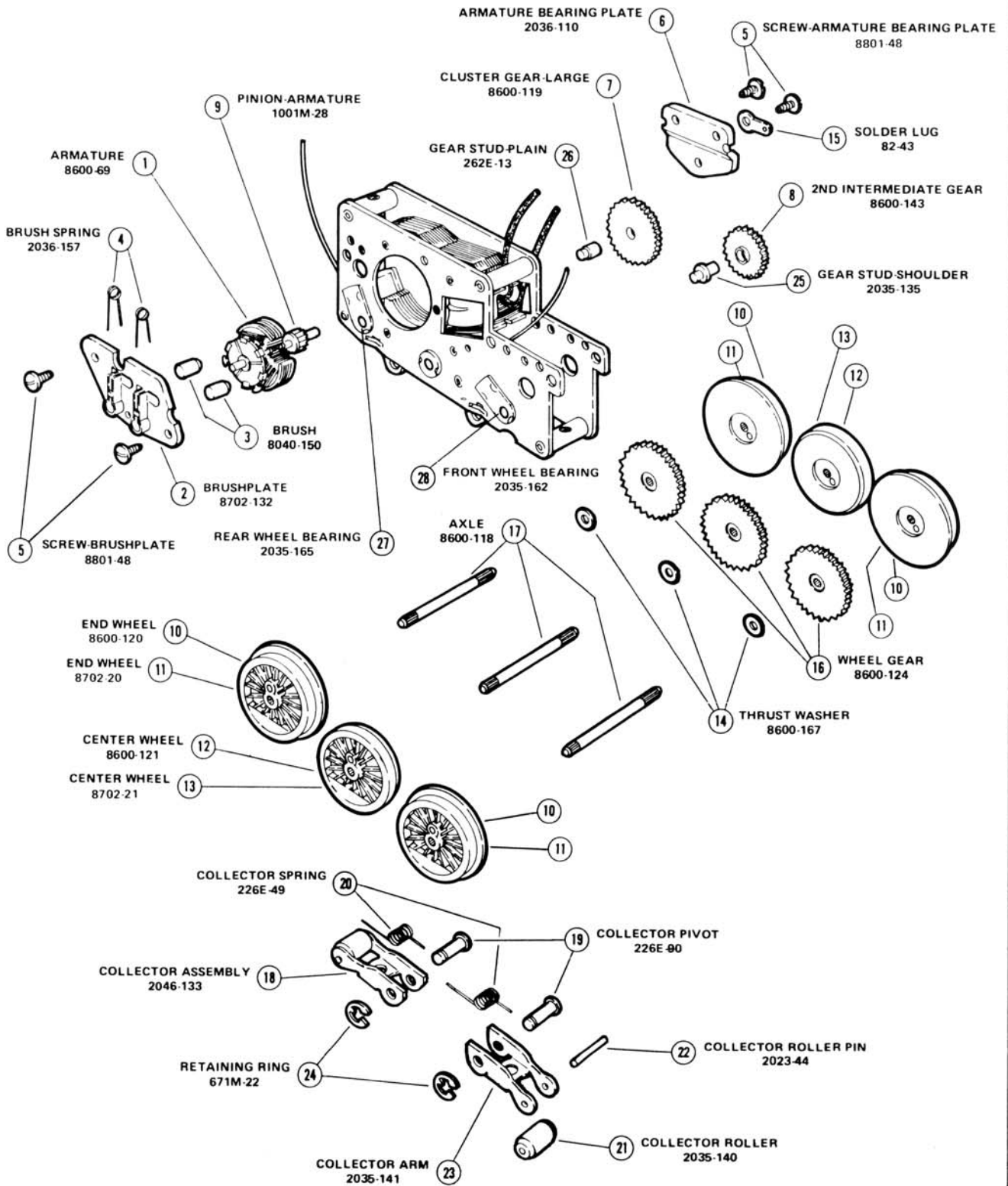


LIONEL

F-3 POWER TRUCK

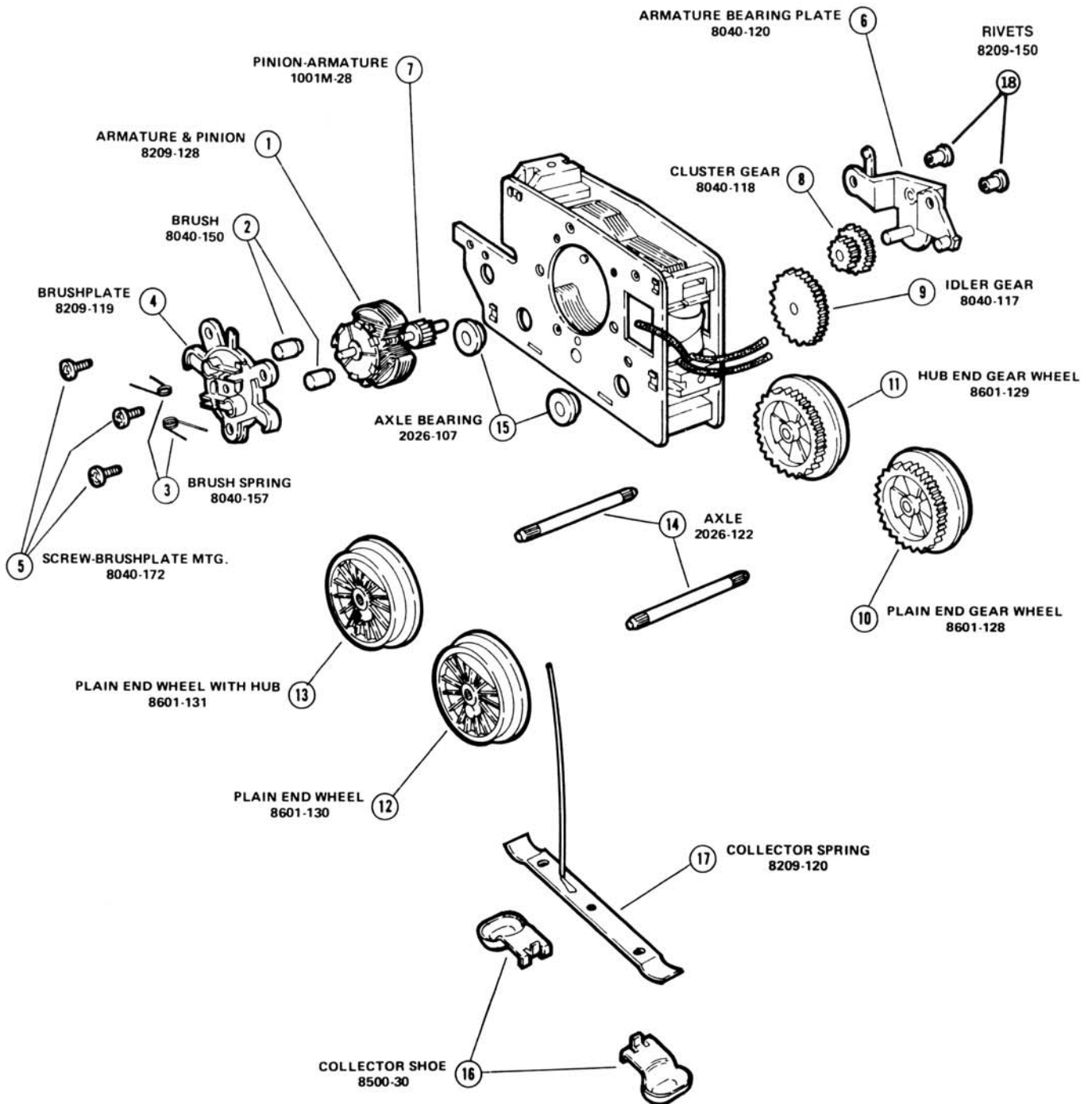


8702-100, 8900-100, 8600-100 MOTOR HUDSON 6 WHEEL



LIONEL

8601-100 MOTOR



8653-150 REAR TRUCK F3 W/SILVER SIDE

SECTION MOTORS/TRUCKS

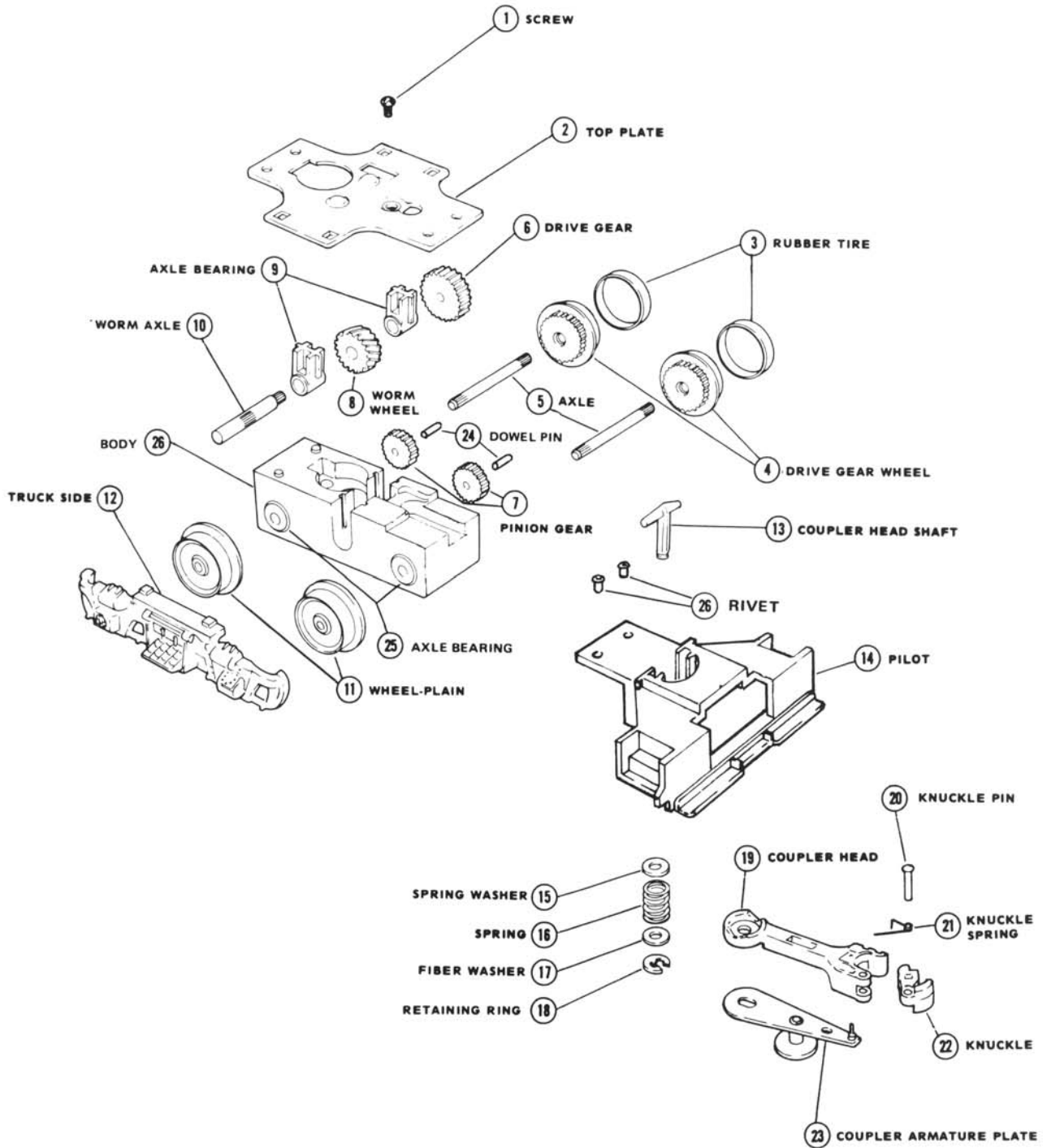
DATE 3/79

REFERENCE

DRAWING

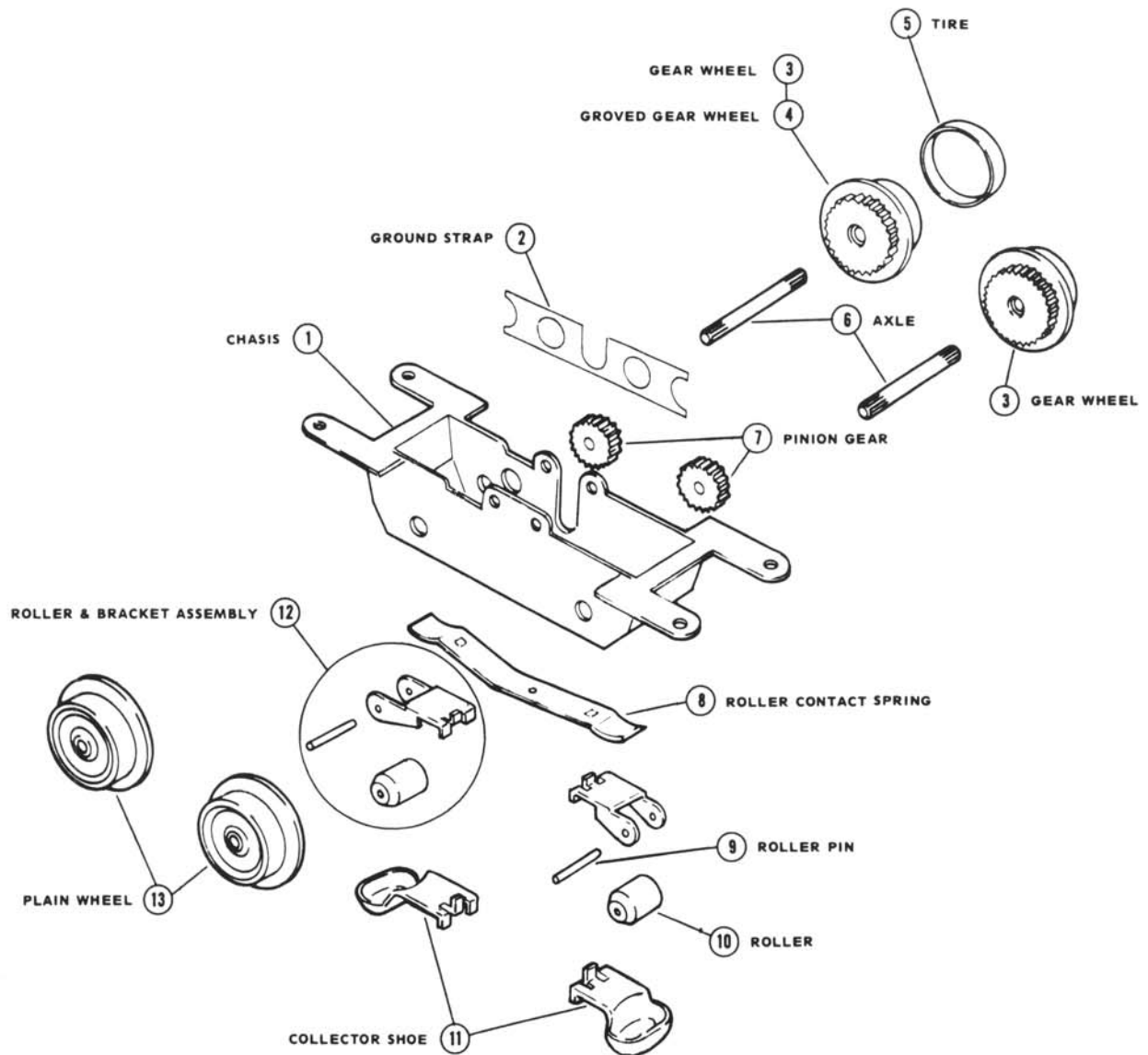
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	222-130	1	Spring
2	2243-90	1	Dummy Coupler Head
3	2243-91	1	Lower Coupler Bracket
4	2243-153	1	Top Plate
5	8652-89	2	Truck Side
6	8030-22	1	Truck Stud
7	671-25	2	Axle
8	8010-118	4	Axle Bearing
9	8010-122	4	Plain Wheel
10	8030-35	1	Truck Frame

8659 MOTOR TRUCK - RECTIFIER & BUDD (less motor)



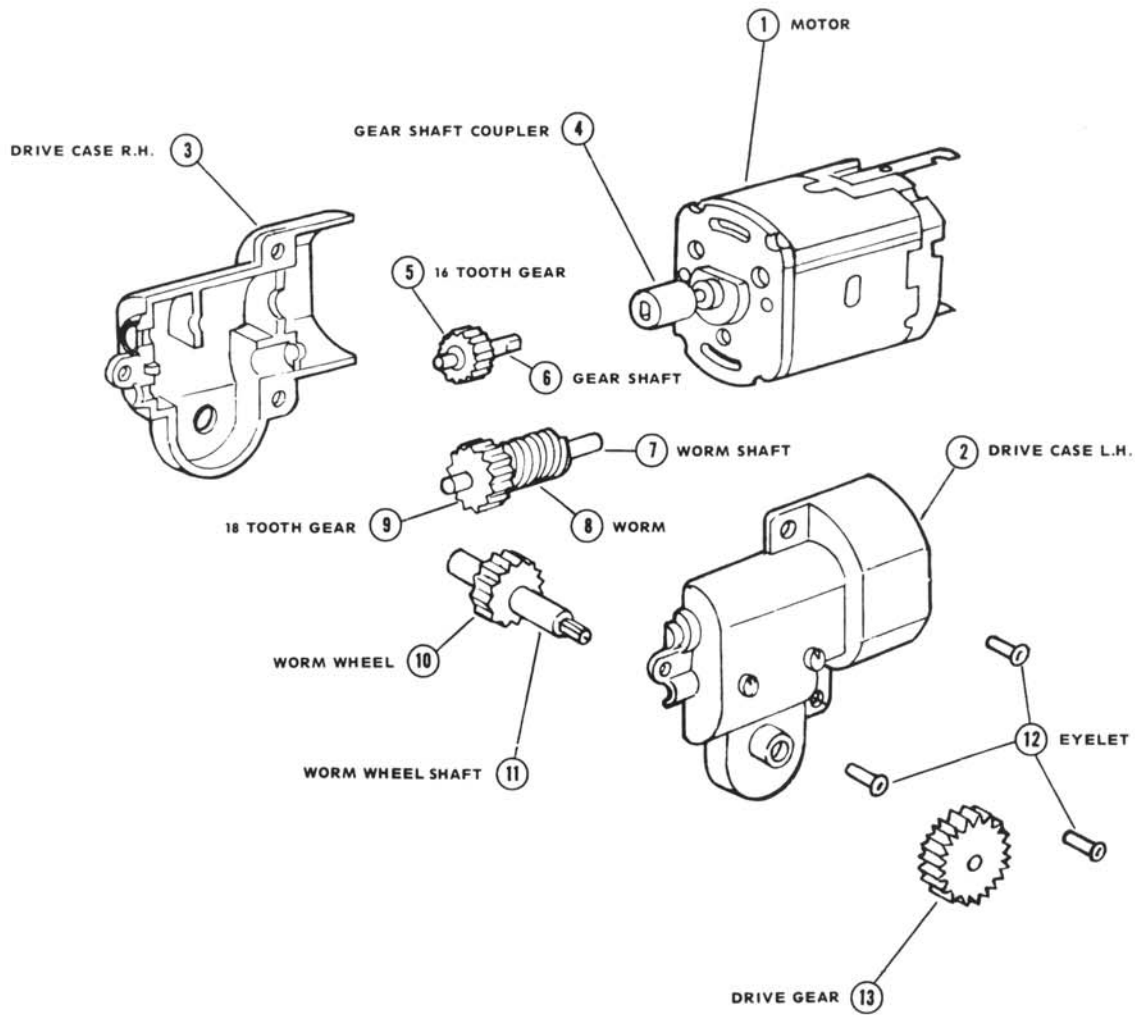
LIONEL

HUSTLER SWITCHER FRAME ASSEMBLY



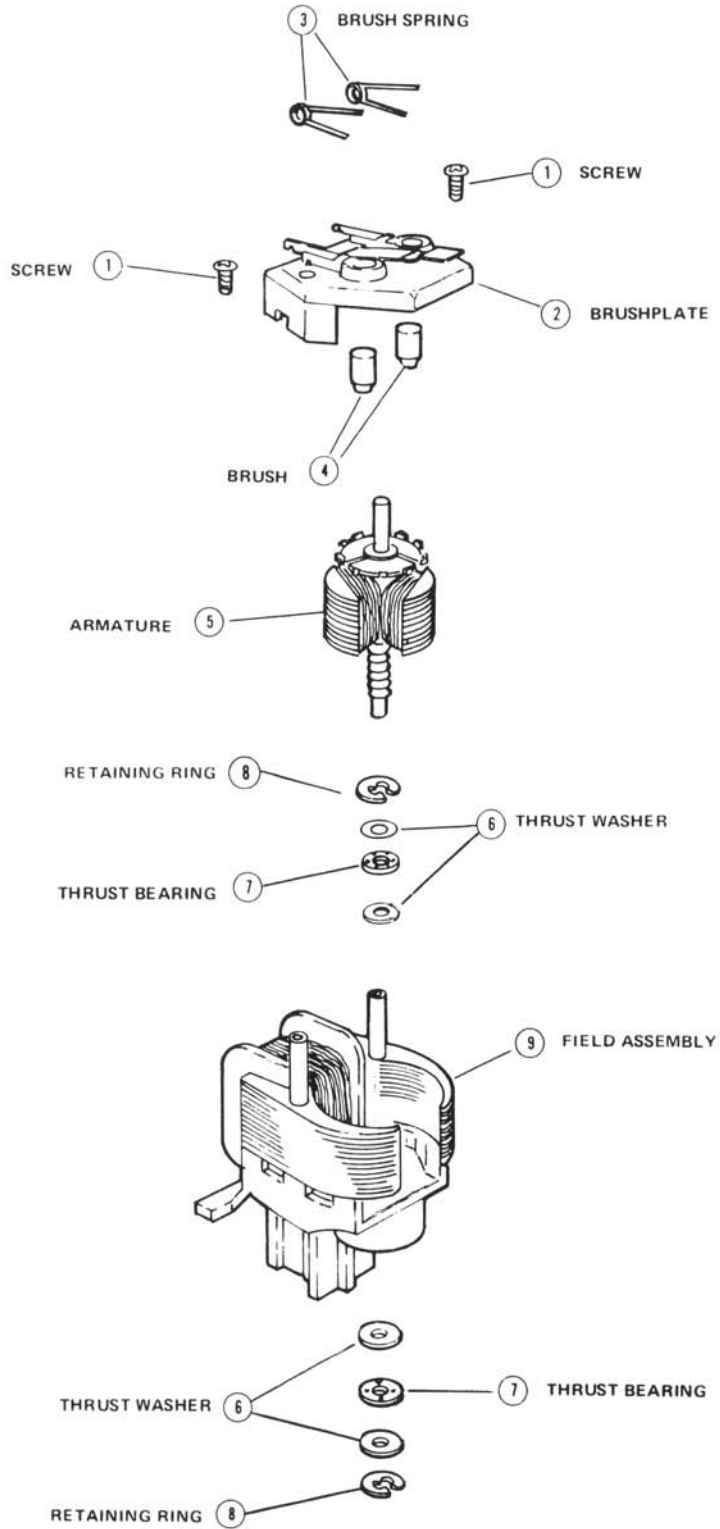
LIONEL

HUSTLER SWITCHER MOTOR ASSEMBLY



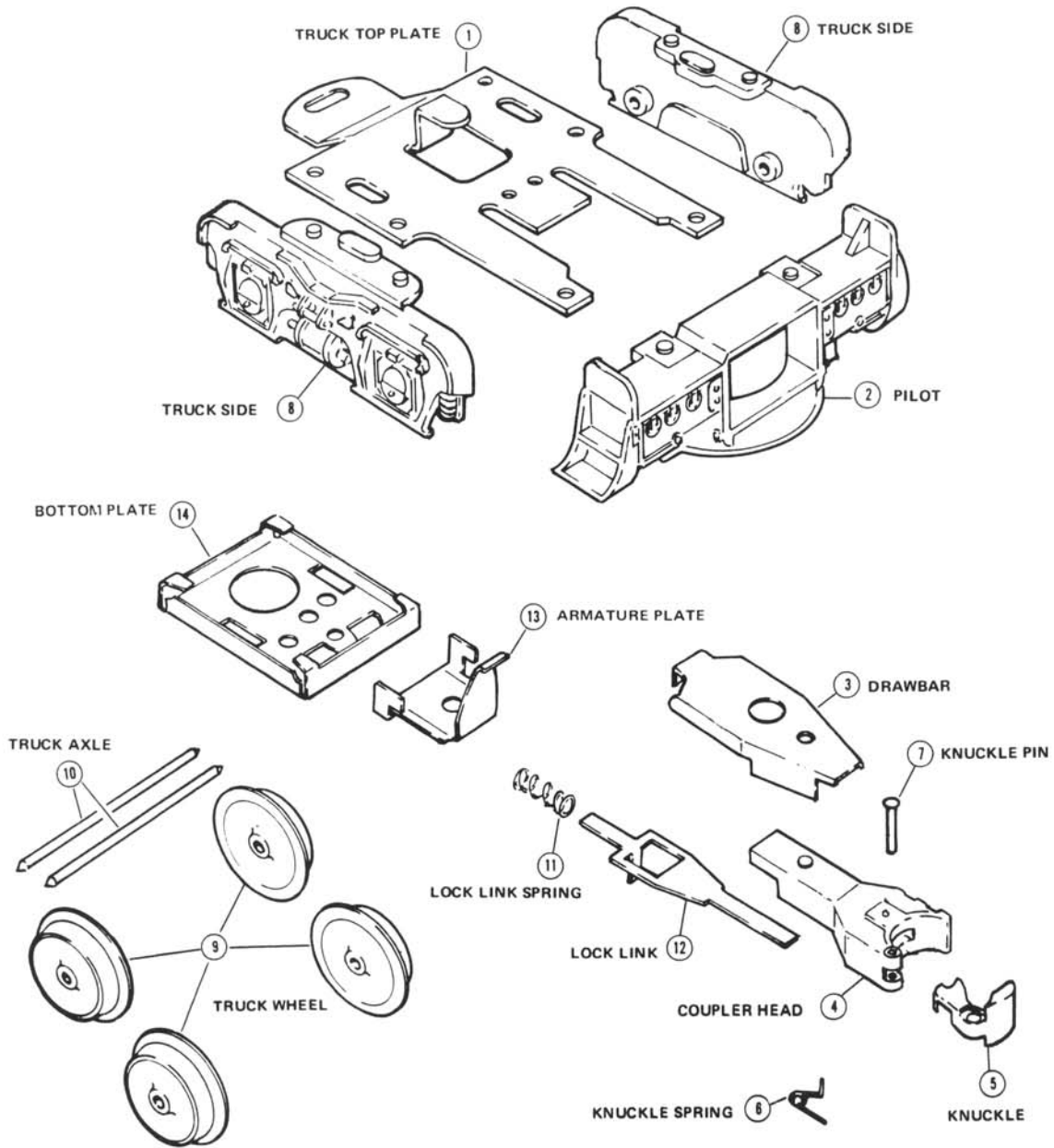
LIONEL

8701-100 MOTOR



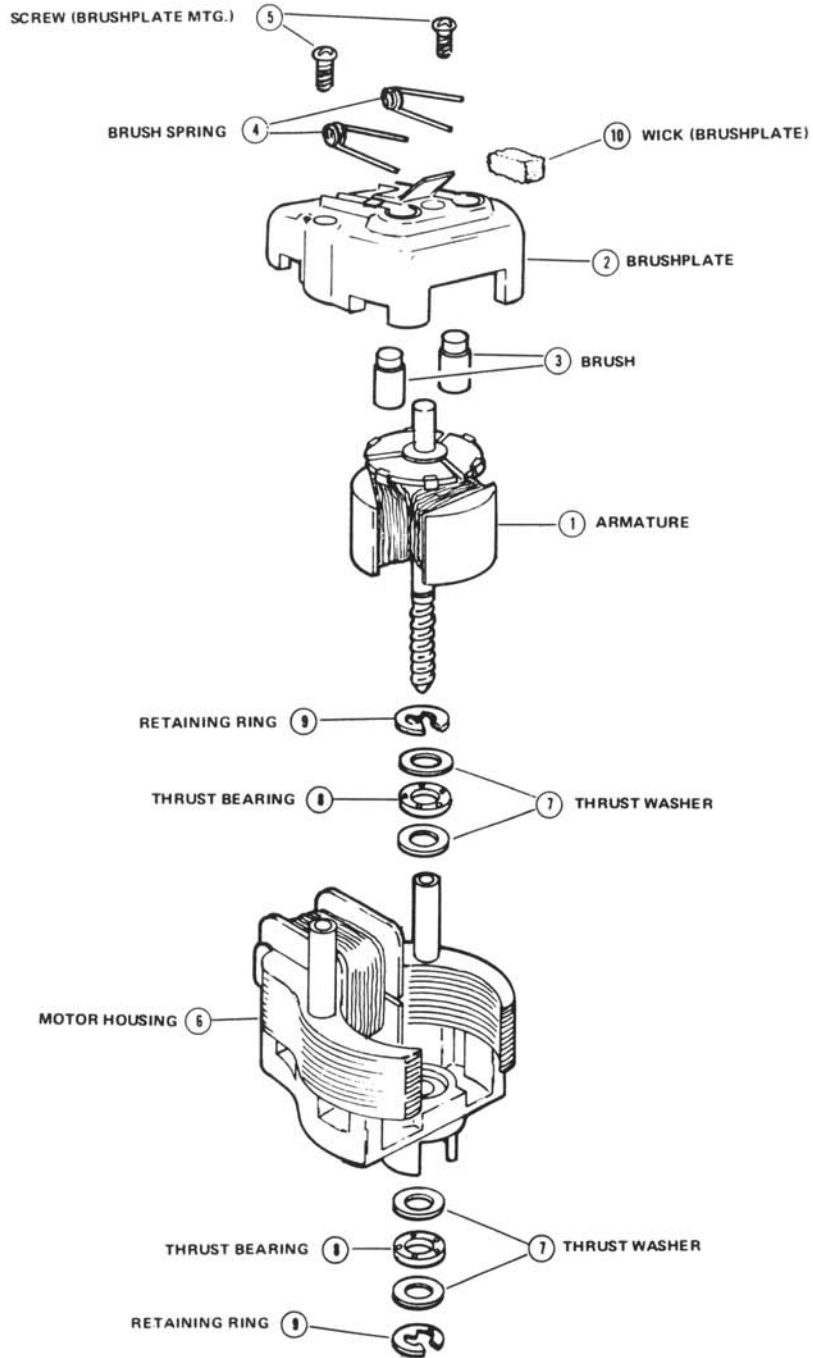
LIONEL

8753-55 PILOT TRUCK (GG-1 pilot)



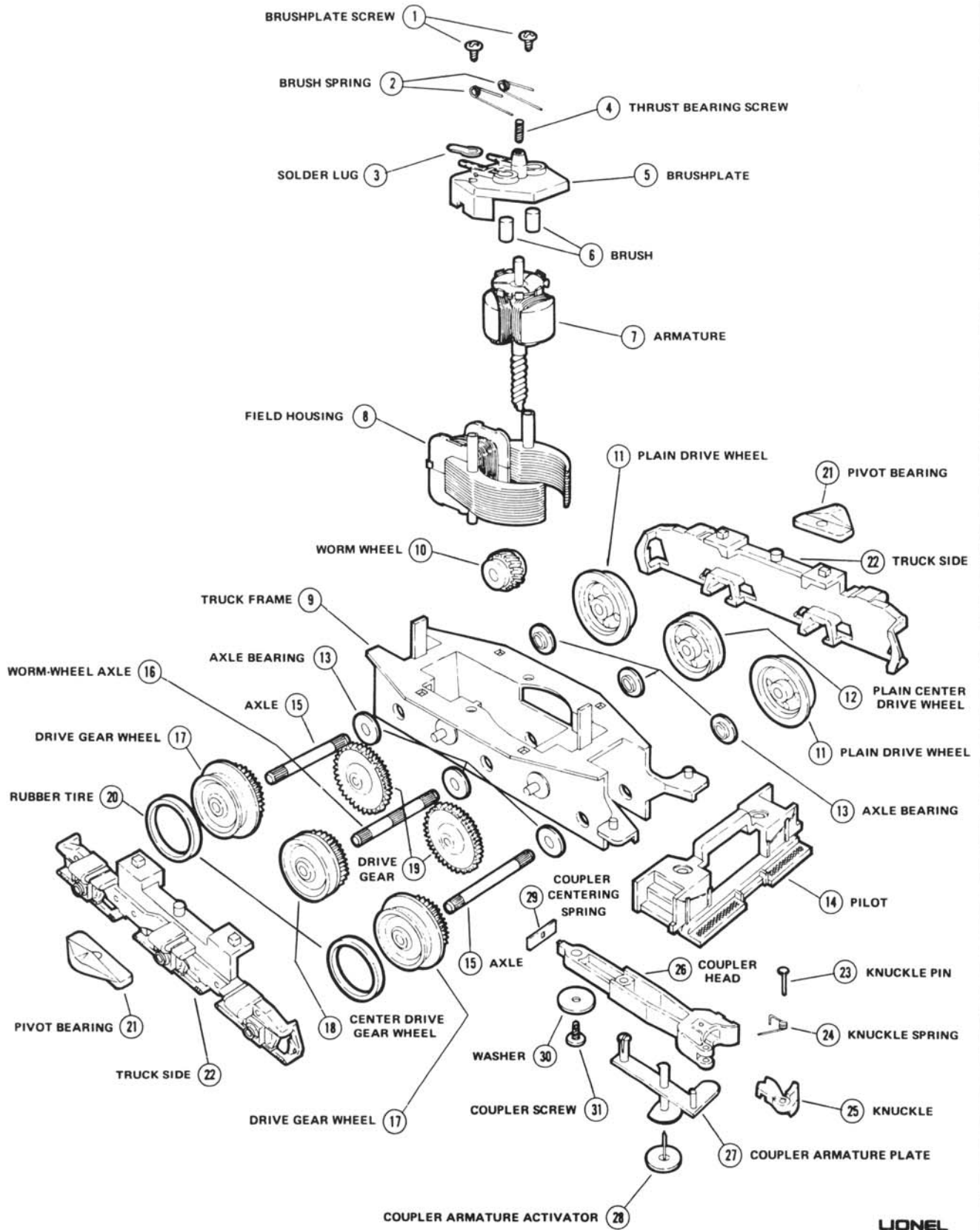
LIONEL

8753-100 MOTOR



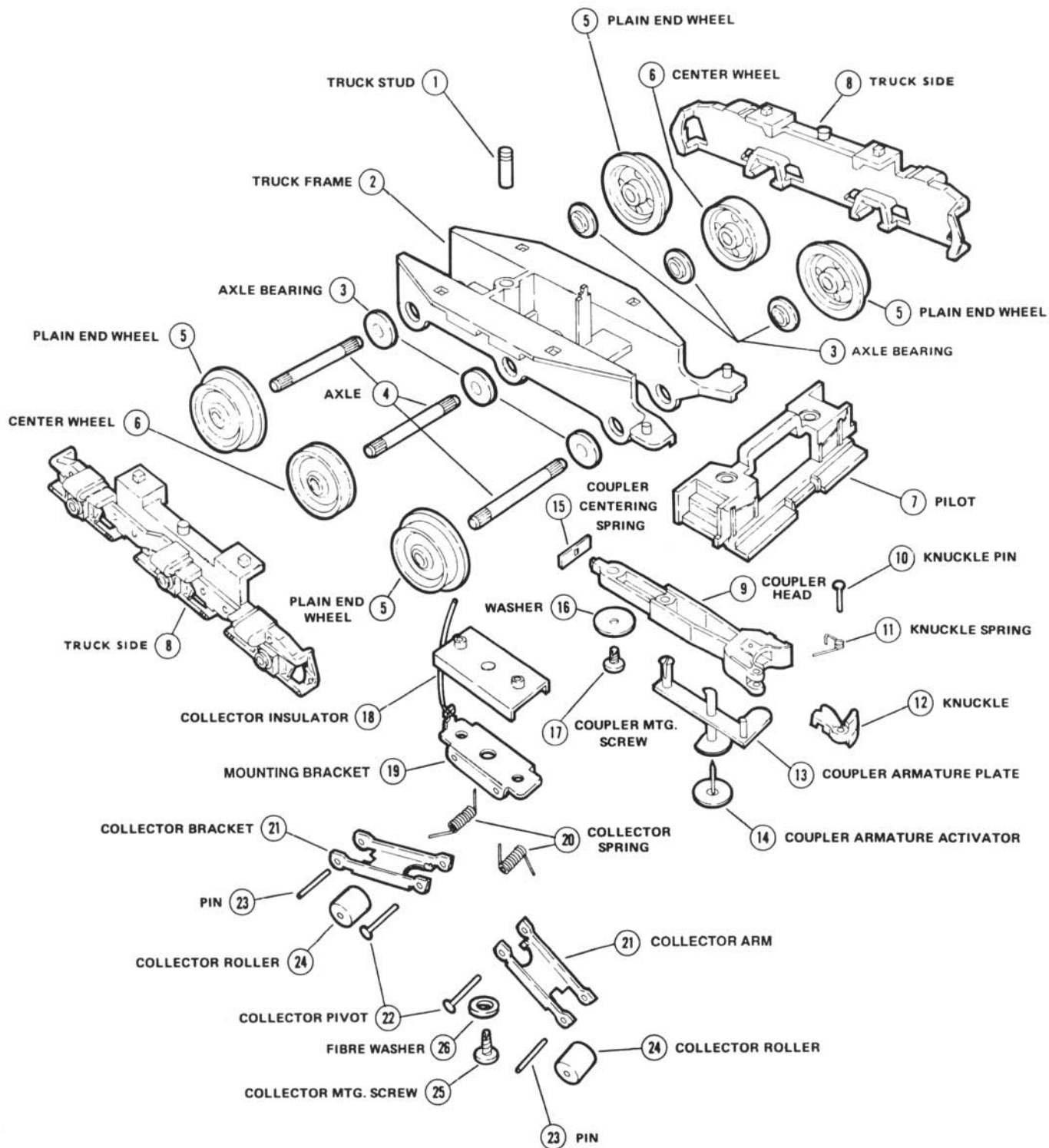
LIONEL

8855-100 MOTOR TRUCK

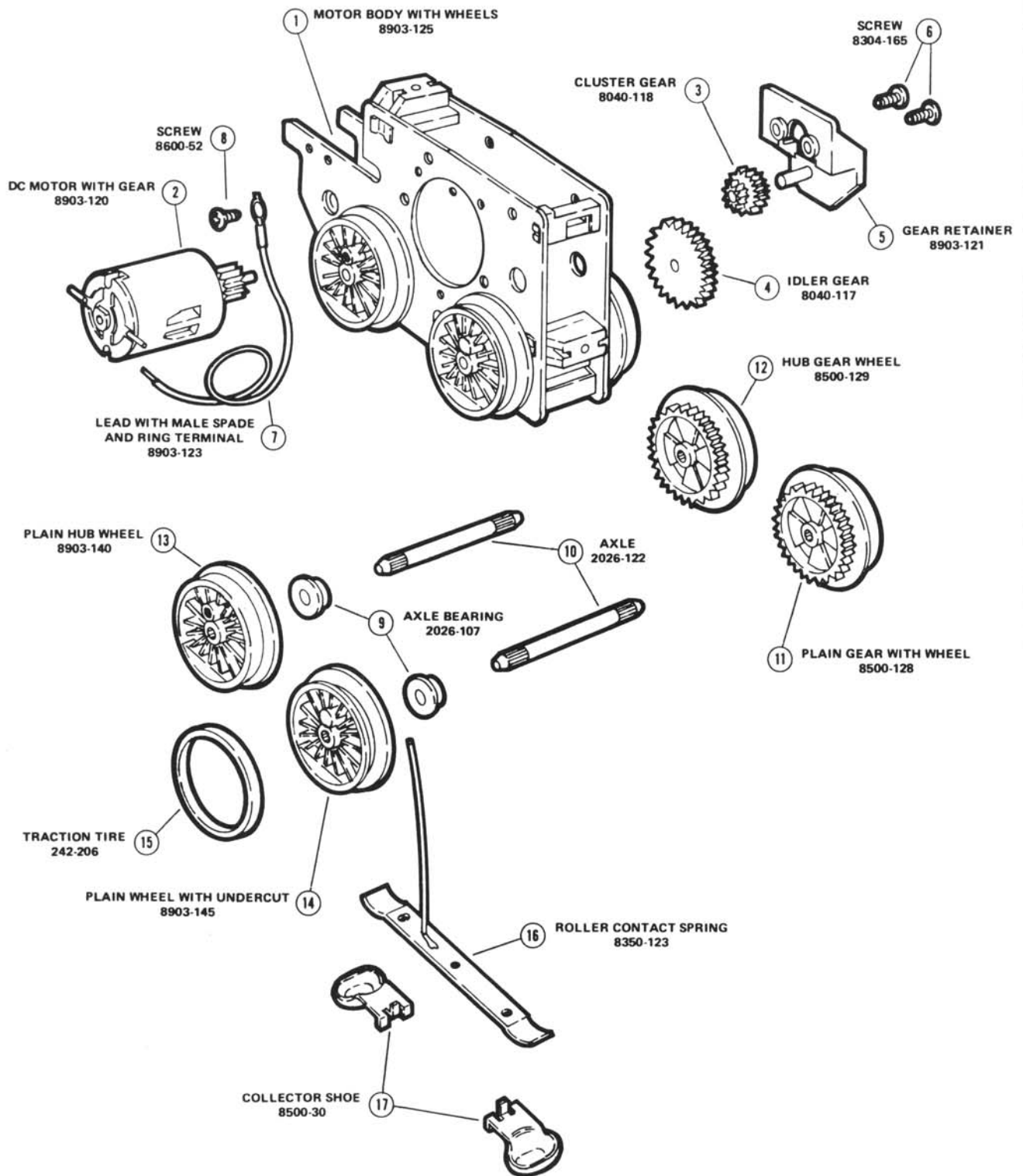


LIONEL

8855-115 PLAIN TRUCK (with roller pick-up)



DC MOTOR



LIONEL

8902-100
 8903-100
 8905-100

DC MOTOR ASSEMBLY

SECTION MOTORS/TRUCKS DC
 DATE 3/79
 REFERENCE
 DRAWING

REF. QUANTITY PER UNIT DESCRIPTION
 NO. PART NUMBER

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	8903-125	1	Motor body w/wheels
2	8903-120	1	DC Motor w/gear
3	8040-118	1	Cluster gear
4	8040-117	1	Idler gear
5	8903-121	1	Gear retainer
6	8304-165	2	Screw #4x1/4 Pan Hd.
7	8903-123	1	Lead w/male spade & ring terminal
8	8600-52	1	Screw #4/40x7/16 Pan Hd.
9	2026-107	2	Axle bearing
10	2026-122	2	Axle
11	8500-128	1	Plain wheel w/gear
12	8500-129	1	Hub gear wheel
13	8903-140	1	Plain hub wheel
14	8903-145	1	Plain wheel w/undercut
15	242-206	1	Traction tire
16	8350-123	1	Roller contact spring
17	8500-30	2	Collector shoe

9150-50 OPERATING COUPLER TRUCK (METAL WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-51	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle Pin
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature
6	9050-54	2	Wheels & Axle
7	9050-52	4	Wheel
8	9050-53	2	Axle

9150-75 DUMMY TRUCK (METAL WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-76	1	Truck Frame
2	9050-54	2	Wheels & Axle
3	9050-52	4	Wheel
4	9050-53	2	Axle

9150-85 DUMMY TRUCK (METAL WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-86	1	Truck Frame
2	9050-54	2	Wheels & Axle
3	9050-52	4	Wheel
4	9050-53	2	Axle

9150-90 OPERATING COUPLER TRUCK (PLASTIC WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-51	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle Pin
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature
6	9150-54	2	Wheels & Axle
7	9050-60	4	Wheels
8	9050-53	2	Axle

9150-95 DUMMY TRUCK (PLASTIC WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-76	1	Truck Frame
2	9050-54	2	Wheels & Axle
3	9050-60	4	Wheel
4	9050-53	2	Axle

9150-105 PLAIN TRUCK (PLASTIC WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-86	1	Truck Frame
2	9150-54	2	Wheels & Axle
3	9050-60	4	Wheels
4	9050-53	2	Axle

9150-115 DUMMY TRUCK (METAL WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-76	1	Truck Frame
2	9050-54	2	Wheels & Axle
3	9050-52	4	Wheel
4	9050-53	2	Axle
5	9150-175	1	Axle Contact

9150-125 PLAIN TRUCK (METAL WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-86	1	Truck Frame
2	9050-54	2	Wheels & Axle
3	9050-52	4	Wheel
4	9050-53	2	Axle
5	9150-175	1	Axle Contact

9150-130 OPERATING COUPLER TRUCK
(METAL WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-51	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle Pin
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature
6	9050-54	2	Wheels & Axle
7	9050-52	4	Wheel
8	9050-53	2	Axle
9	9150-175	1	Axle Contact

9150-135 DUMMY TRUCK (METAL WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-76	1	Truck Frame
2	9050-54	2	Wheels & Axle
3	9050-52	4	Wheel
4	9050-53	2	Axle
5	9150-175	1	Axle Contact
6	9050-154	1	Roller Retainer
7	9050-158	1	Roller Contact
8	246-105	1	Roller
9	SE-35	1	Eyelet

9150-145 PLAIN TRUCK W/AXLE CONTACT & ROLLER
(METAL WHEELS)

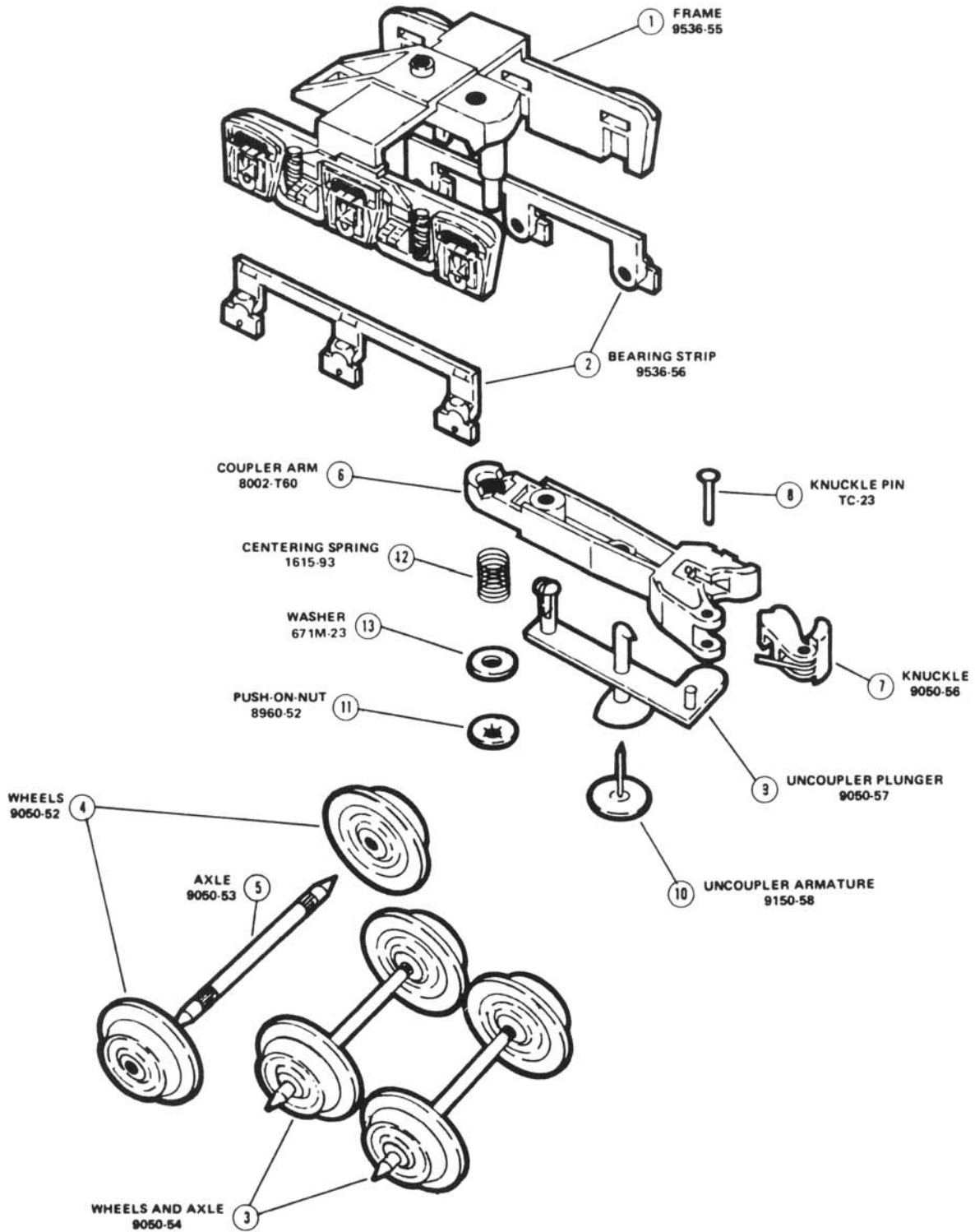
SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9150-51	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle Pin
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature
6	9050-54	2	Wheels & Axle
7	9050-52	4	Wheel
8	9050-53	2	Axle
9	9150-175	1	Axle Contact
10	9050-154	1	Roller Retainer
11	9050-158	1	Roller Contact
12	246-105	1	Roller
13	SE-35	1	Eyelet

6 WHEEL TRUCK



LIONEL

9500-50 OPERATING COUPLER TRUCK (METAL WHEELS)

SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	6403-51	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle Pin
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature (Thumb Tack)
6	9050-54	2	Wheel & Axle Assembly
7	9050-52	4	Wheel
8	9050-53	2	Axle
9	9500-60	1	Coupler Arm
10	6403-52	1	Plastic Rivet

9551-80 OPERATING COUPLER TRUCK (METAL WHEELS)

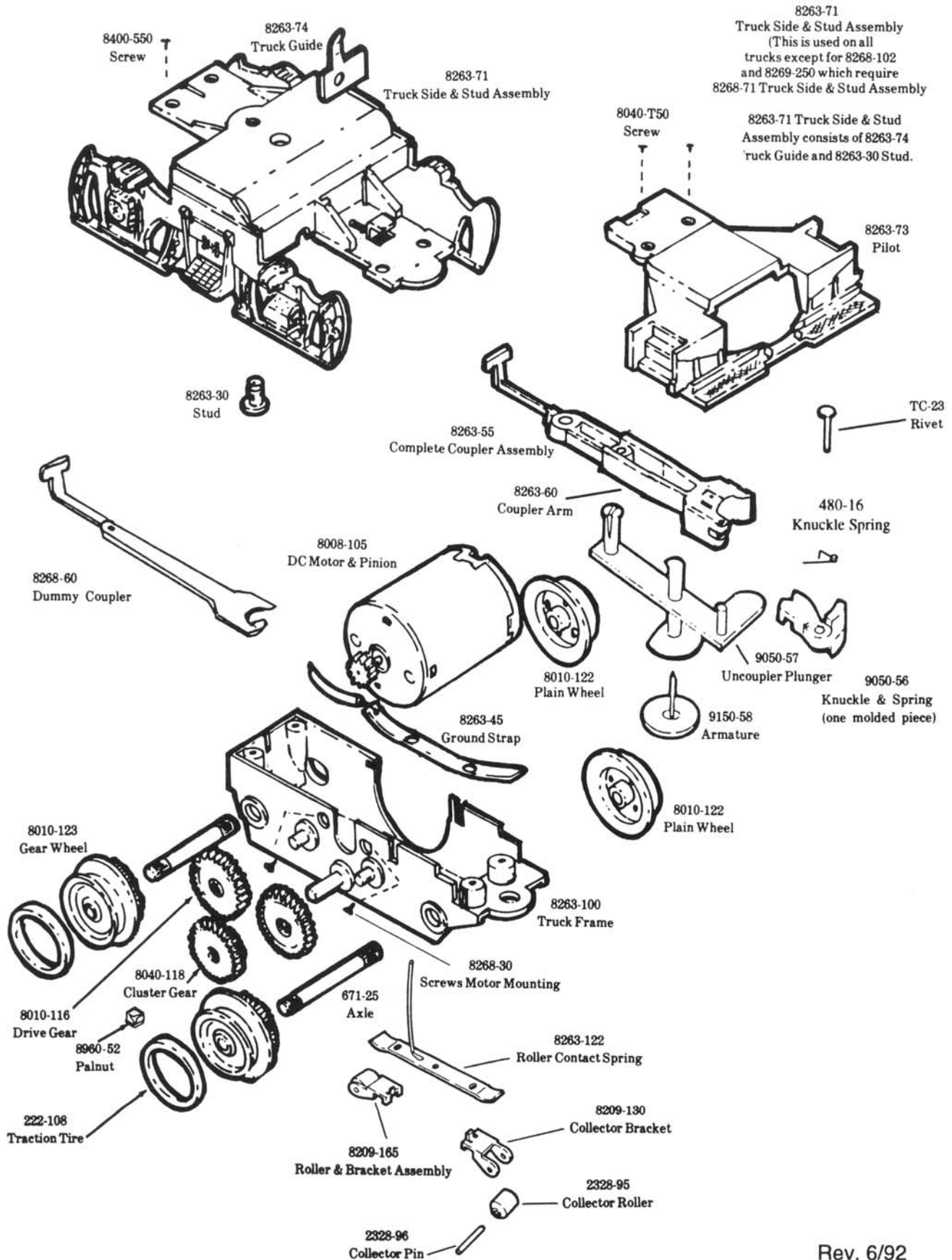
SECTION MOTORS/TRUCKS

DATE 3/79

REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	9551-72	1	Truck Frame
2	9050-56	1	Knuckle
3	TC-23	1	Knuckle
4	9050-57	1	Uncoupler Plunger
5	9150-58	1	Uncoupler Armature
6	9050-54	2	Wheel & Axle
7	9050-52	4	Wheel
8	9050-53	2	Axle
9	6403-60	1	Coupler Arm
10	6403-52	1	Plastic Rivet

Traditional Series: GP 7-9-20 and FA-Alco Motor & Collector Trucks with DC Motor



Rev. 6/92

GP7-9-20 and FA ALCO MOTOR & COLLECTOR TRUCKS

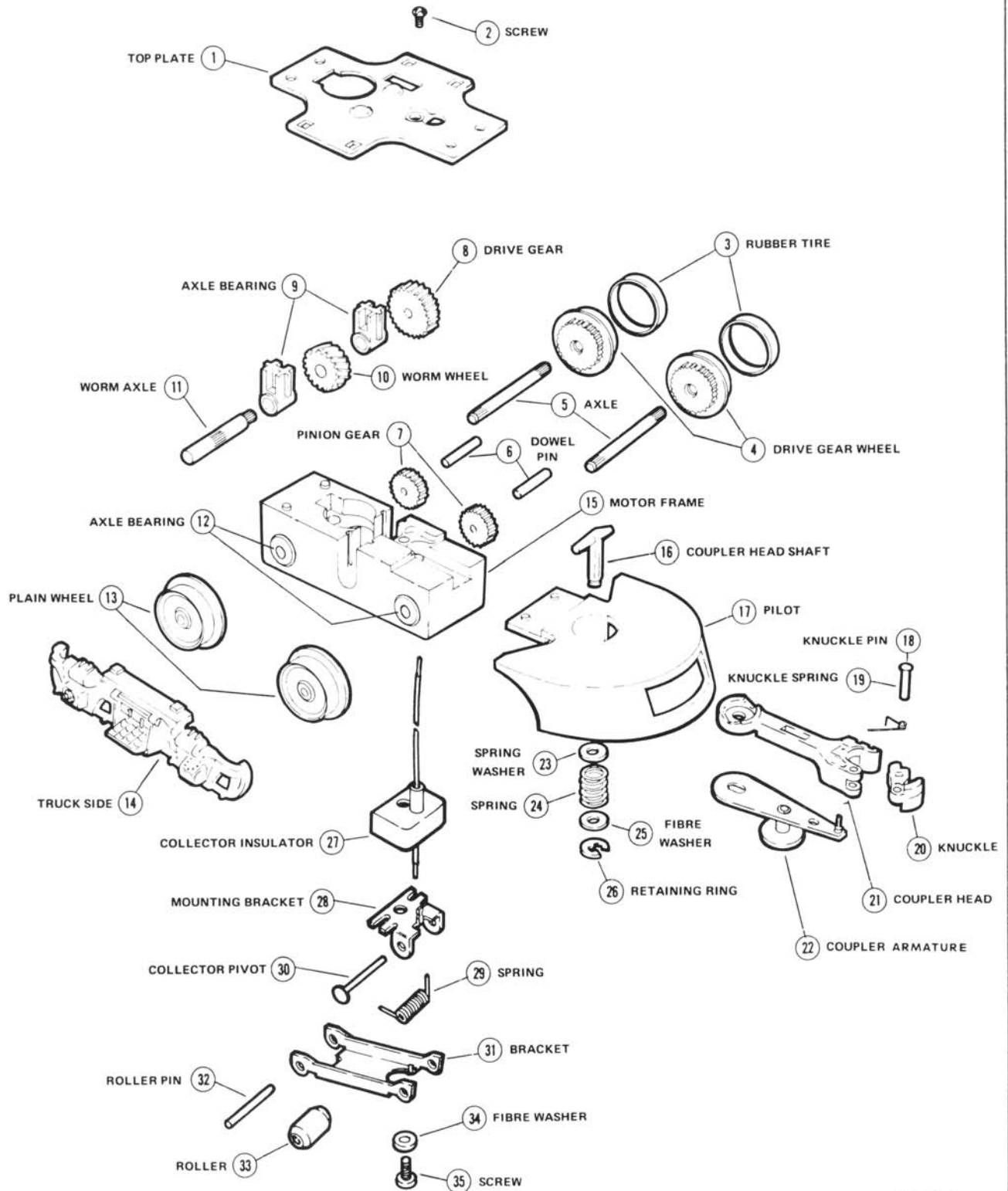
SECTION MOTORS/TRUCKS

DATE 4/86

Reference
Drawing

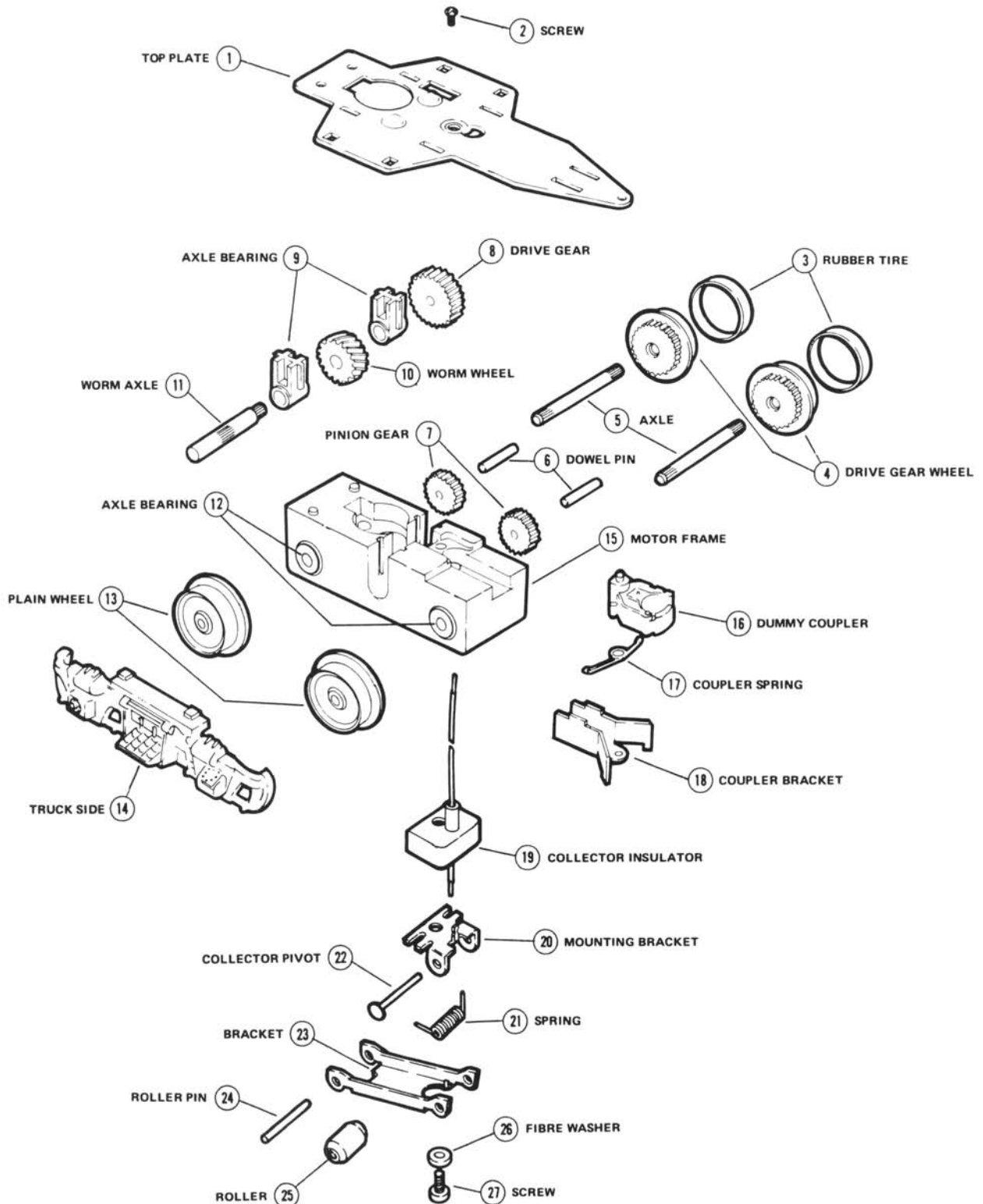
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	222-108	2	Traction tire all motor trucks
2	8263-151	1	Motor truck & wheel assembly 8263-101 & 8268-101
3	8263-100	1	Truck frame all trucks
4	671-25	2	Axle all trucks
5	8010-116	2	Drive gear all motor trucks
6	8010-122	2	Plain wheel all trucks
7	8010-123	2	Gear wheel - under cut all motor trucks
8	8040-118	1	Cluster gear all motor trucks
9	8008-105	1	DC motor with pinion all motor trucks
10		2	Screw (flat head motor mtg all motor trucks
11	8263-71	1	Truck side & stud assembly 8263-101 8263-250 8369-101 8268-101 8269-251
12	8263-73	1	Pilot - all Geeps & SW1 Switcher motor & collector truck
13	8263-55	1	Coupler assembly 8263-101 8369-101 8263-250 8269-250
14	9050-57	1	Plunger 8263-55 coupler - all trucks with operating coupler
15	9150-58	1	Armature 9050-57 plunger - all trucks with operating coupler
16		2	Washer 8263-101 & 8263-250
17	8960-52	1	Palnut all motor trucks
18	8400-550	3	Screw 8268-101 8269-250 8268-102 8269-251 all locations mtg truck side & stud as also Geep & SW1 mounting truck side & stud assembly back or rear screw position
19	8040-T50	2	Screw - truck side & stud mtg for all Geeps & SW1's frt position
20	8369-151	1	Motor truck & wheel assembly - dual motor Geeps
21	8209-165	2	Roller & bracket - motor trucks
22	8500-30	2	Contact shoe - collector trucks
23	8263-45	1	Ground strap assembly - all trucks where applied
24	8263-122	1	Contact spring - all trucks where applied
25	8263-152	1	Collector truck & wheel assembly 8263-250 8268-102
26	8269-252	1	Plain truck & wheel assembly 8269-250 & 251
27	8350-12	2	Gear wheels - all dummy & collector trucks
28	8268-71	1	Truck side & cover assembly 8268-102 8269-250
29	8268-60	1	Dummy coupler 8268-101 8269-251

F-3 "A" DUAL MOTOR TRUCK (front)



LIONEL

F-3 "A" DUAL MOTOR TRUCK (rear)



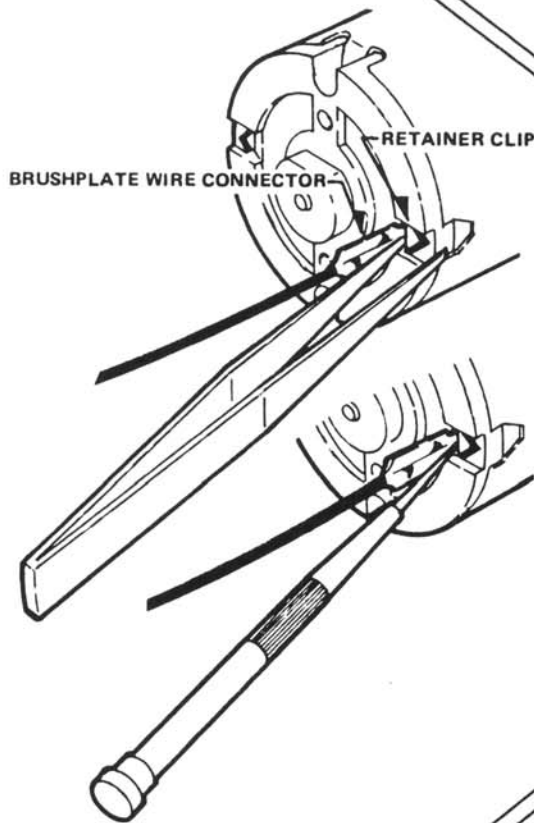
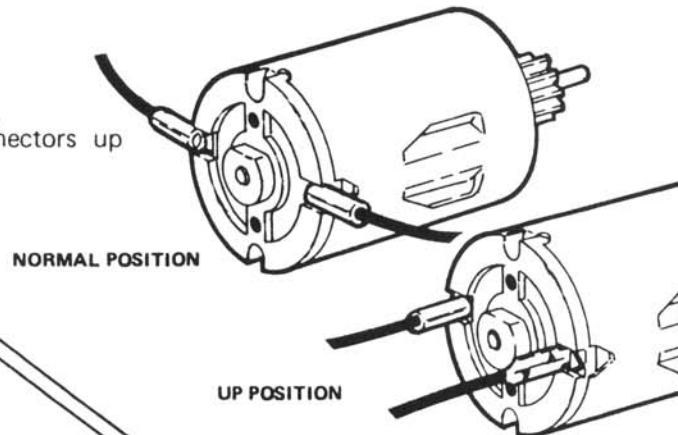
LIONEL

LIONEL DC MOTORS

INSTRUCTIONS FOR MOTOR REPLACEMENT ON ALL DC MOTORS

1 TO REPLACE MOTOR:

Carefully bend brushplate wire connectors up as shown.

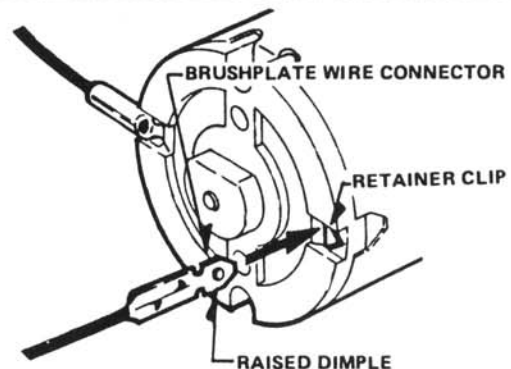


2 REMOVING BRUSHPLATE WIRE CONNECTORS:

Using pointed tweezers, insert one side between brushplate wire connector and retainer clip and the opposite side against the outside of the motor case as shown. Squeeze tweezers together and pull brushplate wire connector away from retainer clip. Repeat for opposite side.

ALTERNATE METHOD

Using a scribe or pointed tool, insert scribe point between brushplate wire connector and retainer clip as shown, push retainer clip open (towards outside of motor case) and pull brushplate connector away from retainer clip.



3 TO CONNECT NEW BRUSHPLATE WIRE CONNECTORS TO MOTOR:

Insert brushplate wire connector (with dimpled side towards retainer clip) between sloped area and retainer clip as shown, push in until locked in place and bend down. Repeat for opposite side.

NOTE: WHEN A MOTOR REPLACEMENT IS NECESSARY, IT IS RECOMMENDED THAT NEW BRUSHPLATE WIRE CONNECTORS BE INSTALLED.

TWO SETS ARE ENCLOSED FOR YOUR USE. IF ADDITIONAL SETS ARE NEEDED, ORDER PART NO. 8903-131 AT \$1.00 PER PAIR - LIST PRICE.

LIONEL

LIONEL "E-UNITS"

The E-Unit is a solenoid-operated rotary sequence switch used to reverse locomotive motors by interchanging the connections of the motor armature with respect to the motor field. The E-Unit is mounted in the locomotive and consists of a solenoid coil connected across the track, a plunger-and-pawl assembly, a rotating plastic drum equipped with copper contact inserts and a central toothed wheel, and an arrangement of contact springs riding on the drum. The E-Unit is also equipped with a lever-type switch which is used to open the solenoid coil circuit, thus disconnecting the E-Unit. A typical wiring diagram of the E-Unit circuit is shown schematically in Figure 2.

Normally, i.e. when the solenoid circuit is closed and the solenoid coil is energized by track voltage, the plunger-and-pawl assembly remains drawn into the upper end of the solenoid tube, as shown in Figure 1 below. When track voltage is interrupted for

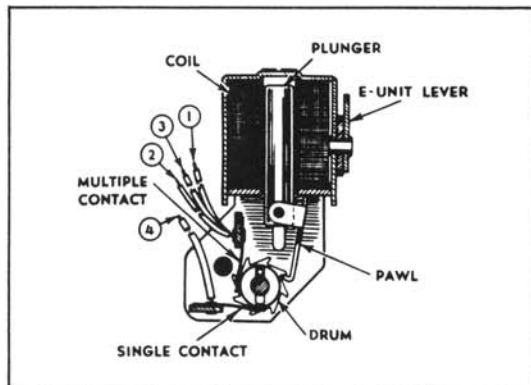
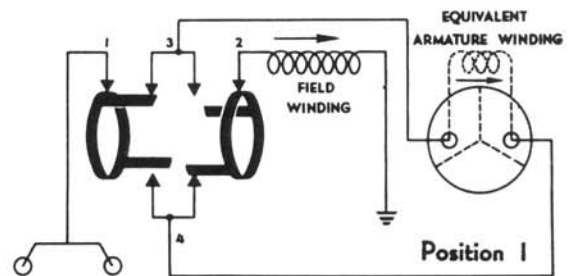


Figure 1 - Cross-section view of a E-Unit

any reason, or when it drops below the minimum 'holding' voltage of the solenoid (4-5 volts), the plunger drops and the pawl engages the next tooth on the drum. When the voltage is reapplied, (7-8 volts minimum), the plunger is drawn into the tube and the pawl rotates the drum into a new position. A cycle of operation consists of four positions: Forward, Stop, Reverse, Stop. Since the coil rotates 45 degrees with each movement of the plunger, one complete rotation of the drum produces two full cycles.



In Position 1 the drum is turned so that contact springs 1 and 3 are connected by a metal insert on top of the drum while contact springs 2 and 4 are similarly connected by an insert in the bottom of the drum. Current from center rail follows the path in the direction of the arrows through contacts 1 and 3 to the motor armature and then through contacts 4 and 2 to the motor field and to the outside or 'ground' rail. In this position the direction of the current through the field and the armature is the same so that the motor turns 'forward.'

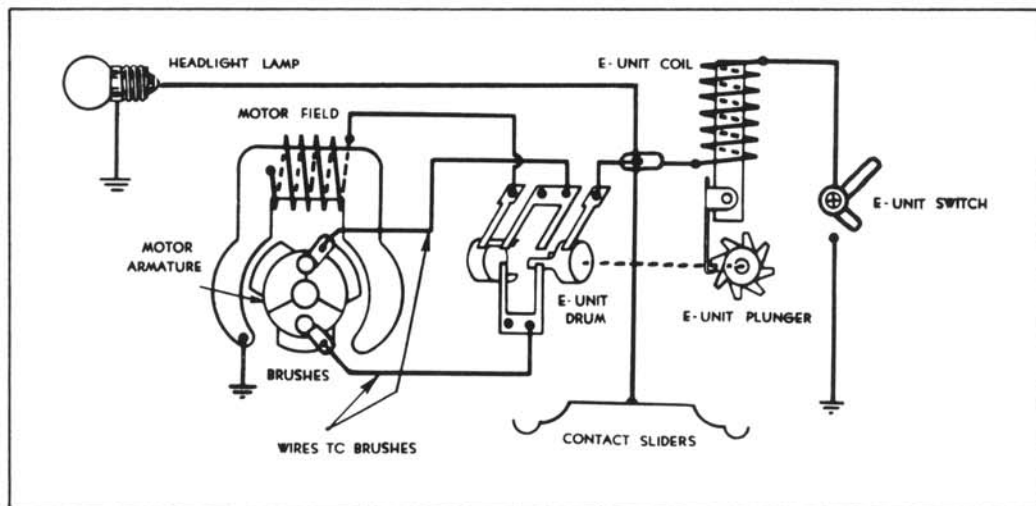
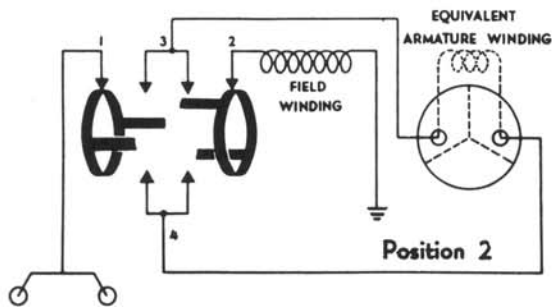
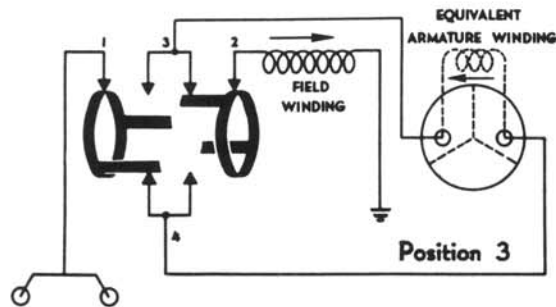


Figure 2 - Schematic Wiring Diagram of a Typical E-Unit Installation

"E- UNITS"

In position 2 the drum is turned 45 degrees so that the connection between contact springs 1 and 3 and between 4 and 2 is broken. The motor circuit is open and the train remains standing in 'neutral.'



In position 3 the drum is turned so that connection is made between contact springs 1 and 4 and between 3 and 2. The current from the center rail now follows the path through contacts 1 and 4 to the motor armature and then through contacts 3 and 2 to the motor field and from there to the 'ground' rail. In this position the direction of the current through the field is opposite to that through the armature so that the motor turns in 'reverse.'

The fourth position of the drum again opens the connection between the field and the armature putting the motor again into 'neutral.' Note that when the E-Unit lever is open the drum cannot be turned electrically and the train will continue to operate in the same direction, or will remain standing in 'neutral' despite current interruptions.

While E-Units usually control but one motor, it is possible, to control as many as four motors simultaneously by connecting them to a single E-Unit in parallel.

SERVICING E-UNITS

If the locomotive fails to reverse properly, the E-Unit is probably at fault. First make sure that the E-Unit lever is closed and makes good contact, then check the wiring connections. Remove the E-Unit from the locomotive frame and check the continuity of the solenoid coil by touching the transformer leads to both ends of the coil. Apply 7-8 volts. If the plunger operates the coil is good. (Gravity-operated E-Units will function only in upright position.)

To remove the drum and the contact assemblies, spread the E-Unit cheeks apart with a pair of pliers, as shown in Figure 3, or with an "E" unit spreader tool - ST 303. Clean the contact springs and the drum well with denatured alcohol and a pencil eraser to remove all dirt and oil. Replace all worn parts. **Make sure that the contact springs have sufficient tension.** Reassemble unit and fasten tightly by gently tapping the end of stud 'B' with a small hammer. When reassembling the E-Unit back into the locomotive make sure that solder joints or bare wires do not touch the locomotive frame or the cab casting.

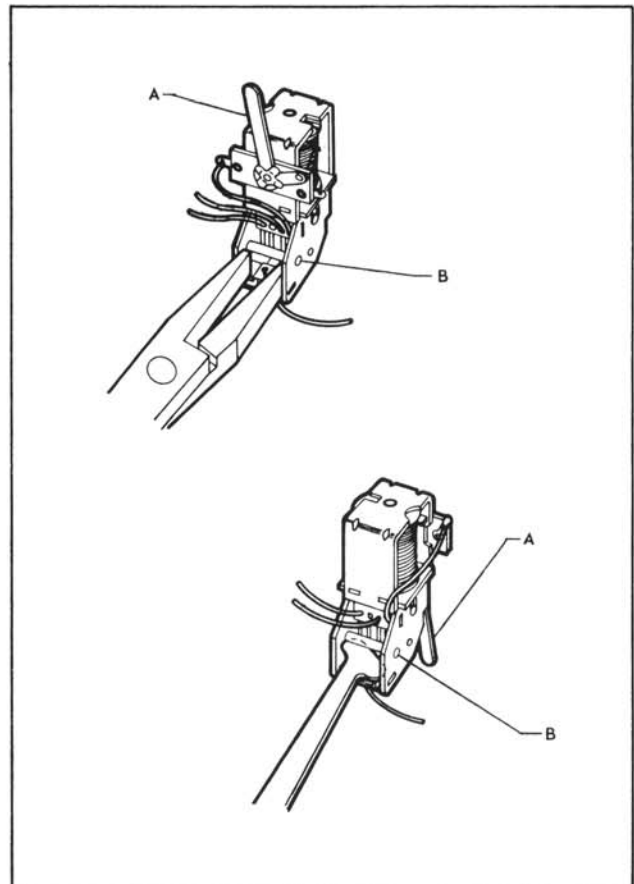


Figure 3 - How to Open E-Unit

TWO-POSITION "E-UNITS"

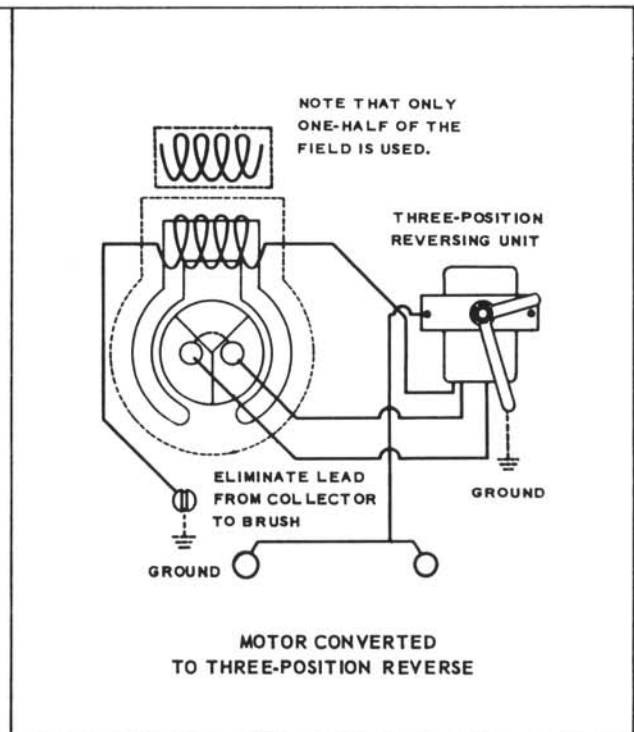
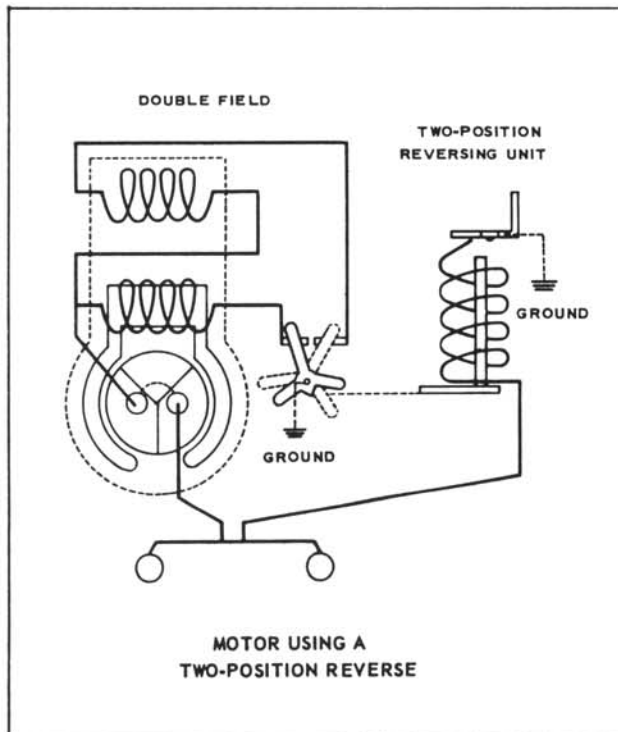
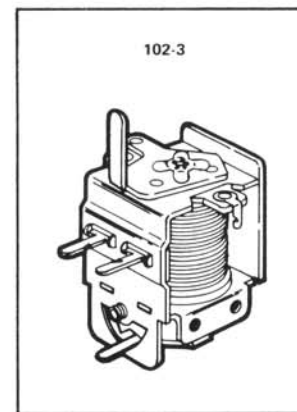
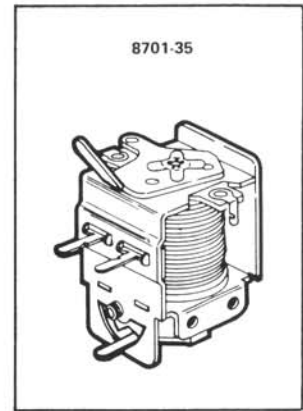
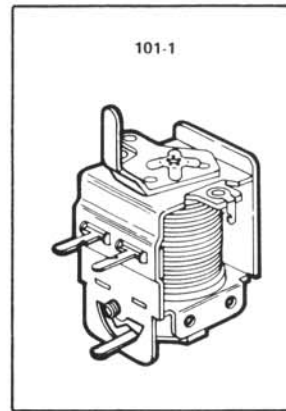
The 101 series of two-position reversing units was initiated in 1957. This permits either forward or reverse operation and eliminates the intermediate "stop" position.

Motors equipped for two-position operation have double-wound fields connected to the armature through the reversing unit. Depending on the position of the contact arm either half of the field is connected to the armature thus changing the direction of its rotation.

Since the plunger of this reversing unit depends on gravity to return to its "ready" position, this unit must be mounted vertically. Part numbers of this type will differ because of various formings of the lever.

Split-field motors can be converted to the regular three-position reverse. In this case only one of the fields, (either green or copper-colored), should be wired into the circuit. The two leads of the other field coil should be insulated or cut short. This is illustrated on the right (below).

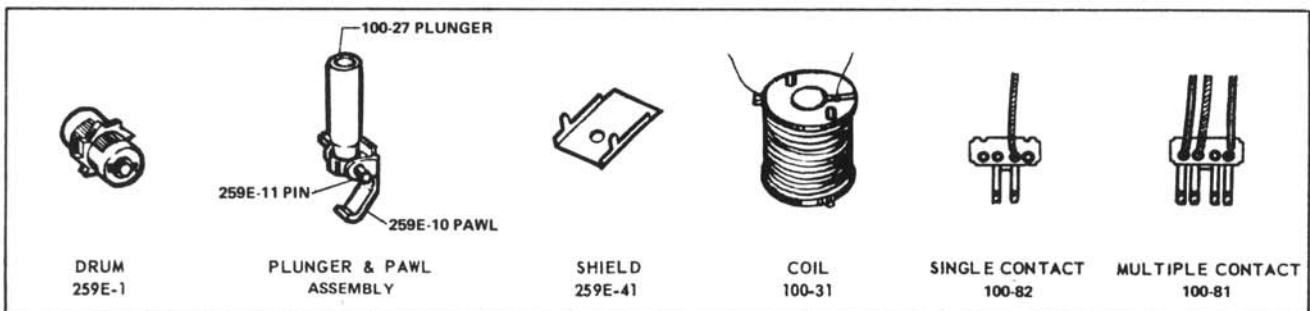
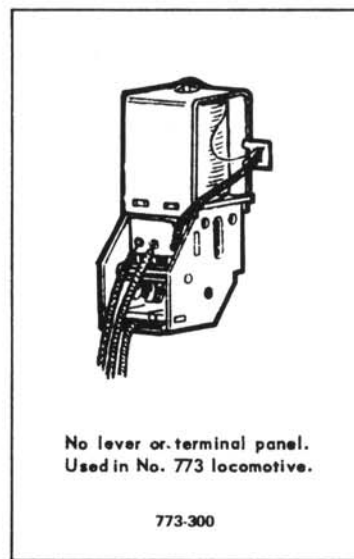
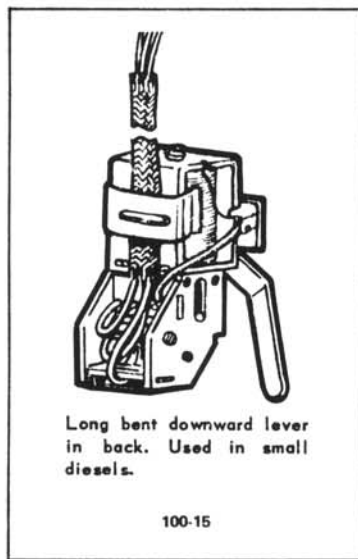
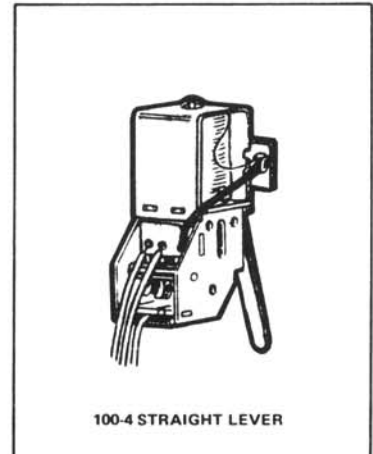
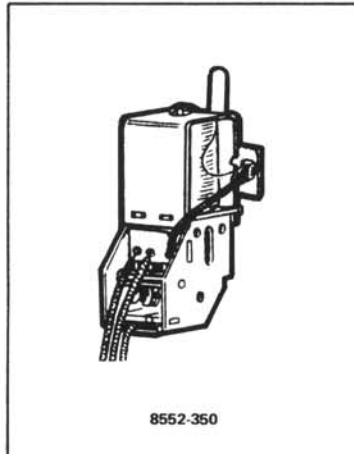
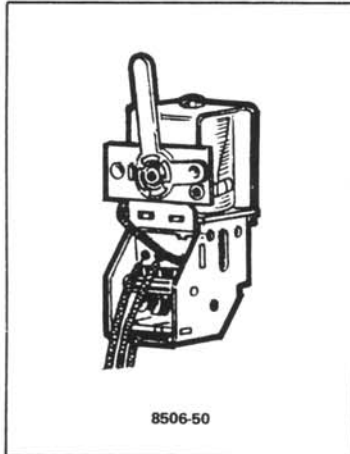
This two-position unit has proven itself to be almost completely trouble-free and component parts of it are not required.



THREE-POSITION "E-UNITS"








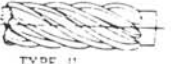





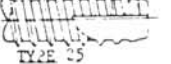



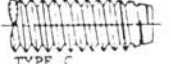

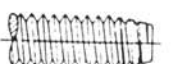

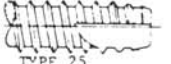



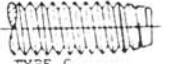

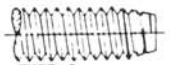

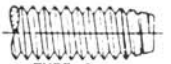

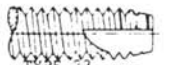
Most "E" Units vary only in the length and location of the E-Unit lever and in the length and color of the wire leads. To simplify servicing, the "E" Units (which differ only in the length of leads) have


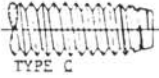

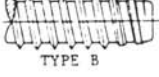

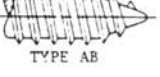

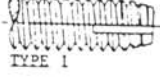





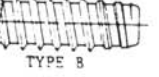

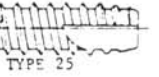











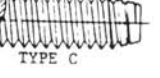

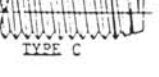


been grouped together and a single replacement specified for each group. The component replacement parts of all "E" Units are identical.






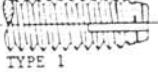



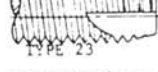

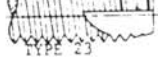

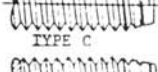
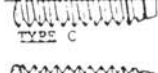

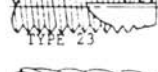

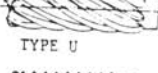
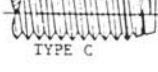




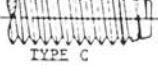

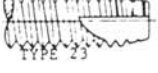

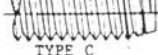



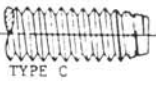





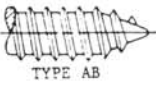



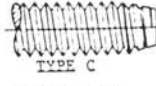

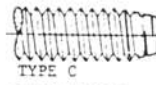

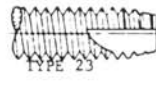

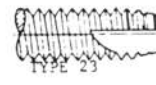

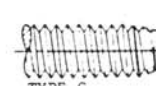

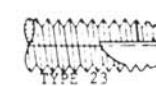

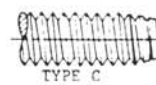

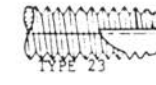



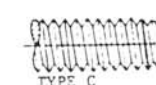




ACTIVE SCREW LIST




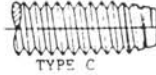



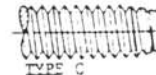

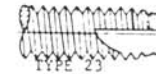

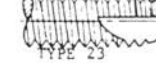

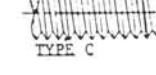

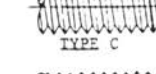

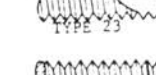

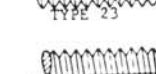

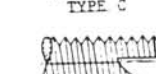

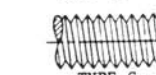








ISSUED: June 1,1977

SCREW SIZE	PART #	HEAD TYPE	THREAD TYPE	REMARKS
#0 x 3/16	00-0022-036	 ROUND	 TYPE U	DRIVE SCREW, PARKER KALON, BLACK OXIDE
#00 x 3/16	00-0045-070	 HEXAGON	 TYPE U	DRIVE SCREW, HEX HEAD, TYPE U, BLACK OXIDE
#00 x 1/4	00-0714-016	 ROUND	 TYPE U	PARKER KALON, TYPE U
#2 x .172	00-0726-049	 HEXAGON	 TYPE U	HEX HEAD, PARKER KALON, #3 HEAD OR EQUIV. NICKEL PLATE, SEE DWG. 40496
#2 x 3/16	00-0153-014	 ROUND	 TYPE U	DRIVE SCREW, SPECIAL ELECTRIC BINDING HEAD, TYPE U, SEE DWG. 5388
#2 x .295	00-8142-043	 HEXAGON	 TYPE U	#3 HEX HEAD, UNSLOTTED, DRIVE SCREW, TYPE U BLACK OXIDE
#2 x 5/16	50-8400-005	 TRUSS	 TYPE 25	TRUSS HEAD, POZIDRIVE, TYPE 25 BLACK OXIDE
#2 x 3/8	00-0035-014	 HEXAGON	 TYPE U	HEX HEAD, TYPE U, DRIVE SCREW, BLACK OXIDE
#3-48	00-1862-113	 HEXAGON	 TYPE C	HEX HEAD, SHOULDER SCREW, BRASS, NICKEL PLATE, SEE DWG. 45806
#3-48	00-1862-114	 HEXAGON	 TYPE C	HEX HEAD, SHOULDER SCREW, BRASS, NICKEL PLATE, SEE DWG. 45806
#3-48	00-8701-113	 HEXAGON	 TYPE 25	HEX HEAD, SHOULDER SCREW, SEE DWG. 45806
#3-48	00-8701-114	 HEXAGON	 TYPE 25	HEX HEAD, SHOULDER SCREW, SEE DWG. 45806
#3-48 x 3/16	00-6149-021	 BINDING	 TYPE C	BINDING HEAD, MACHINE SCREW, BRASS, SLOTTED
#3-48 x 7/32	00-8206-040	 HEXAGON	 TYPE C	HEX HEAD, MACHINE SCREW, C.R.S., BLACK OXIDE
#3-48 x 1/4	00-0348-187	 ROUND	 TYPE C	ROUND HEAD, MACHINE SCREW, NC-2, BLACK OXIDE
#3-48 x 1/4	00-8753-075	 FLAT	 TYPE 23	SELF-TAPPING, FLAT HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE

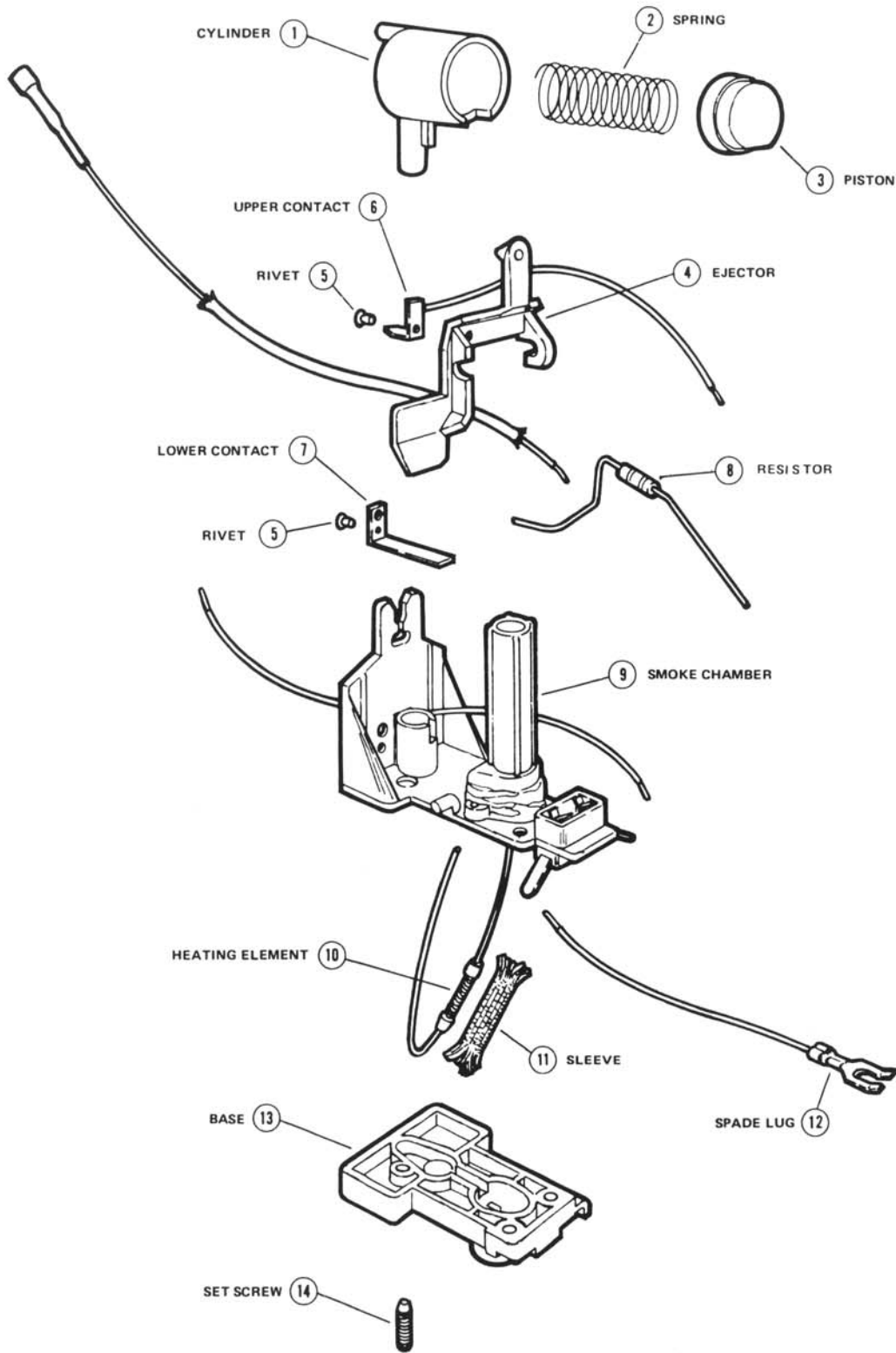
SCREW SIZE	PART #	HEAD TYPE	THREAD TYPE	REMARKS
#3-48 x 5/16	00-6149-020	 BINDING	 TYPE C	BINDING HEAD, MACHINE SCREW, SLOTTED, BRASS
#4 x 1/4	00-2260-020	 HEXAGON	 TYPE B	HEX HEAD, TYPE B, BLACK OXIDE
#4 x 1/4	00-2260-025	 ROUND	 TYPE AB	SLOTTED, ROUND HEAD, TYPE AB, BLACK OXIDE
#4 x 1/4	00-3203-055	 BINDING	 TYPE 1	BINDING HEAD, SELF-TAPPING, TYPE 1
#4 x 1/4	00-8240-071	 TRUSS	 TYPE 25	TRUSS HEAD, POZIDRIVE, TYPE 25, BLACK OXIDE
#4 x 5/16	30-9540-300	 ROUND	 TYPE B	ROUND HEAD, POINT SCREW, CROSS RECESS DRIVE, TYPE B, SEE DWG. 36032
#4 x 5/16	50-8400-550	 PAN	 TYPE B	PAN HEAD, PHILLIPS, TYPE B, BLACK OXIDE
#4 x 5/16	90-8205-050	 PAN	 TYPE 25	PAN HEAD, POZIDRIVE, TYPE 25, BLACK OXIDE
#4 x 3/8	00-8555-030	 FLAT	 TYPE 25	FLAT HEAD, SELF-TAPPING, TYPE 25
#4 x 7/16	90-8040-T50	 PAN	 TYPE 25	PAN HEAD, POZIDRIVE, TYPE 25, BLACK OXIDE
#4 x 1/2	00-4044-018	 CLUTCH	 TYPE U	CLUTCH HEAD DRIVE STUD, TYPE U, BLACK OXIDE ALT. 00-4044-019
#4 x 5/8	00-9304-055	 FLAT	 TYPE 25	C'SUNK, FLAT HEAD, TYPE 25, POZIDRIVE, BLACK OX.
#4 x 3/4	00-8506-055	 TRUSS	 TYPE 23	TRUSS HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#4-36	90-226E-033	 SHOULDER	 TYPE C	SHOULDER SCREW, BRASS, SEE DWG. 3549
#4-40	00-2035-106	 HEXAGON	 TYPE C	SHOULDER SCREW, HEX HEAD, MACHINE SCREW, NC-2, SEE DWG. 41672
#4-40	00-2055-037	 SHOULDER	 TYPE C	SHOULDER SCREW, NC-2, SEE DWG. 43549

SCREW SIZE	PART #	HEAD TYPE	THREAD TYPE	REMARKS
#4-40 x 3/16	00-0101-048	 PAN	 TYPE C	POZIDRIVE, PAN HEAD, TAP-TITE, PHOSPHATE & OILED
#4-40 x 3/16	00-2055-093	 FLAT	 TYPE C	PHILLIPS RECESS FLAT HEAD, SPIN LOCK SCREW, BLACK OXIDE, NC-2, SEE DWG. 43670
#4-40 x 3/16	00-8142-062	 ROUND	 TYPE 1	POZIDRIVE, ROUND HEAD, TYPE 1, CADMIUM PLATED
#4-40 x 3/16	00-8600-052	 PAN	 TYPE 23	POZIDRIVE, PAN HEAD, TYPE 23, BLACK OXIDE
#4-40 x 1/4	00-8010-035	 ROUND	 TYPE 23	ROUND HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#4-40 x 1/4	00-8010-165	 TRUSS	 TYPE 23	TRUSS HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#4-40 x 1/4	00-8142-051	 ROUND	 TYPE C	ROUND HEAD, POZIDRIVE, MACHINE SCREW, BLACK OX.
#4-40 x 1/4	00-8206-017		 TYPE C	SET SCREW, CONICAL POINT, BLACK OXIDE
#4-40 x 1/4	00-9700-025	 FLAT	 TYPE 23	FLAT HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#4 x 5/16	00-1872-052	 ROUND	 TYPE U	DRIVE SCREW, PARKER KALON, TYPE U, NICKEL PLT
#4-40 x 5/16	00-8030-118		 TYPE C	SOCKET HEAD, CONE POINTED SET SCREWS, BLACK OXIDE
#4-40 x 5/16	00-8040-172	 ROUND	 TYPE 23	ROUND HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#4-40 x 3/8	00-8141-070		 TYPE C	ALLEN HEAD, SET SCREWS, BLACK OXIDE
#4-40 x 3/8	00-8206-030	 FILLISTER	 TYPE C	PHILLIPS, FILLISTER HEAD, MACHINE SCREW
#4-40 x 3/8	00-9805-035	 TRUSS	 TYPE 23	TRUSS HEAD, SELF-TAPPING, POZIDRIVE, TYPE 23, BLACK OXIDE
#4-40 x 3/8	00-8600-049	 FILLISTER	 TYPE C	PHILLIPS, FILLISTER HEAD, MACHINE SCREW, BLACK OX.

SCREW SIZE	PART #	HEAD TYPE	THREAD TYPE	REMARKS
#4-40 x 21/32	00-0736-030	 FLAT	 TYPE C	PHILLIPS RECESS-FLAT HEAD, SPIN LOCK SCREW, NC-2, BLACK OXIDE SEE DWG. 43670
#5 x 3/8	00-8769-300	 PAN	 TYPE 25	PHILLIPS, PAN HEAD, TYPE 25, BLACK OXIDE
#6 x 3/8	00-8141-022	 PAN	 TYPE 25	PAN HEAD, POZIDRIVE, TYPE 25, BLACK OXIDE
#6 x 1/2	00-8701-104	 PAN	 TYPE AB	PAN HEAD, PHILLIPS OR POZIDRIVE, TYPE AB
#6 x 1	00-8310-040	 OVAL	 TYPE 23	OVAL HEAD, COUNTER SUNK, SELF-TAPPING, TYPE 23
#6-32	00-2046-028	 FLAT	 TYPE C	SLOTTED SHOULDER SCREW, SEE DWG. 41868
#6-32	00-2330-058	 FLAT	 TYPE C	SLOTTED SHOULDER SCREW, NC-2, SEE DWG. 41987
#6-32 x 1/4	00-2036-164	 PAN	 TYPE 23	PAN HEAD, SELF-TAPPING, TYPE 23, BLACK OXIDE
#6-32 x 1/4	00-2122-022	 FLAT	 TYPE 23	SLOTTED FLAT HEAD, TYPE 23
#6-32 x 1/4	00-4300-065	 BINDING	 TYPE C	SLOTTED BINDING HEAD, UNDERCUT, MACHINE SCREW, NICKEL PLATED
#6-32 x 1/4	00-8040-171	 ROUND	 TYPE 23	ROUND HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#6-32 x 1/4	00-8141-020	 HEXAGON	 TYPE C	TRIMMED HEX HEAD, MACHINE SCREW, UNSLOTTED, BLK.OX.
#6-32 x 5/16	00-8142-046	 PAN	 TYPE 23	PAN HEAD, POZIDRIVE, BLACK OXIDE, TYPE 23
#6-32 x 5/16	00-8142-052	 ROUND	 TYPE 23	ROUND HEAD, POZIDRIVE, TYPE 23, NICKEL PLATE
#6-32 x 5/16	00-8600-045	 FLAT	 TYPE C	FLAT HEAD, MACHINE SCREW, POZIDRIVE, OR SLOTTED BLACK OXIDE
#6 x 3/8	00-2122-021	 PAN	 TYPE 25	SLOTTED PAN HEAD, TYPE 25 BLK. OX.
#6-32 x 3/8	00-4090-023	 PAN	 TYPE C	PAN HEAD, POZIDRIVE, MACHINE SCREW, BLACK OX.

SCREW SIZE	PART #	HEAD TYPE	THREAD TYPE	REMARKS
#6-32 x 3/8	00-8142-045	 HEXAGON	 TYPE C	HEX HEAD, MACHINE SCREW, TRIMMED, BLACK OXIDE
#6-32 x 3/8	00-8142-049	 OVAL	 TYPE C	OVAL HEAD, C'SUNK, POZIDRIVE, MACHINE SCREW, BLACK OXIDE
#6 x 3/8	00-8500-045	 HEXAGON	 TYPE 25	HEX HEAD, TYPE 25, TRIMMED, BLACK OXIDE
#6-32 x 3/8	00-8600-047	 FILLISTER	 TYPE C	FILLISTER HEAD, MACHINE SCREW, BLACK OXIDE
#6-32 x 3/8	00-8600-051	 PAN	 TYPE 23	PAN HEAD, TYPE 23, BLACK OXIDE
#6-32 x 7/16	00-8142-065	 OVAL	 TYPE 23	OVAL HEAD, C'SUNK, POZIDRIVE, TYPE 23, BLACK OXIDE
#6-32 x 3/4	00-2126-006	 FILLISTER	 TYPE C	FILLISTER HEAD, MACHINE SCREW
#6-32 x 1/2	00-8551-031	 ROUND	 TYPE C	ROUND HEAD, MACHINE SCREW, POZIDRIVE, BLK.OX.
#6-32 x 9/16	00-8753-325	 FLAT	 TYPE 23	FLAT HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#6-32 x 3/4	00-8240-070	 FLAT	 TYPE 23	FLAT HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#6-32 x 3/4	00-8600-046	 OVAL	 TYPE C	OVAL HEAD, MACHINE SCREW, BLACK OXIDE
#6-32 x 7/8	00-8310-026	 PAN	 TYPE 23	PAN HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#8-32	00-2401-002		 TYPE C	SHOULDER SCREW, NC-2, SEE DWG. 41220
#8-32 x 1/4	00-8111-055	 PAN	 TYPE 23	PAN HEAD, POZIDRIVE, TYPE 23, BLACK OXIDE
#8 x 7/8	00-1044-069		 TYPE BP	CLUTCH HEAD, DRIVE SCREW, TYPE BP, BLACK OXIDE
#12 x 3/4	00-6410-030		 TYPE BP	PHILLIPS, POZIDRIVE #12-7-P

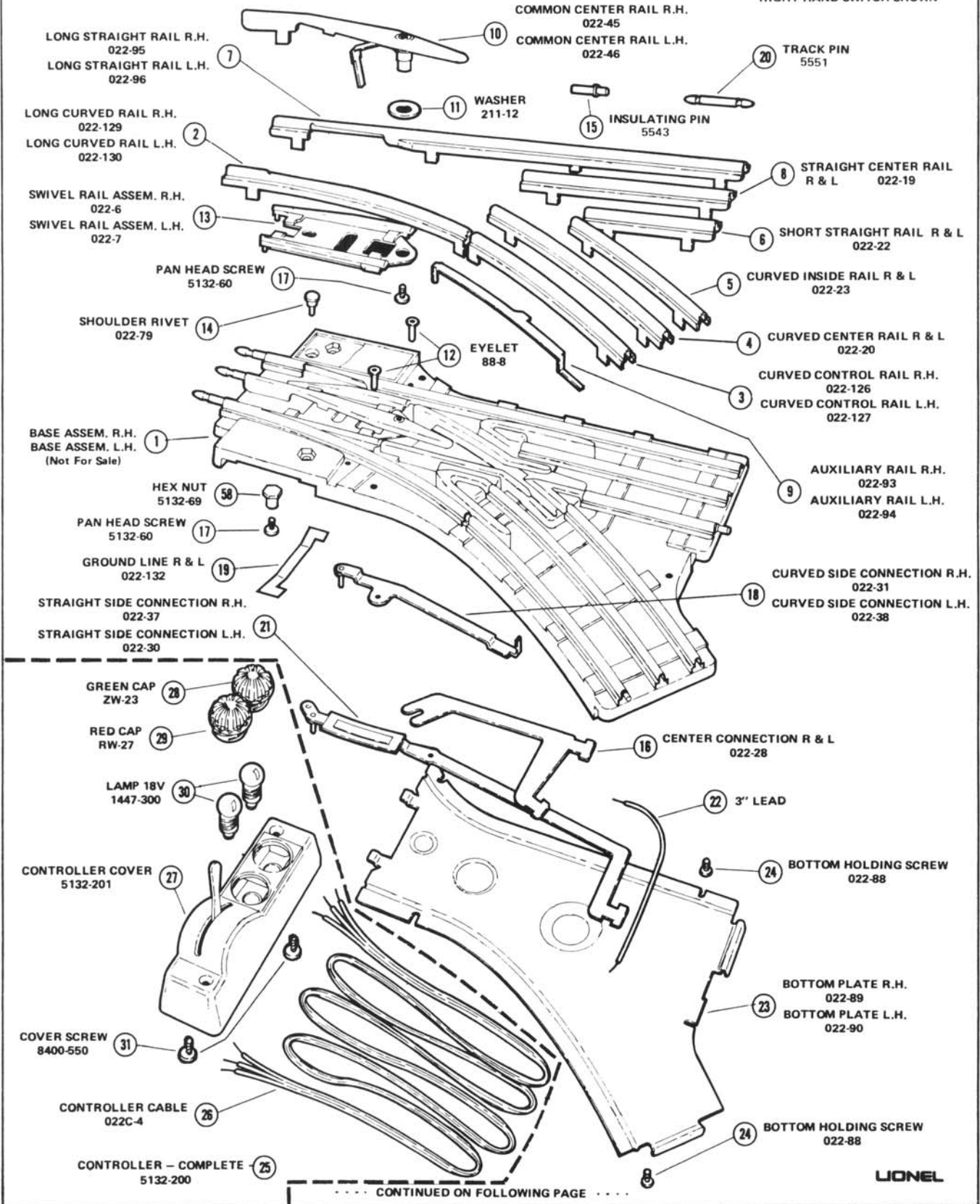
8141-50 SMOKE UNIT ASSEMBLY



LIONEL

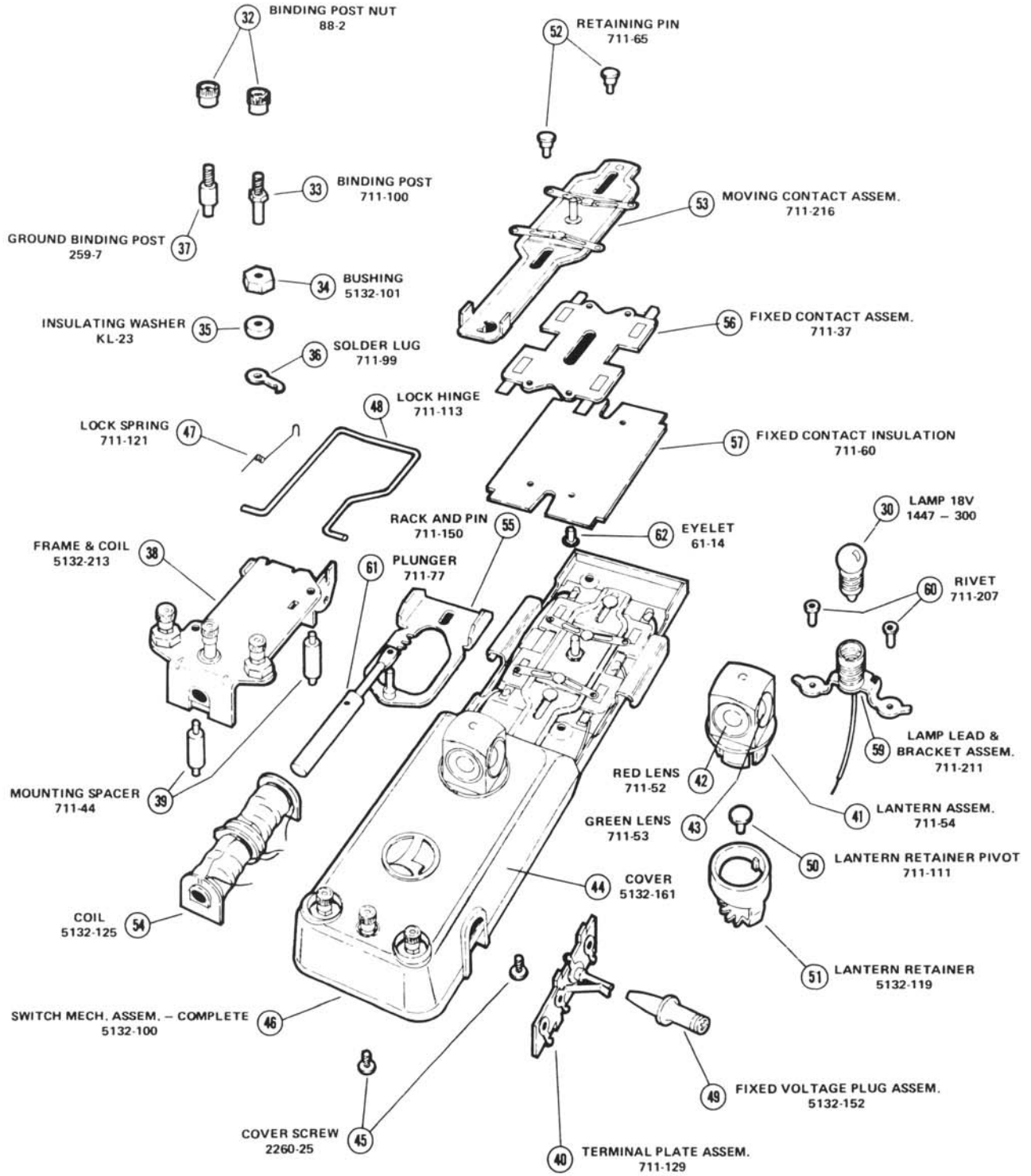
"O" GAUGE SWITCH R & L (base and controller)

RIGHT-HAND SWITCH SHOWN



LIONEL

"O" GAUGE SWITCH R & L (switching mechanism)



LIONEL

"0" GAUGE SWITCH RIGHT - 5132
LEFT - 5133

SECTION TRACK & SWITCHES

DATE 11/80

REF. QUANTITY PER
NO. PART NUMBER UNIT

REFERENCE
DRAWING

DESCRIPTION

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1		1	Base assembly RH
		1	Base assembly LH
2	022-129	1	Long Curved rail RH
	022-130	1	Long Curved rail LH
3	022-126	1	Curved Control rail RH
	022-127	1	Curved Control rail LH
4	022-20	1	Curved Center rail R & L
5	022-23	1	Curved Inside rail R & L
6	022-22	1	Short Straight rail R & L
7	022-95	1	Long Straight rail RH
	022-96	1	Long Straight rail LH
8	022-19	1	Straight Center rail R & L
9	022-93	1	Auxiliary rail RH
	022-94	1	Auxiliary rail LH
10	022-45	1	Common Center rail RH
	022-46	1	Common Center rail LH
11	211-12	1	Washer
12	88-8	2	Eyelet
13	022-6	1	Swivel rail assembly RH
	022-7	1	Swivel rail assembly LH
14	022-79	1	Shoulder Rivet
15	5543	2	Insulating Pin
16	022-28	1	Center Connection R & L
17	5132-60	3	Pan Head screw
18	022-31	1	Curved side connection RH
	022-38	1	Curved side connection LH
19	022-132	1	Ground Link L & R
20	5551	8	Track pin (5 RH - 3 LH)
21	022-37	1	Straight side connection RH
	022-30	1	Straight side connection LH
22	011-16	1	3" Lead
23	022-89	1	Bottom Plate RH
	022-90	1	Bottom Plate LH
24	022-36	2	Bottom holding screw #0x3/16" drive screw
25	5132-200	1	Controller complete
26	022C-4	1	Controller cable
27	5132-201	1	Controller cover
28	ZW-23	1	Green Cap
29	RW-27	1	Red Cap
30	1447-300	3	Lamp 18v
31	8400-550	2	Cover screw #4x5/6 Pan Head Phil
32	88-2	3	Binding Post Nut
33	711-100	2	Binding Post
34	5132-101	1	Bushing
35	KL-23	1	Insulating washer
36	711-99	1	Solder Lug
37	259-7	1	Ground Binding Post
38	5132-213	1	Frame & Coil
39	711-44	2	Mounting Spacer
40	711-129	1	Terminal Plate assembly

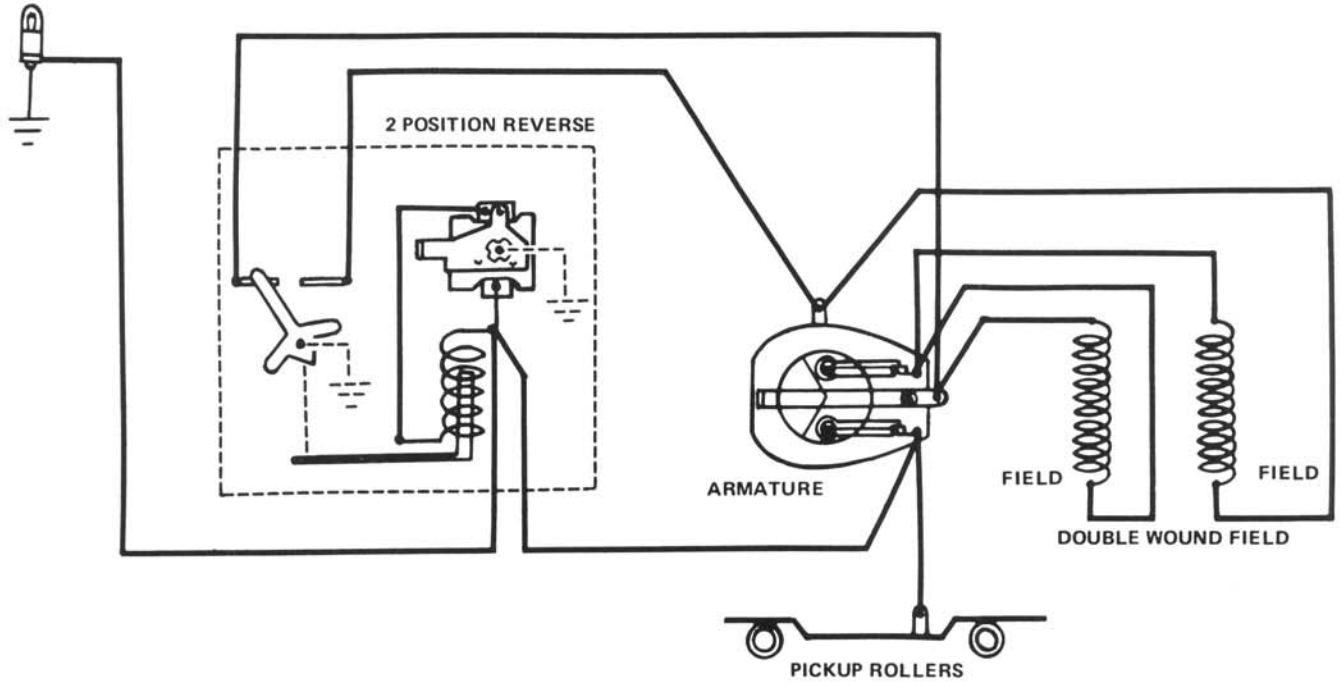
027 SWITCH MODIFICATION

If customers are complaining about derailments on 5021, 5022, 5121 or 5122, 027 switches, particularly in conjunction with the use of the 8213 and 8214 Steam Locomotives, please check the swivel rails to be sure they are traveling far enough to touch the outside rails without leaving a gap. This gap could occur in either the straight or curved position, although it is not as troublesome if it occurs on the straight position. If this gap is present and could cause derailment, use a pair of pliers to grip the offending rail part of the swivel rail and bend it outwards from the top so that it will fit into the recess in the outside rail better. This should rectify the problem.

LIONEL SERVICE MANUAL

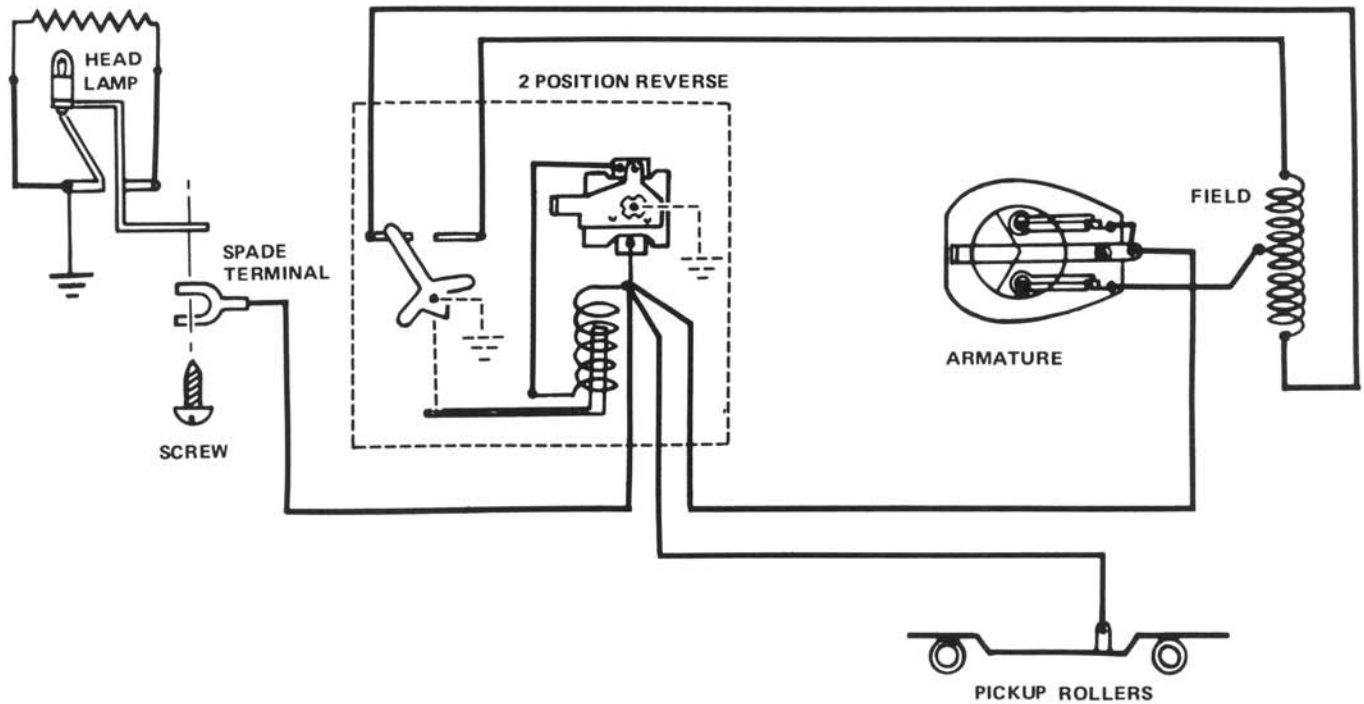
8770

HEADLAMP



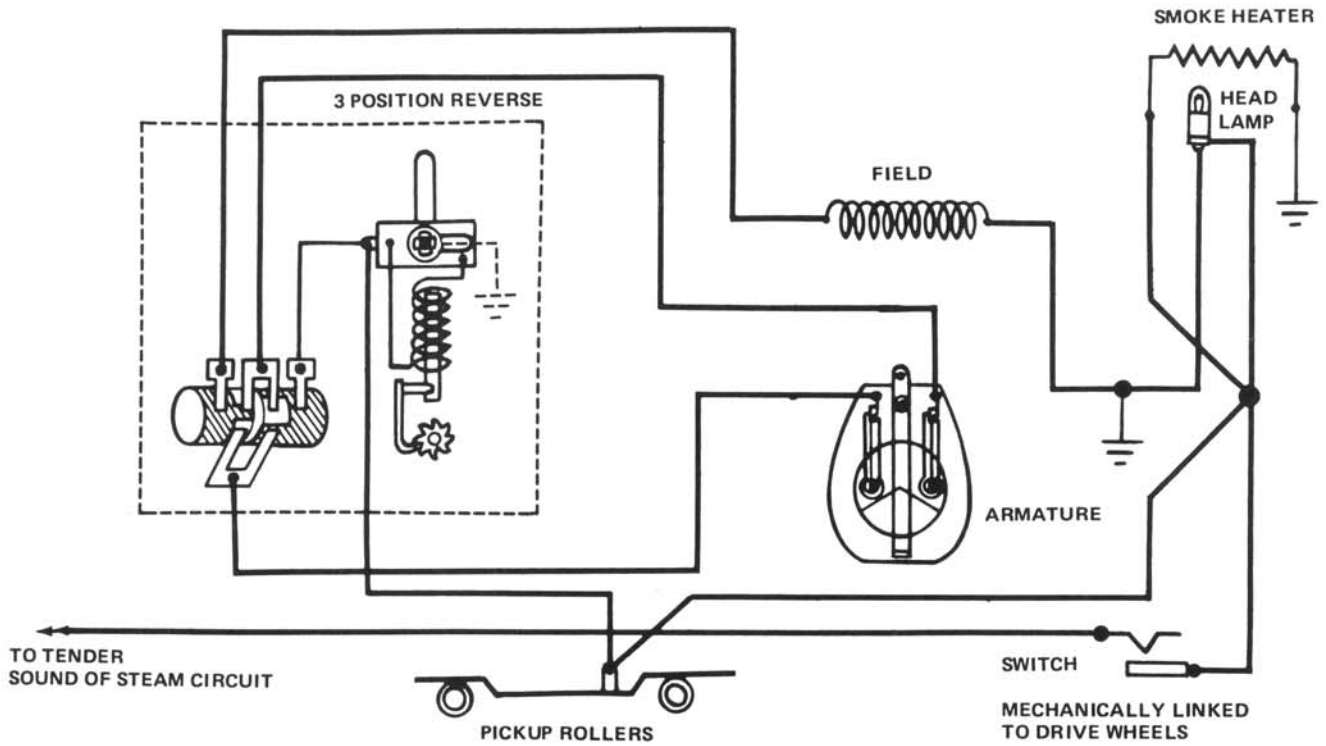
GENERAL

SMOKE HEATER

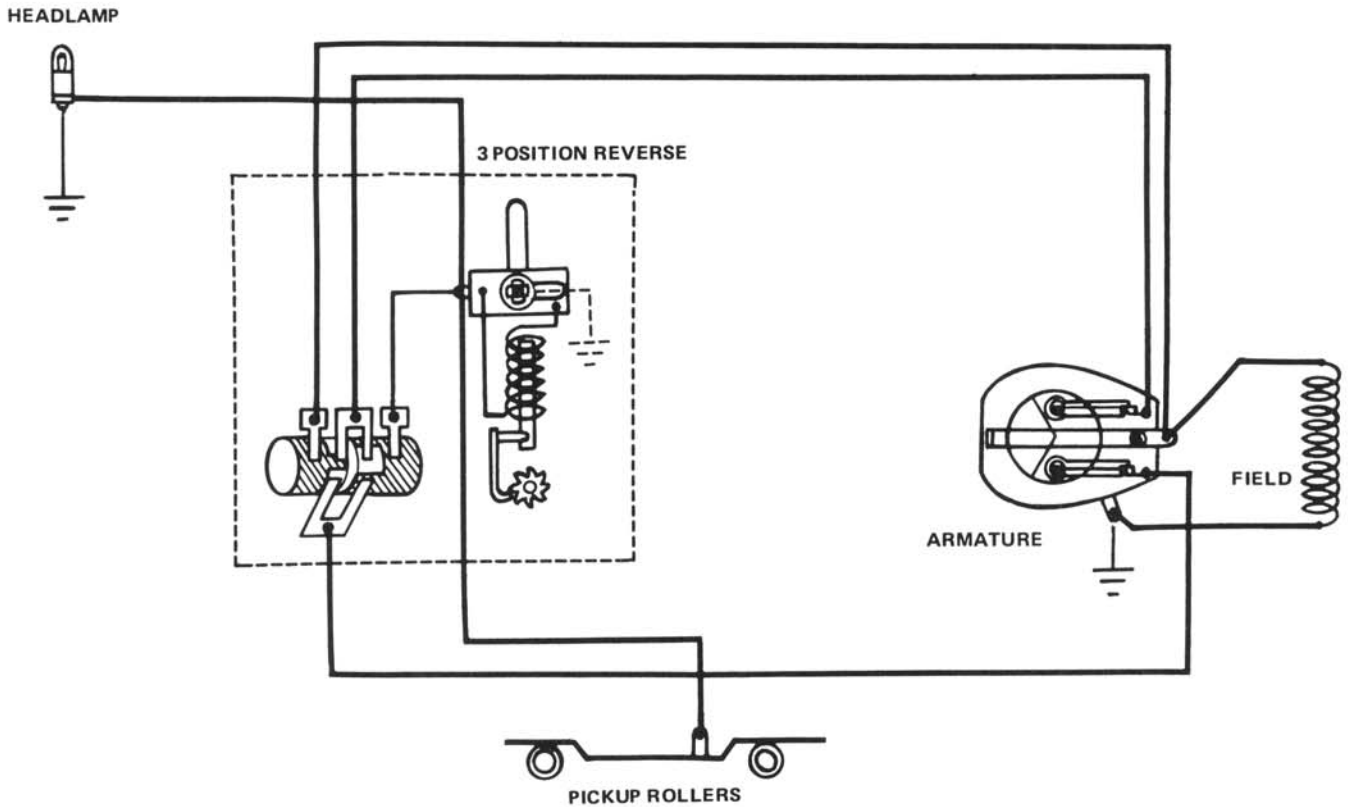


LIONEL SERVICE MANUAL

8801 HUDSON

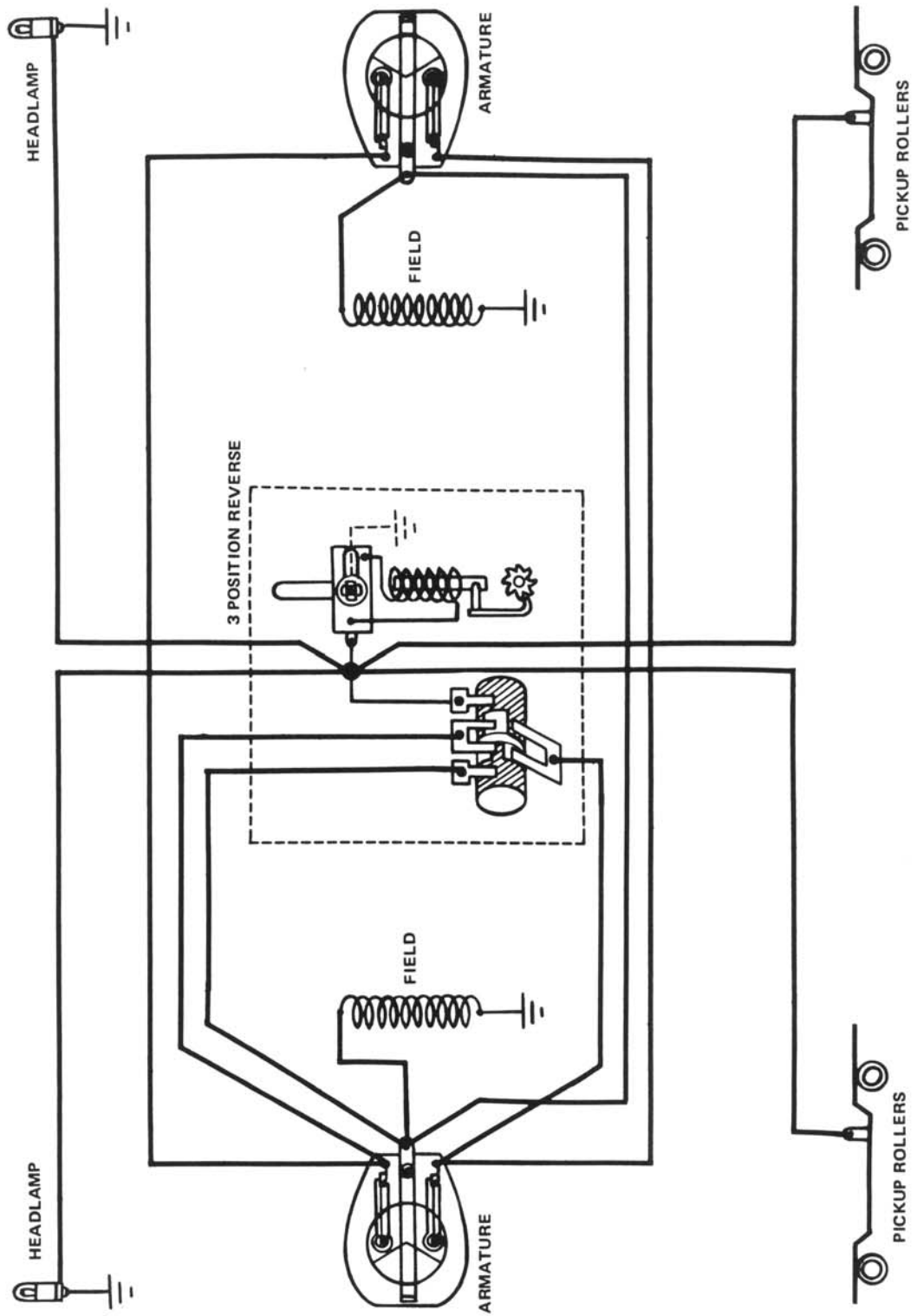


ALCO - 3 Position E-Unit

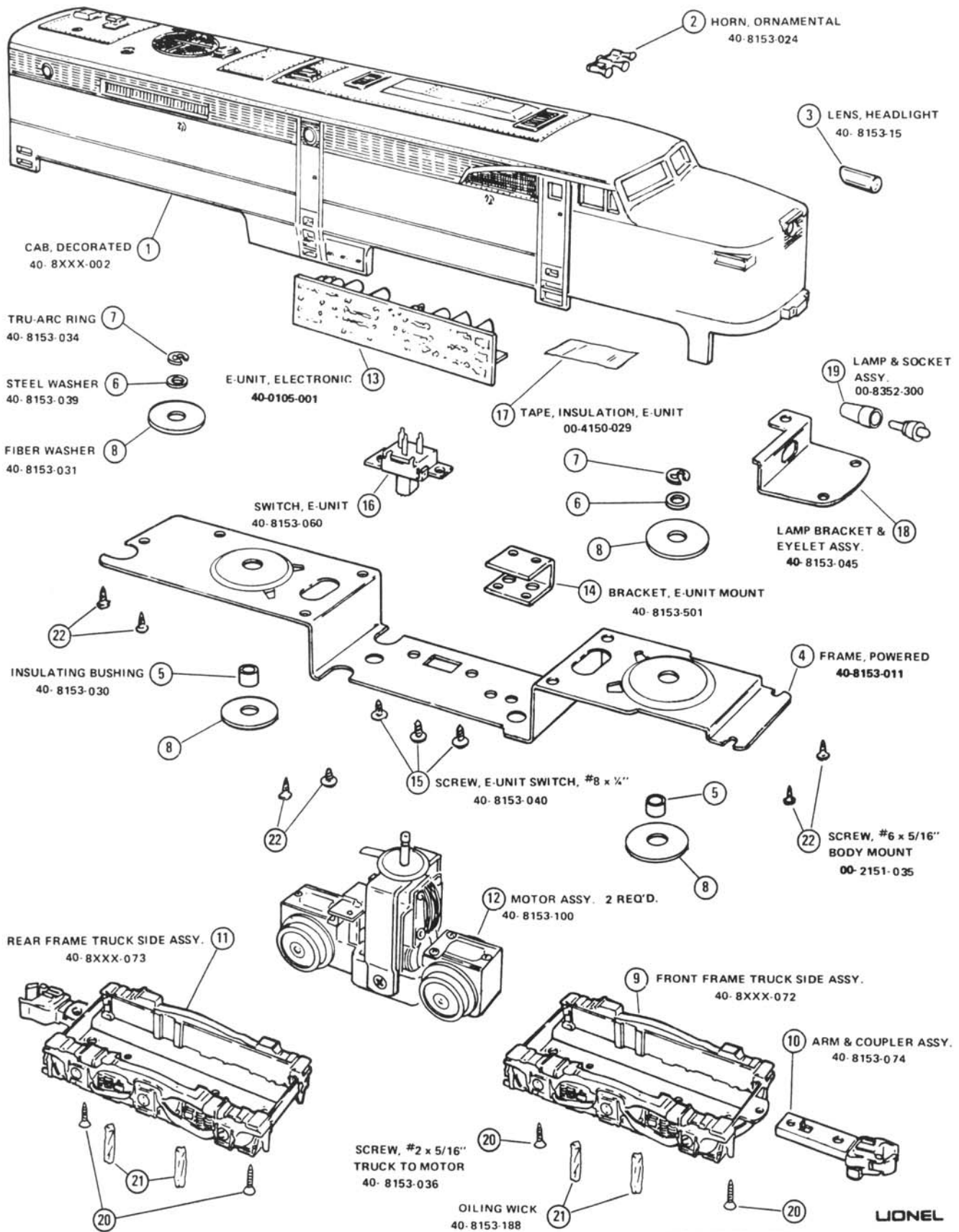


LIONEL SERVICE MANUAL

GG - 1



S GA. ALCO PA-1 POWERED A UNIT 8150 S.P. 8153 B. & O.



S-GAUGE ALCO PA-1 POWERED A-UNIT

SECTION AMERICAN FLYER
DIESEL ENGINE

40-8150 S.P.
40-8153 B. & O.

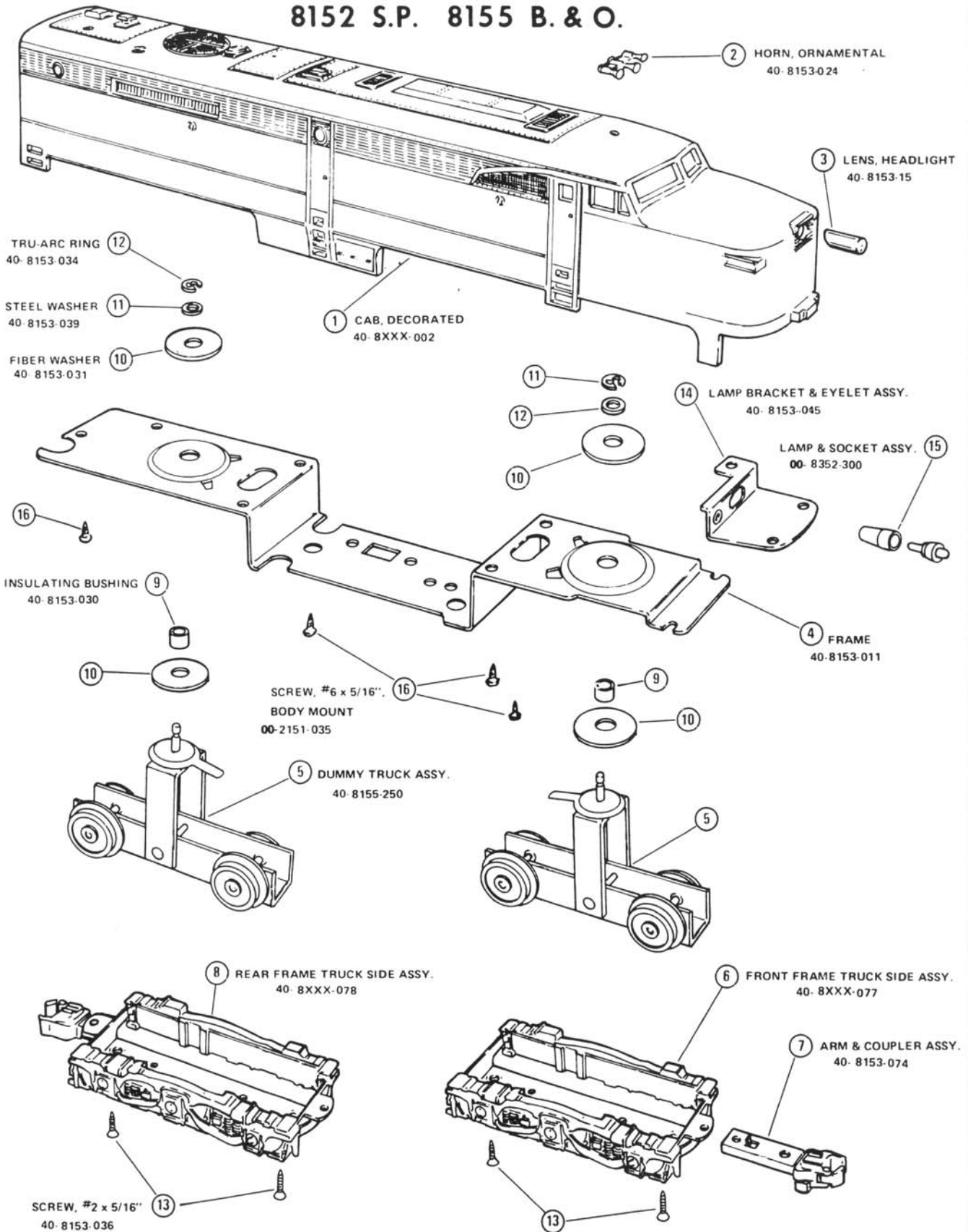
DATE 3/82

Reference
Drawing

REF.	QUANTITY PER UNIT	NO.	PART NUMBER	DESCRIPTION
		1	40-8XXX-002	Cab, decorated
		2	40-8153-024	Horn, ornamental
		3	40-8153-015	Lens, headlight
		4	40-8153-011	Frame, powered
		5	40-8153-030	Insulating bushing
		6	40-8153-039	Steel washer
		7	40-8153-034	Tru-Arc ring
		8	40-8153-031	Fibre washer
		9	40-8XXX-072	Front frame & truck side assembly
		10	40-8153-074	Arm & Coupler assembly
		11	40-8XXX-073	Rear frame & truck side assembly
		12	40-8153-100	Motor assembly
		13	40-0105-001	E-Unit, Electronic
		14	40-8153-501	Bracket, E-Unit mount
		15	40-8153-040	Screw, E-Unit switch, #8x1/4"
		16	40-8153-060	Switch, E-Unit
		17	80-4150-029	Tape, insulation, E-Unit
		18	40-8153-045	Lamp bracket & eyelet assembly
		19	00-8352-300	Lamp & socket assembly
		20	40-8153-036	Screw, #2x5/16", truck to motor
		21	40-8153-188	Oiling wick
		22	00-2151-035	Screw, #6x5/16", body mount
		23	40-8153-083	Pickup Shoes
		24	40-8153-084	Collector Frame
		25	40-8153-085	Pickup Spring

S GA. ALCO PA-1 DUMMY A UNIT

8152 S.P. 8155 B. & O.



LIONEL

S-GAUGE ALCO PA-1 DUMMY A-UNIT

SECTION AMERICAN FLYER
DUMMY UNITS

40-8152 S.P.

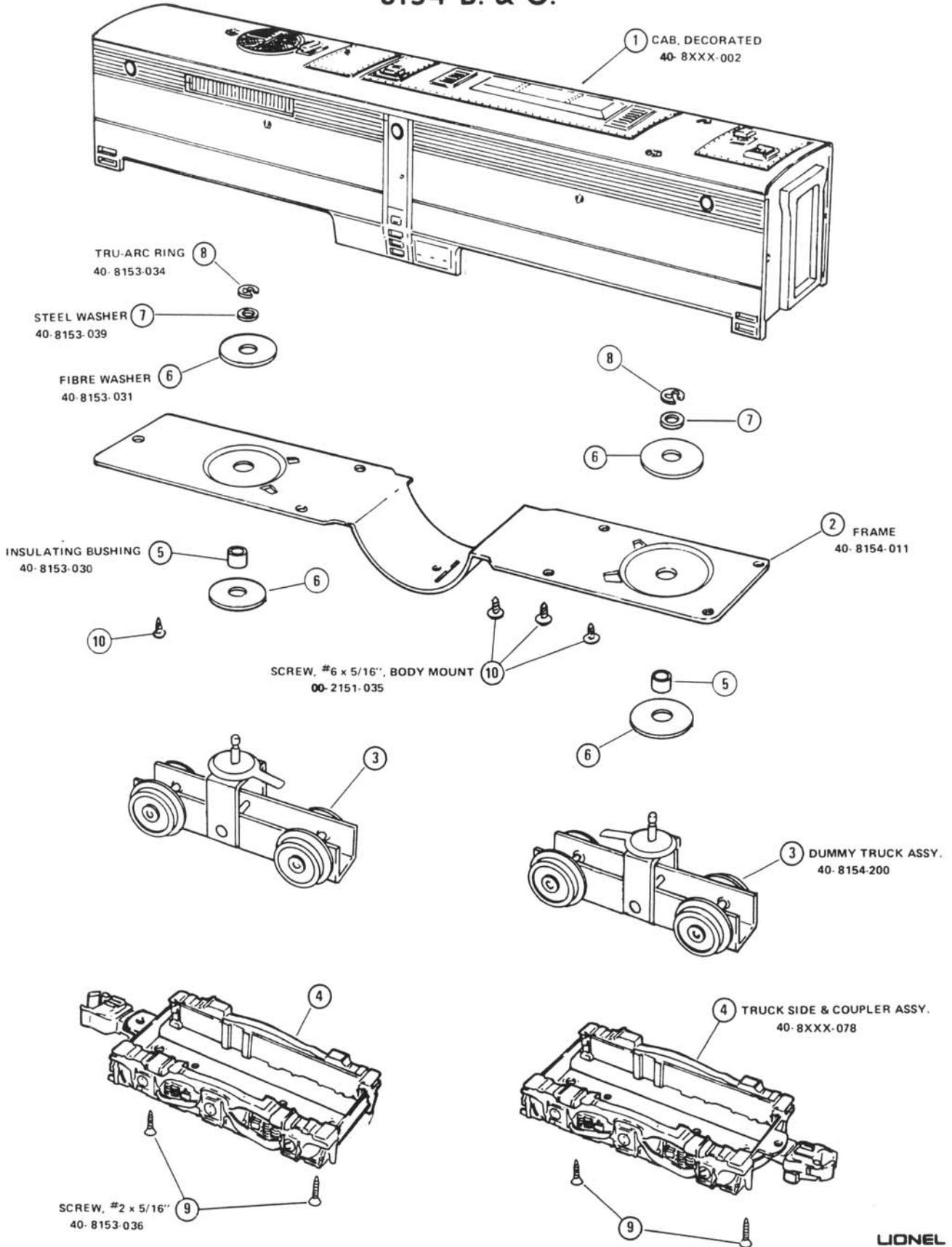
DATE 3/82

40-8155 B. & O.

Reference
Drawing

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	40-8XXX-002	1	Cab, decorated
2	40-8153-024	1	Horn, ornamental
3	40-8153-015	1	Lens, headlight
4	40-8153-011	1	Frame
5	40-8155-250	2	Dummy Truck assembly
6	40-8XXX-077	1	Front frame & truck side assembly
7	40-8153-074	1	Arm & Coupler assembly
8	40-8XXX-078	1	Rear frame & truck side assembly
9	40-8153-030	2	Insulating bushing
10	40-8153-031	4	Fibre washer
11	40-8153-039	2	Steel washer
12	40-8153-034	2	Tru-Arc ring
13	40-8153-036	4	Screw, #2x5/16", truck side mount
14	40-8153-045	1	Lamp bracket & eyelet assembly
15	00-8352-300	1	Lamp & Socket assembly
16	00-2151-035	4	Screw, #6x5/16", body mount

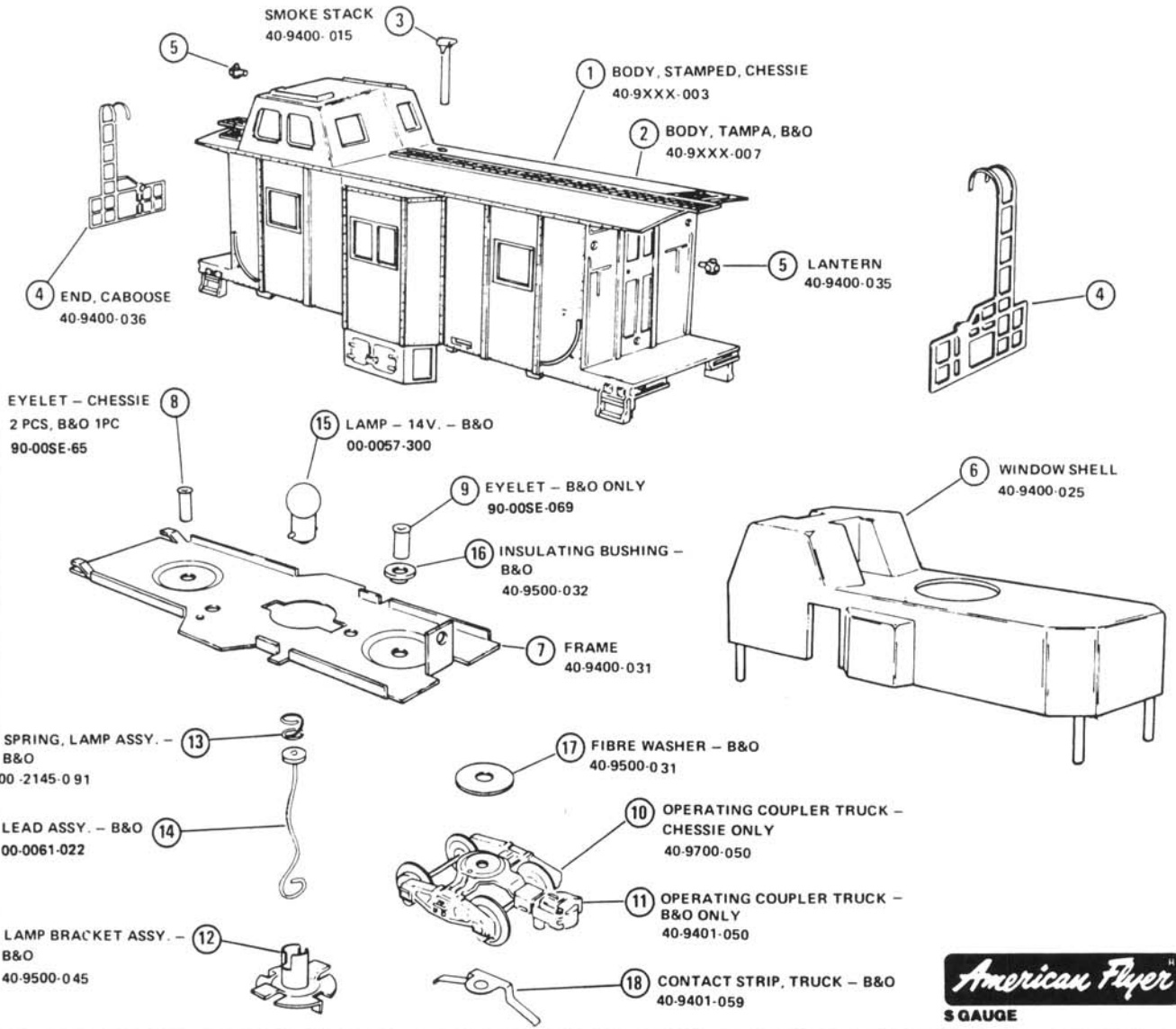
S GA. ALCO PB-1 DUMMY B UNIT 8154 B. & O.



LIONEL

CABOOSE LIGHTED B&O

CABOOSE CHESSIE



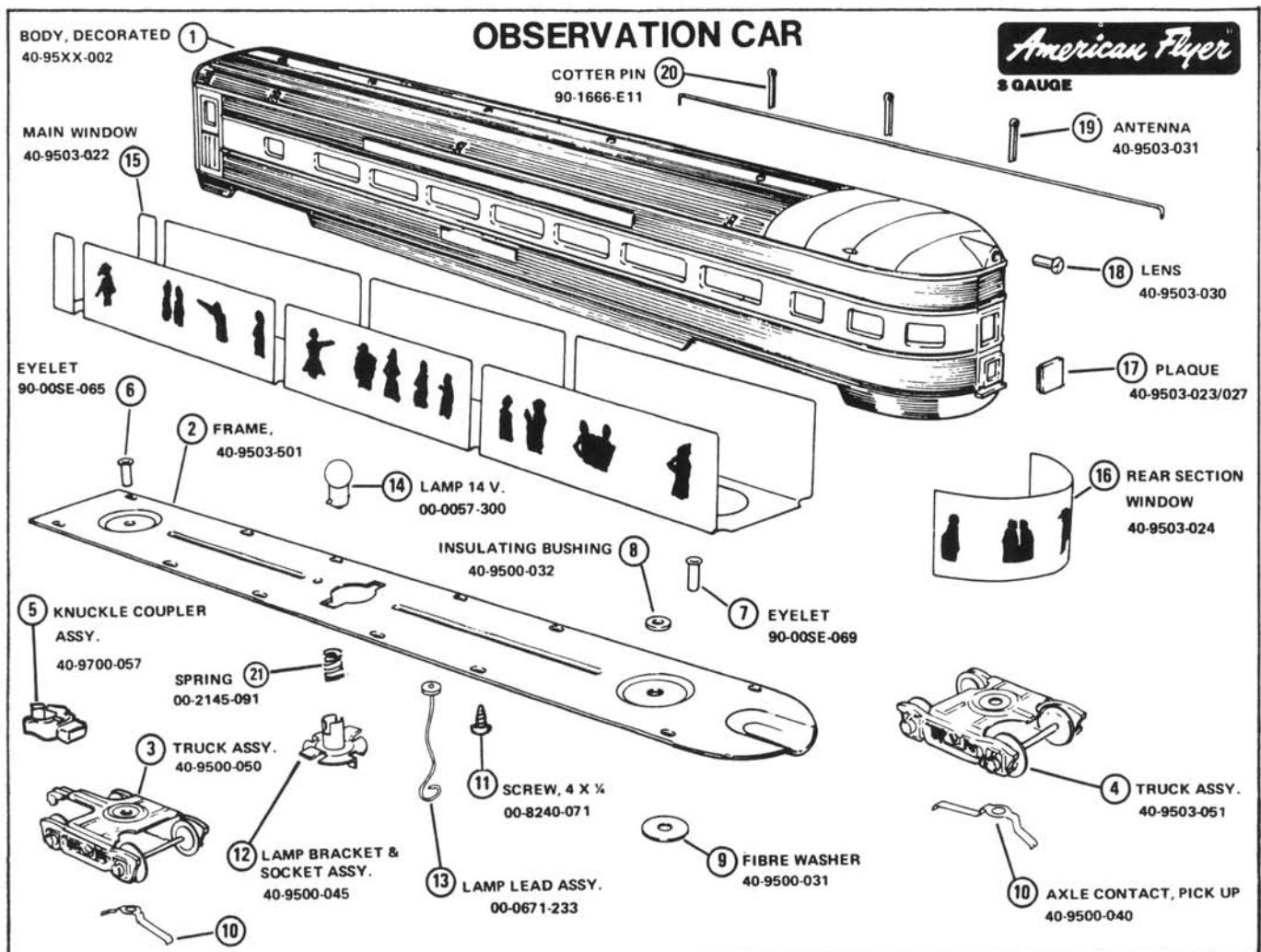
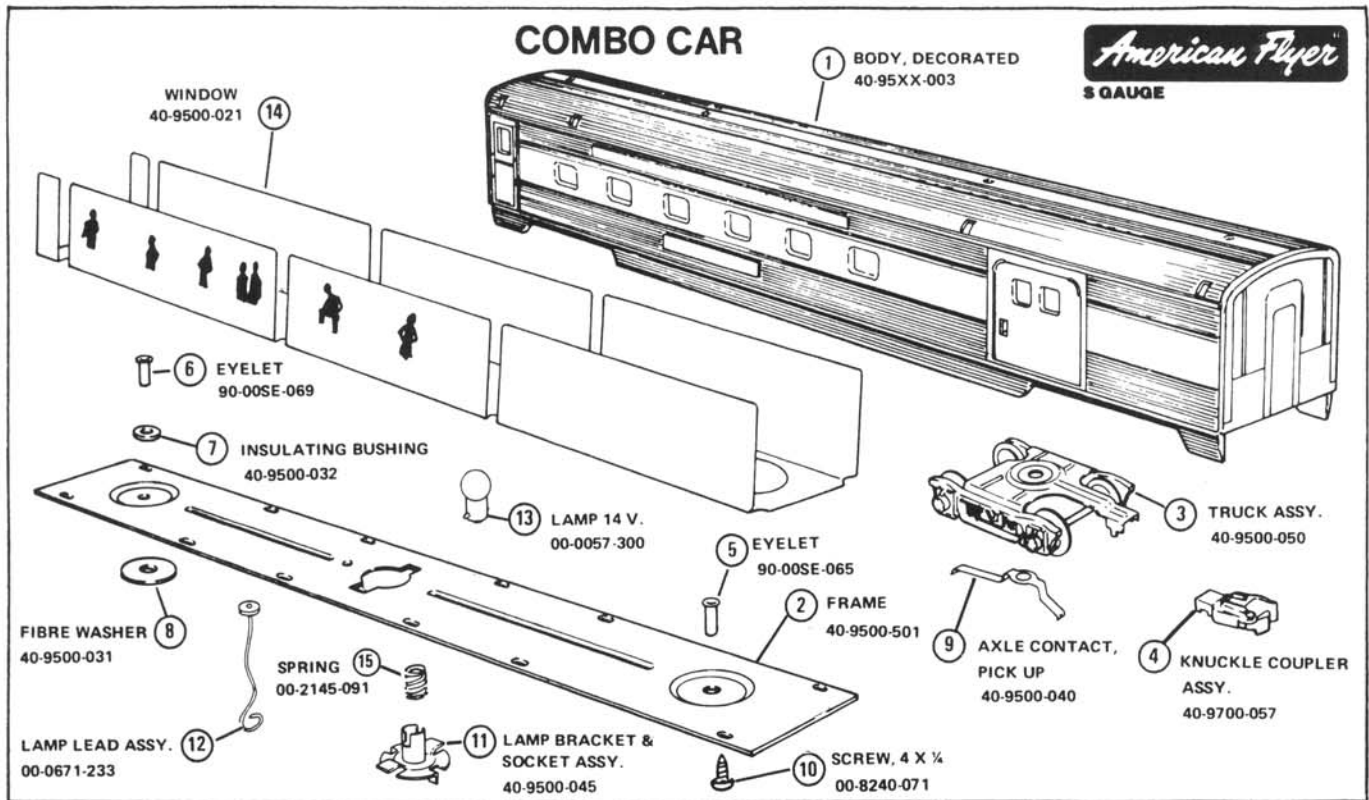
S-GAUGE CABOOSE
 9400 CHESSIE - NON ILLUMINATED
 9401 B & O - ILLUMINATED

AMERICAN FLYER
 SECTION ROLLING STOCK

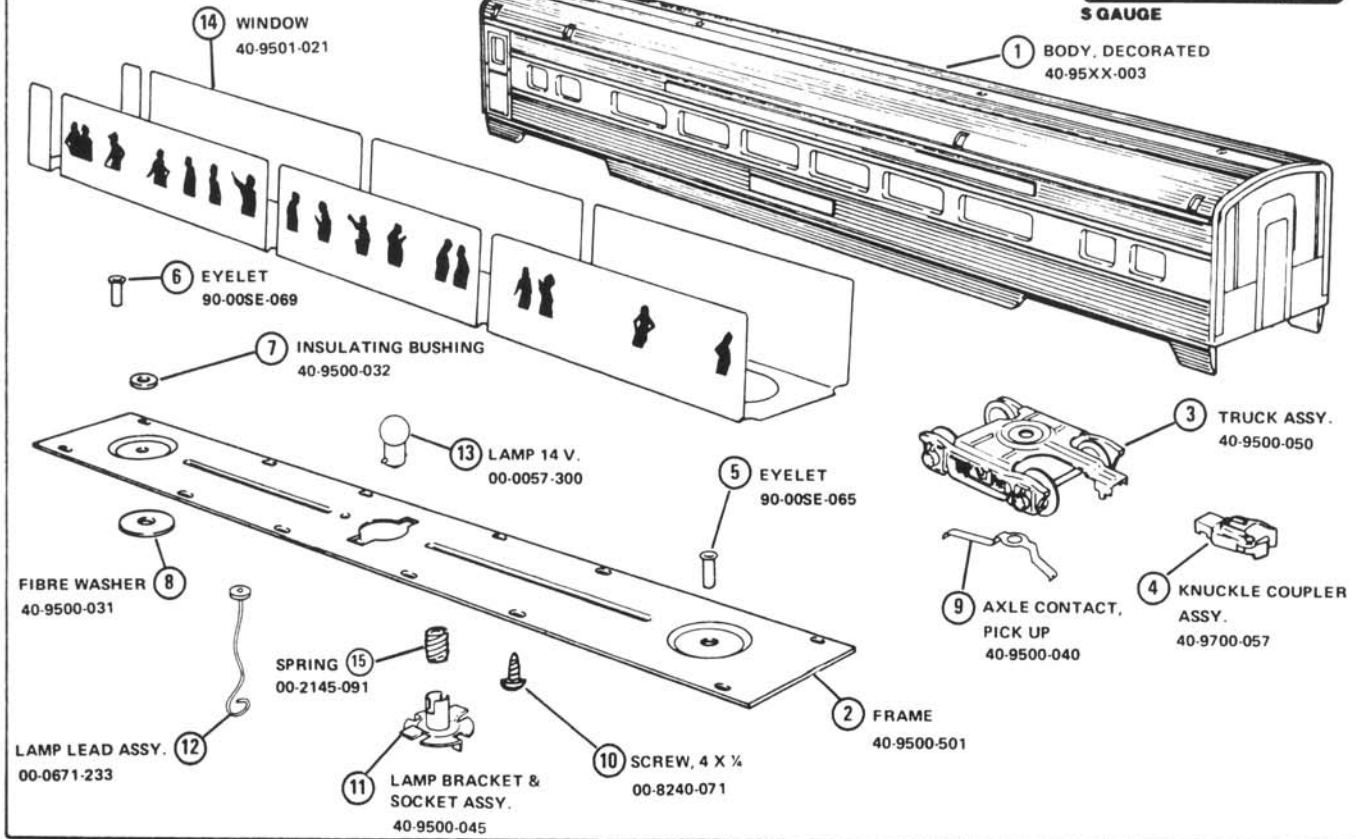
DATE 3/82
 Reference
 Drawing

REF. QUANTITY PER UNIT
 NO. PART NUMBER DESCRIPTION

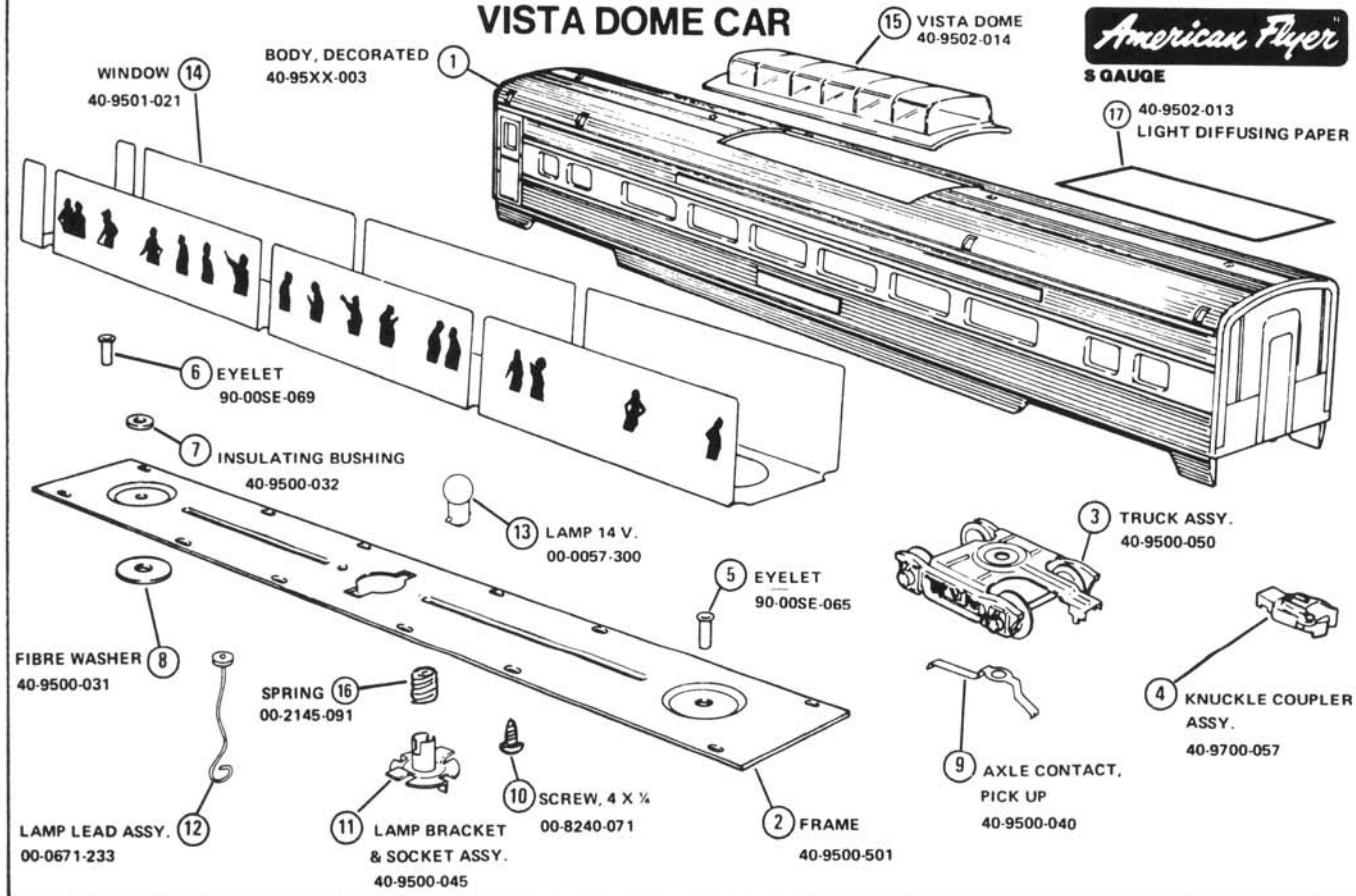
REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	40-9XXX-003	1	Body, Chessie
2	40-9XXX-007	1	Body, B & O
3	40-9400-015	1	Smoke stack
4	40-9400-036	2	End rails
5	40-9400-035	3	Lantern
6	40-9400-025	1	Window shell
7	40-9400-031	1	Frame
8	90-00SE-065	2	Eyelet - Chessie only
8	90-00SE-065	1	Eyelet - Illuminated Caboose
9	90-00SE-069	1	Eyelet - Illuminated Caboose
10	40-9700-050	2	Coupler truck - Chessie only
11	40-9401-050	2	Coupler truck - w/metal wheels
12	40-9500-045	1	Lamp bracket assembly, Illuminated Caboose
13	00-2145-091	1	Spring, lamp assembly, Illuminated Caboose
14	00-0061-022	1	Lead assembly, Illuminated Caboose
15	00-0057-300	1	Lamp, 14 volt - Illuminated Caboose
16	40-9500-032	1	Insulating bushing - Illuminated Caboose
17	40-9500-031	1	Fibre washer - Illuminated Caboose
18	40-9401-059	2	Contact strip, pickup - Illuminated Caboose



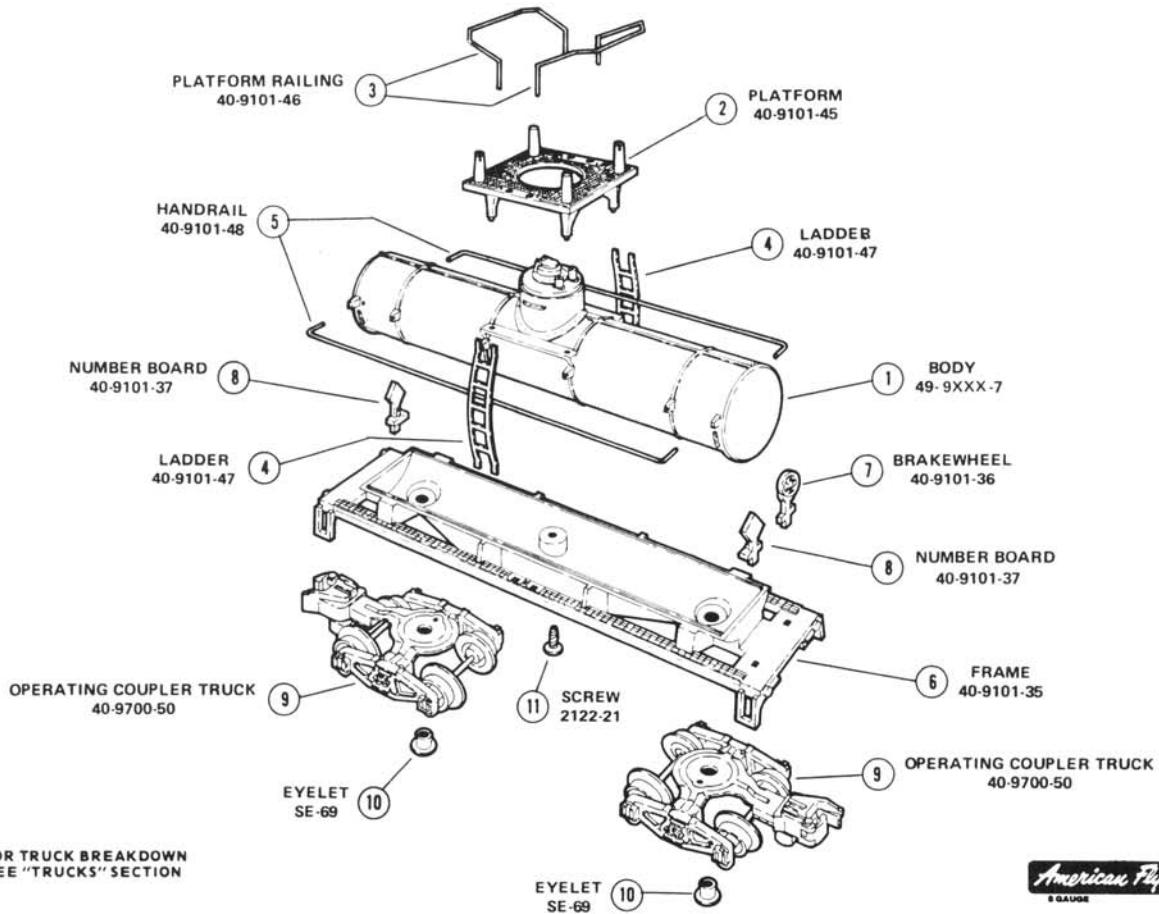
PASSENGER CAR



VISTA DOME CAR



SINGLE DOME TANK CAR



SINGLE DOME TANK CAR

SECTION AMERICAN FLYER
DATE 11/80
REFERENCE
DRAWING

REF. NO.	PART NUMBER	QUANTITY PER UNIT	DESCRIPTION
1	40-9XXX-7	1	Body
2	40-9101-45	1	Platform
3	40-9101-46	2	Platform Railing
4	40-9101-47	2	Ladder
5	40-9101-48	2	Handrail
6	40-9101-35	1	Frame
7	40-9101-36	1	Brakewheel
8	40-9101-37	2	Number Board
9	40-9700-30	2	Operating Coupler Truck
10	SE-69	2	Eyelet
11	2122-21	1	Screw 6/32x3/8 Pan Head

40-8153-100 MOTOR ASSY., S GAUGE

