

VOLUME ONE

REPLACEMENT PARTS CATALOG NO. 190

GENERAL PURPOSE, SPECIAL DUTY AND PASSENGER LOCOMOTIVES

Powered By
567D and 645 Engines

Refer to Catalog 300
for Engine Replacement Parts

Parts Department



Electro-Motive Division
LaGrange, Illinois, U.S.A.

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	500	COOLING SYSTEM
	700	FUEL OIL SYSTEM
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	1000	ACCESSORY RACK EQUIPMENT
	1040	INERTIAL AIR SYSTEM
	1080	AIR SYSTEM EQUIPMENT
	1090	
	1100	AIR COMPRESSOR
	1200	AIR COMPRESSOR MTG. & DRIVE
	1500	TRUCK, HAND BRAKE
	1800	FLEXIBLE COUPLINGS, DIAL GAUGES, BALL COCK VALVES
	1900	SANDING EQUIPMENT
	2100	WINDOW WIPER, SPEED RECORDER & HOPPER
	2300	STEAM SYSTEM
	2400	CAB EQUIPMENT, PILOT
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5300		CONTACTORS, RELAYS
5400		
5500		SWITCHES – CONTROL & ALARM
5700		JUMPERS, PLUGS, RECEPTACLES
5900		LIGHTS
6300		ALARM BELL
6700		TERMINAL BOARDS
6900	RESISTORS & RHEOSTATS	
9100	GENERAL LISTS – ELECTRICAL	
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Illustrations which apply to a parts list are assigned plate numbers. These plate numbers carry the same group number as the parts list and are followed by a plate serial number. For example, Plate D749-1 indicates the plate is a part of parts list group 749; the prefix letter "D" indicates plate revision; and the serial number identifies the sequence of the plate within the parts list.

These illustrations are only intended to be used as a general guide for parts ordering purposes.

Additional information, in the form of subtitles, subheadings, and italicized notes, appears within the parts list. This information may further describe the subject or explain design changes, modifications and newly developed replacement parts. References to Maintenance Instructions and Pointers are also included. Oversize and undersize part number are listed in the description column of the parts list.

The number of components used in an assembly or application are shown on the text page in the column designated "Number Required". A dash (-) in the column indicates that either the item is not a component of an assembly or application, or that the optional quantities required are shown in the description column. For example:

Ref. No.	Part Number	No. Req.	Description
1	8360846	-	WASHER .. Plain - 1-9/32 I.D. 8 required with gen. bracket 12 required without gen. bracket

The letters (A,B,C, etc.) at the top of "Number Required" column denote either model application or assembly application.

The Reference Number indicates the part number location in the text and identifies the part location on the illustration. Where it is difficult to illustrate all the detailed parts of a group of parts, the reference numbers are bracketed to indicate their general location. If a part is not shown on the illustration, an asterisk (*) symbol will precede the reference number in the text.

SPECIAL CATALOG SYMBOLS

1) The plus (+) symbol preceding the Reference Number in the text indicates that the part listed is a repetition of that part from its primary catalog location. For example:

Ref. No.	Part Number	No. Req.	Description
+16	8067251	2	GASKET .. Inlet elbow to intercooler

While the part appears in Parts List 1155 - Intercooler for clarity and catalog user convenience, its primary location is Parts List 1144 - Air Compressor.

2) The option (ϕ) symbol preceding the Reference Number in the text means that one or more items of different types have been used in this application. This may be due to a design change or because of different supplier sources. For example:

Ref. No.	Part Number	No. Req.	Description
ϕ 28	8365865	1	COOLER ASY. .. Lube oil (Young)
ϕ 28	8373361	1	COOLER ASY. .. Lube oil (American Standard)

The option symbol here indicates that both Young and American Standard lube oil cooler assemblies are available and either one can be ordered.

3) The note (f) symbol preceding the reference number in the text implies that additional information regarding the part is found in the form of an italicized note within the parts list. For example:

Ref. No.	Part Number	No. Req.	Description
f 24	8352041	1	ROD .. Piston

f No longer available. Recommend using complete cylinder assembly 9096227.

4) The asterisk (*) symbol preceding the reference number in the text indicates that the part is not shown on the illustration.

FOREWORD

FORMAT AND TERMINOLOGY

This Replacement Parts Catalog provides parts ordering information for General Motors General Purpose, Special Duty and Passenger Locomotives powered by 567D and 645 diesel engines. Engine replacement parts for the above locomotives are found in Catalog 300.

The catalog is comprised of a series of subject groups called "Parts Lists". These parts lists are identified by a parts list number which is prefixed by an alphabetical letter. When a parts list is revised, the prefix will change in alphabetical order. For example, Parts List F749 - Fuel Oil Filter would become Parts List G749.

The Alphabetical Index, following this foreword, provides a quick reference to locomotive components and the parts lists in which they appear. The Locomotive Reference List, which follows the Alphabetical Index, gives the engine and generator models for each locomotive model.

Immediately following the Locomotive Reference List is the Tables of Contents. The Table of Contents is a listing of the parts lists in numerical sequence. Under the general headings of each parts list are detailed subject descriptions, part numbers, the pages in which they appear, and the applicable locomotive models. For example :

TABLE OF CONTENTS

Parts List Number	Subject	Part Number	Page No.	Locomotive Application
E555	Air Cylinder	8302819	1	GP30 GP28,GP35,GP38,GP40,DD35,DDA35, SD28,SD35,SD38,SD40,SD45,SDP28, SDP35,SDP40
	Cylinder Assembly	8339138	2	

By referring to the Alphabetical Index first to locate the appropriate parts list for a particular item, and then utilizing the table of contents to find the specific application and page, most locomotive components can easily be found in the catalog.

Located at the back of the catalog is the Numerical Index. This is a complete listing of all part numbers contained in the catalog. The part numbers are listed in numerical, parts list, page, and reference number sequence. This index can be applied when the user has a part number and wants to identify the part, where it is used, and where it is located in the catalog.

The method of listing items within a parts list is termed the "indented system". Components of an assembly are indented to the right and appear directly beneath the assembly. These items are identified by a single word part name, whenever possible, followed by a detailed description. For example:

Ref. No.	Part Number	No. Req.	Description
1	8260930	1	STRAINER ASSEMBLY .. Fuel suction
2	8177027	1	HOUSING .. Strainer
3	8325646	1	COVER .. Strainer
4	8177030	1	SEAL .. Cover to housing

This does not mean that all the components of the assembly are cataloged. Those items which are not considered serviceable are not listed.

Items not identified by a part number in a parts list may be ordered by specifying on the purchase order the following: catalog number, parts list number, page number, reference number, complete description of the part and the assembly part number of which this item is a component. For example:

Ref. No.	Part Number	No. Req.	Description
1	9311027	1	PUMP ASY. .. Lube oil - Gear driven
2		1	PUMP .. Lube oil

Order quantity 1, lube oil pump, Catalog 190, Parts List F1158, Page 3, Reference Number 2, applied to 9311027 gear driven lube oil pump assembly.

INSTRUCTIONS FOR LOCATING PARTS IN THE CATALOG

1) To find the part number for a required item, refer first to the Alphabetical Index to determine the applicable parts list number. For example, if a Lube Oil Cooler Assembly for a SD45 locomotive is required, it will be found in the Alphabetical Index under "Cooler" and the appropriate Parts List Number is 938.

Secondly, proceed to this parts list number in the Table of Contents. The required part, its application, and the page number in the parts list where the part appears will be shown here. For example:

Parts List Number	Subject	Part Number	Page No.	Application
K938	Lube Oil Cooler Lube Oil Cooler Assembly	- - - -	1	GP30,GP35,GP35M,GP39,GP39-2,GP40,GP40P,GP40-2,DD35,DDA35,DDA40X,SD35,SD39,SDL39,SD40,SD40-2,SD45,SD45-2,SDP35,SDP40,SDP40F,SDP45,F40C,F45,FP45

Finally, refer to the parts list and the page that includes the appropriate model in the model application. In our example, the part number for the Lube Oil Cooler Assembly applicable to a SD45 locomotive will be found on Page 1.

2) If only the part number is known, proceed directly to the Numerical Index in the back of the catalog. Listed here are all the parts list, page, and reference numbers where this part number appears. Then, by referring to the parts list, the part number can be identified as to description, application, and quantity required.

LOCOMOTIVE REFERENCE LIST

Locomotive Model	Engine Model	Generator/Alternator Model
GP15-1	12-645E	D32B2-D14
GP18	16-567D1	D22B-D14
GP20	16-567D2	D22BT-D14
GP28	16-567D1	D32B-D14
GP30	16-567D3	D22DT-D14
GP35	16-567D3A	D32-D14
GP38	16-645E	D32B-D14,D32E1-D14
GP38AC	16-645E	AR10E-D14
GP38AC,GP38-2	16-645E	AR10E1-D14,AR10E1-D18
GP39	12-645E3	D32-D14,AR10A4-D14
GP39-2	12-645E3,E3B	AR10A6-D14,AR10A7-D18
GP39X	12-645F3	AR10X2-D14,AR15-D14,AR15-D18
GP40	16-645E3	AR10A-D14,AR10A2-D14
GP40P	16-645E3	AR10A2-D14
GP40-2	16-645E3,E3B	AR10A6-D14,AR10A7-D18
GP40P-2	16-645E3	AR10A6-D14
GP40X	16-645F3	AR10X2-D14,AR10X3-D14,AR15-D14
GP50	16-645F3	AR15-D14,AR15A-D14,AR15-D18
DD35	16-567D3A	D32-D14
DDA35	16-567D3A	D32-D14
DDA40X	16-645E3A	AR12-D14
SD18	16-567D1	D33C-D14,D32C-D14
SD28	16-567D1	D32B-D14
SD35	16-567D3A	D32-D14
SD38	16-645E	D32B-D14,D32E1-D14
SD38AC,SD38-2	16-645E	AR10E1-D14
SD38-2	16-645E	AR10E2-D14,AR10E2-D18
SD39	12-645E3	D32D-D14,D32E-D14
SDL39	12-645E3	D32E-D14
SD40	16-645E3	AR10A-D14,AR10A1-D14,AR10A3-D14, AR10A3M-D14,AR10A7-D14,AR10A8-D14
SD40-2	16-645E3,E3B	AR10A7-D14,AR10A7-D18
SD40-2SS	16-645E3	AR16-D14
SD40T-2	16-645E3,E3B	AR10A7-D14,AR10A7-D18
SD40X	16-645F3	AR16-D18
SD45	20-645E3	AR10B-D14,AR10B2-D14,AR10B3-D14, AR10B4-D14
SD45-2	20-645E3,E3B	AR10B4-D14
SD45X	20-645E3A	AR12A-D14
SD45T-2	20-645E3,E3B	AR10B4-D14
SD50	16-645F3	AR16A-D18
SD50S	16-645F3	AR16-D18,AR16A-D18
SDP28	16-567E	D32B-D14
SDP35	16-567D3A	D32-D14
SDP38	16-567E	D32B-D14
SDP40	16-645E3	AR10A-D14,AR10A1-D14
SDP40F	16-645E3	AR10A7-D14
SDP45	20-645E3	AR10B-D14,AR10B2-D14,AR10B3-D14
F40C	16-645E3A	AR10A9-D14
F40PH	16-645E3,E3A,E3B	AR10A7B-D14,AR10A9-D14,AR10A9-D18
F40PH-2	16-645E3,E3B	AR10A9-D14,AR10A9-D18,AR10E1B-D18
F45	20-645E3	AR10B2-D14,AR10B3-D14
FP45	20-645E3	AR10B2-D14