

R-345U

BUS TRIP RELIABILITY EQUIPMENT LISTS
TASK B REPORT

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PREFACE

This report describes Task B of the contract to "Develop the Groundwork and Prepare the Backup Information Necessary for the Establishment of a BUS TRIP Data Bank," (herein after referred to as BUS TRIP). The purpose of Task B was to establish bus equipment reliability lists and identify priority components and subsystems that BUS TRIP should monitor. This task was performed under Contract Number DTRS-57-80-C-00007 from the U.S. Department of Transportation, Transportation Systems Center (TSC) which was awarded to DRC in December 1979.

TABLE OF CONTENTS

| | Page |
|--|------|
| 1. EXECUTIVE SUMMARY | 1 |
| 2. INTRODUCTION | 4 |
| 2.1 Purpose | 4 |
| 2.2 Approach | 5 |
| 3. MASTER GENERIC PARTS LIST DEVELOPMENT | 7 |
| 3.1 Development | 7 |
| 3.2 Coding | 9 |
| 3.3 Parts List | 13 |
| 4. GENERIC PARTS NUMBER SCHEME | 15 |
| 4.1 Generic Part Number | 16 |
| 4.2 Generic Part List | 19 |
| 4.3 Bus Master Generic Parts List | 21 |
| 5. RESULTS AND CONCLUSIONS | 22 |
| 6. APPENDIX A - PARTS LIST | 24 |
| A-1 Master BUS-TRIP List | 25 |
| A-2 GMC-ADB | 81 |
| A-3 GMC-NLC | 107 |
| A-4 FLX-ADB | 132 |
| A-5 FLX-NLC | 156 |
| A-6 AM-Articulated | 202 |

LIST OF TABLES AND FIGURES

| | Page |
|--|------|
| Table 1 - Generic Functional Hierarchy | 10 |
| Table 2 - Equipment Breakdown and Coding Example | 12 |
| Figure 1 - Bus-TRIP Generic Part Number | 17 |
| Figure 2 - Bus-TRIP Generic Serial Number | 20 |

SECTION 1 - EXECUTIVE SUMMARY

BUS TRIP (Transit Reliability Information Program) is a Government sponsored response to an acknowledged need to collect, analyze, and disseminate bus equipment reliability information on a national basis. It is a parallel extension to rapid rail vehicle (RRV) TRIP and is designed to use the present TRIP structure and experience in collecting and processing data.

This report describes the purpose, approach, development, coding, and conclusions of Task B, "Establish Bus Equipment Reliability Lists" of the BUS TRIP contract. The effort here represents the development of source material into equipment lists representing the five most prominent bus models that are or will be found in use throughout the USA. From these lists, a master generic parts list representing a comprehensive list of all the components contained in these buses has been generated.

Consistent with the above development are the two objectives of Task B. First, to identify bus transit equipment to be monitored in the data bank and second, to establish a uniform component identification system, coded to accommodate various bus models.

The results of this task are as follows:

- Generic Part Number (GPN) - a 12-character code used as an identification for components from different bus models which perform similar functions.
- Generic Serial Number (GSN) - a seven-character code which identifies the transit property, vehicle type, and car number and is used in conjunction with the GPN.
- Generic Parts List (GPL) - a list of all generic part numbers (GPN) identified with a specific generic serial number, along with associated manufacturer's and property part identification.
- Master Generic Parts List (MGPL) - a list of all unique generic part numbers obtained from combining all of the generic parts lists.

With the development of the equipment lists, we may conclude that these lists are complex and varied in form. To properly assess this equipment requires additional information so that each system or component may be

evaluated objectively. This information calls for specifications, functional descriptions, engineering drawings, and schematics all of which will serve to enhance any equipment evaluation and make a bus vehicle data bank more productive.

SECTION 2 - INTRODUCTION

TRIP (Transit Reliability Information Program) is a Government initiated program designed to assist the transit industry in satisfying its needs for rapid rail transit reliability information. An extension of this effort was an award in December 1979 of a Bus TRIP contract to develop the groundwork and prepare the backup information necessary for the establishment of a Bus TRIP data bank. This effort runs parallel to the TRIP program and is designed to use the present TRIP structure and experience in collecting and processing data. Bus TRIP will also be developed similar to TRIP and will use the same data bank configuration and general equipment breakdown where possible.

2.1 - PURPOSE

Consistent with the development of a data bank was the requirement for a standard equipment list which was identified in the contract as a separate and distinct task (Task B). As part of the Bus TRIP contract, Task B, "Establish Bus Equipment Reliability Lists," had two main objectives. The first objective was to identify bus transit equipment to be monitored in the data bank, and the second

objective was to establish a uniform component identification system, coded to accommodate various bus models and specific enough to address their individual components. To accomplish these objectives required the development of a master generic parts list containing all the components found in bus vehicle systems. This list will be composed of the components used in the five buses that are or will be the most common street buses found in the USA. Ultimately this task will identify components and assemblies to be monitored in the data bank.

2.2 - APPROACH

The approach used to establish a master generic parts list was to obtain a data source that could identify bus equipment and from it develop a master list. It was recognized that bus maintenance manuals are usually descriptive of equipment and therefore a manual for each bus model to be carried in the list was sought and obtained. These manuals were obtained from several sources, one from a property which provided the articulated bus manual and another from the two prime manufacturers who supplied the remaining four model manuals. Each manual was reviewed for its contents and examined in detail for its hardware descriptions and illustrations. From these manuals a parts

breakdown was developed for each system identified in the manual. These system breakdowns when combined, represented a complete listing of all the components identified as part of that bus model. This step led to the creation of a generic parts list for each bus model, after which, when merged into a comprehensive master list, represented all the generic components identified in the various bus models. This master generic parts list, properly coded, serves to describe the equipment that could be monitored in the data bank.

SECTION 3 - MASTER GENERIC PARTS LIST DEVELOPMENT

This section describes in detail the evolution of the master generic parts list. It illustrates and explains the concept used in deciding the format for monitoring components in the data bank and the codes used to identify the components.

3.1 - DEVELOPMENT

Review of bus maintenance manuals revealed a significant variation in descriptive material contained in these documents. Each manufacturer describes his models with different emphasis, resulting in design features stressed at various levels of detail. The manuals also showed equipment assembled in terms of bus construction in one case and by functional description in another case. Depending upon the manual used, detail information on operations and repair of components has varied. This variation has termed each bus model as somewhat unique with regard to its description and detailed design disclosure. Nevertheless, the information from the manuals do play a significant part in the development of parts lists.

Equipment and vehicles which have provided the same type of service have many similar characteristics. These similarities can be found in the components and equipment which perform similar functions and are identified by like nomenclature. Their operations are generally identical in nature and usually provide the same service regardless of differences in assembly or "packaging." Therefore, because of this fact and regardless of descriptive differences, such equipment can be identified by common nomenclature and also grouped within standard functional classifications without conflicting designations.

Another consideration in the parts list development was the use of road calls. Road call reports from bus properties generally describe equipment in terms of loss of function. These reports usually relate a failure symptom to a component not performing its function. Adding this consideration to the equipment similarities previously noted made it obvious that a functional criteria is the logical standard to use for measuring performance. It then followed that a functional breakdown of bus equipment was the best format for responding to performance criteria when supplying data from the bank. Furthermore, this format implies a consistency of identification between reported information from the properties and equipment functional descriptions used in the data bank regardless of where the data may originate.

3.2 - CODING

Codes known as Generic Part Numbers (GPN) are part of the format conceived for tracking components as they are entered, processed, and retrieved from the data bank. Using these codes, components may be traced through a data processing cycle without loss of identification, regardless of their source. The equipment's data sources are known by using a Generic Serial Number (GSN) which identifies the property submitting the data. Combined with the GPN, the GSN forms a Generic Parts List (GPL) which also includes manufacturer parts identification for the components. To facilitate a GPL that is uniform, the bus models to be monitored will be combined to form a Master Generic Parts List (Bus MGPL) configured to represent and identify data from any model. Consistent with this approach the Bus MGPL will contain a Generic Functional Hierarchy which groups the bus equipment into a number of practical systems each representing a major equipment function to which data can be assigned to for processing.

Table 1 illustrates the functional systems which will be identified in the bank, with their corresponding system code. Alphabetical order of system identification is not maintained due to several systems designations being

inactive. Hence, only those active systems shown will have data assigned to them. The designation BO represents buses in the data bank to distinguish them from rail vehicles data entered in the bank.

Table 1

GENERIC FUNCTIONAL HIERARCHY

| | | | |
|----|-------------------------|----|--------------------------------|
| BO | Transit Bus | | |
| BA | Doors and Door Controls | BL | Fuel Supply System |
| BB | Air Comfort System | BM | Body and Structures |
| BD | Electrical System | BN | Safety Equipment |
| BE | Engine System | BJ | Suspension, Steering, Tires |
| BF | Brake System | BK | Drive Train |

The Bus MGPL is based on bus models which have extensive and detailed parts lists. Not all of the parts in these lists necessarily contribute sufficient data or impact on operation to warrant monitoring in the data bank. Typical of such hardware are miscellaneous items such as nuts, bolts, washers, pins, and gaskets which are found throughout the bus. The Bus MGPL can then be described as a

complete list of bus equipment from the system level down to the lowest replaceable unit with the above mentioned exceptions. All told the Bus MGPL will permit tracking of over 1300 items of equipment. To avoid repetitive descriptions in the Bus MGPL where identical assemblies are contained in the list (i.e., Left Hand Assembly and Right Hand Assembly), both are listed but only one will have its components breakdown recorded. To support this format, reports generated from the data bank must follow a data base structure that accommodates the commonality of classification and identification of equipment problems experienced by bus properties. A data base so organized can easily group equipment by functional categories and simplify data sorting and selecting routines. As an example of how equipment breakdown and coding would read, Table 2 presents a section of the Bus MGPL. As noted previously in Table 1, BF implies the Brake System and the remaining letter codes shown imply subsystem down to component code level identification. A more detailed and explanatory description of the generic codes and their application is presented in the next section, Generic Parts Number Scheme (Section 4.0).

Table 2

EQUIPMENT BREAKDOWN AND CODING EXAMPLE

| | |
|--------------|------------------------------|
| BFABAQxxxxxx | Drive/Rear Axle Wheel Brakes |
| BFABAQAAxxxx | Bushing |
| BFABAQABxxxx | Cam Support Bracket |
| BFABAQACxxxx | Bushing |
| BFABAQADxxxx | Seal Housing |
| BFABAQAExxxx | Bearing |
| BFABAQAFxxxx | Bushing |
| BFABAQAGxxxx | Return Spring Pin |
| BFABAQAHxxxx | Return Spring |
| BFABAQAIxxxx | Anchor Bushing |
| BFABAQAJxxxx | Roller Pin |
| BFABAQAKxxxx | Anchor Pin |
| BFABAQALxxxx | Spider Assy. |
| BFABAQAMxxxx | Backing Plate |
| BFABAQANxxxx | Brake Camshaft |
| BFABAQAPxxxx | Brake Drum |
| BFABAQAQxxxx | Brake Shoes |

The establishment of a Bus MGPL provides the foundation for a Bus Master Reliability Equipment List (Bus MREL). The Bus MREL is a concise version of the Bus MGPL containing only those components selected for monitoring in the data bank. The selection of components will be made by the Bus TRIP Liaison Board Members who consist of participating property members and other representatives. As of this writing, the Board has not had an opportunity to meet and select components for the list. Therefore, no Bus MREL is included in this report.

3.3 - PARTS LIST

Six individual parts lists have been developed and are illustrate in Appendix A. The first list shown, known as the Master Generic Parts List (Appendix A-1) is coded. The remaining five lists (Appendix A-2 to A-6) are not coded and represent parts list breakdowns of the five bus models from which the Master Generic Parts List was derived. These five lists are included for reference only and present a complete description of each bus model's components.

In developing the Master Generic Parts List and to insure complete coverage of equipment, code designations have been provided from the system level down to the least

component which can be monitored. In some cases the breakdown has exceeded the code coverage and no code for that level of equipment (piece part) has been designated. In the code description, the last four characters are identified by a series of X's as follows: xxxx. This designation identifies those components which are at the level called Universal Component Codes (UCC), which is explained in detail in Section 4.0. Briefly, the UCC defines the type of component identified.

SECTION 4 - GENERIC PART NUMBER SCHEME

This section provides a detail description of the codes and a summary of the major equipment lists used in the Bus TRIP data bank.

The application of the GPN system to the development of the Bus TRIP data bank structure has resulted in the establishment of four major types of equipment lists and a list of formats. Their definitions and characteristics are described briefly below.

- Generic Parts List (GPL):
 - Relates property and manufacturer's part numbers for a specific bus type to GPNs
 - Identified by a GSN

- Master Generic Parts List (MGPL):
 - A list of all possible GPNs of which the GPLs are comprised

- Bus Reliability Equipment List (BREL):
 - A subset of a GPL
 - Names specific component being monitored in the Bus-TRIP data bank for a specific bus type
 - Identified by a GSN

- Bus Master Reliability Equipment List (MBREL)
 - A subset of the MGPL
 - Lists all active GPNs in the Bus TRIP data bank

4.1 GENERIC PART NUMBER

The Generic Part Number (GPN) is the means by which component classification and identification will be achieved within the Bus TRIP data bank. The GPN (Figure 1) consists of three parts which perform separate functions as defined below:

- Functional Hierarchy. The first five fields (eight characters) of the GPN define a functional breakdown of a transit bus. This hierarchy is the frame of reference through which assemblies are categorized by function for subsequent identification by the remaining two fields (four characters) of the GPN.

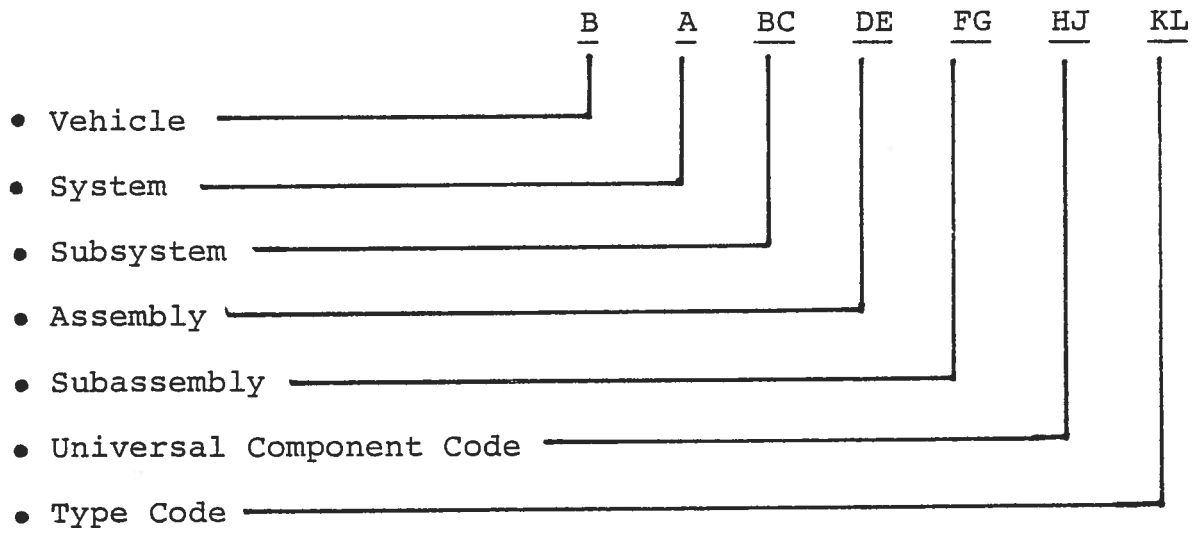


Figure 1 - Bus TRIP generic part number, (GPN)

- Universal Component Code. The next field (two characters) of the GPN consists of a Universal Component Code (UCC), which defines the class or type of component being addressed in the functional hierarchy. A list of UCCs was developed by DRC for RRV TRIP and this list will be modified in the future to accommodate components specific to buses.
- Type Code. The last field (two characters) of the GPN is used to identify distinguishing features of the component addressed in the functional hierarchy. "Type" is an adjective which is used to further delineate the function of the component or provide additional descriptive information for the UCC described above.

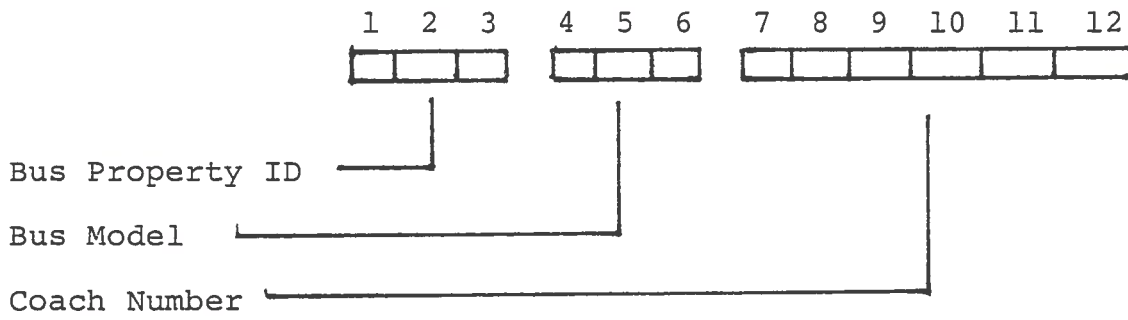
The GPN provides a uniform system of component identification that can be applied to all transit buses. It has the capability of merging the components from various vehicles into defined functional categories without sacrificing component identity. Since the GPNs are common to all bus types, a Generic Serial Number has been created to differentiate between the lists as they apply to a

specific bus type. The GSN (described below) consists of three codes which identify the transit property, bus fleet or type, and bus number, respectively.

4.2 - GENERIC PARTS LIST

The Generic Parts List (GPL) is a table of all GPNs, along with the associated manufacturer's and property part identification numbers for each GPN, for a specific bus type. Each GPL is identified by a Generic Serial Number (GSN) which identifies the property and bus type described by the GPL.

The format for the GSN is shown in Figure 2. The first character position identifies the transit property where the equipment operates. The second and third character positions identify the bus type of the property. The fourth through seventh character positions will identify the specific bus number within a bus type. However, because a GPL applies to a bus type, no bus numbers will be required for the list. However, bus number entries in the GSN will be used to identify data for a specific bus contained in the Bus TRIP data bank.



Bus Model



Bus Models ID

- GMC-ADB - A
- GMC-NLC - B
- FLX-ADB - C
- FLX-NLC - D
- MAN -
- Articulated - E

Figure 2 - Generic serial number, (GSN)

Generic Parts List have been prepared for five bus types (GMC Advanced Design Bus (ADB); Grumman FLX ADB, GMC New Look Conventional (NLC); Grumman FLX NLC, and AM/MAN Articulated). These GPLs contain only word descriptions of the components at the time of this writing and were used to prepare the Master Generic Parts List in Appendix A.

4.3 - BUS MASTER GENERIC PARTS LIST

The Master Generic Parts List contains only GPNs and component nomenclature, whereas a GPL also contains the corresponding transit property and manufacturer's part numbers for each GPN. The Bus MGPL is prepared by merging the GPNs from the GPLs for individual vehicle types and then deleting duplicate GPNs. The first GPL prepared, therefore, defined the "first cut" of the MGPL. The MGPL is then used as the starting point to prepare the GPL for the next vehicle type. New GPNs are generated to accommodate components which cannot be described by existing numbers. These new GPNs are then added to the Bus MGPL, and the process begins again.

SECTION 5 - RESULTS AND CONCLUSIONS

The objectives of the Task B effort were to identify bus transit equipment to be tracked in the data bank and to establish a uniform component code for this equipment. In doing so, this effort has resulted in the following defined products:

- A Generic Serial Number (GSN), identifying transit properties, fleet type vehicles, and vehicle numbers.
- A Generic Part Number (GPN), identifying vehicle components in terms of their functional hierarchy, breakdowns, component code, and type.
- Generic Parts List (Bus GPL), relating property and manufacturer's part numbers for a specific vehicle type.
- Master Generic Parts List (Bus MGPL), a comprehensive list of all of the GPNs.

The quantity, complexity, and variety of the equipment reviewed for this report suggests a need for additional information to accurately identify and evaluate bus components. This information would include:

- Component parts lists and descriptions
- More detail descriptions of functional equipment and their operations
- Engineering drawings and schematics of equipment
- Quality control information and data
- Specs and requirements for the components
- Manufacturer Part Numbers and Property Stock Numbers

SECTION 6
APPENDIX A - PARTS LISTS

APPENDIX A-1
MASTER BUS TRIP LIST

| BAxxxxxxxxxx | <u>Doors and Door Controls System</u> |
|----------------|---------------------------------------|
| BAAAxxxxxxxxx | Front Door Assys. |
| BAAAAAxxxxxxxx | Front Leaf Assy. LHS |
| BAAAABxxxxxxxx | Front Leaf Assy. RHS |
| BAAAABAAxxxxx | Door Upper Seals |
| BAAAABABxxxxx | Center Panel |
| BAAAABACxxxxx | Outer Panels |
| BAAAABADxxxxx | Glass Upper |
| BAAAABAExxxxx | Glass Lower |
| | Seals |
| | Door Sealing Strips |
| | Rubber Liners |
| | Finger Guards |
| | Trim Skirts |
| BAAAABAFxxxxx | Door Bearing Mount Assy. |
| | Mounts |
| | Bearings |
| | Brackets |
| BAAAABAGxxxxx | Guide Channel Assy. |
| BAAAABAHxxxxx | Guide Door Arm Assy. |
| BAAAABAIxxxxx | Guide Arm Roof Bracket |

| | |
|--------------|-----------------------------------|
| | Guide Roller |
| | Guide Holder |
| BAAAABAJxxxx | Front Door Header & Panel Assy. |
| | Pipe Holder |
| | Ball Joint Head |
| | Ball Joint Head Holder |
| BAAAABAKxxxx | Panel Shaft Assys. |
| | Shaft |
| | Mount |
| | Bearing |
| BAAAABALxxxx | Upper Door Panel Bracket Assy. |
| | Bracket |
| BAAAABAMxxxx | Lower Door Panel Bracket Assy. |
| | Brackets |
| | Bearing |
| | Bushing |
| BAAAABANxxxx | Lower Shaft Support Bracket Assy. |
| | Bracket |
| | Bearing |
| | Bushing |
| BAAAABAOxxxx | Door Shaft Assy. LHS |
| BAAAABAPxxxx | Door Shaft Assy. RHS |
| BAAAABAQxxxx | Gear and Shaft Assy. |
| | Shaft Upper Pivot Bracket |

| | |
|--------------|-------------------------------------|
| BAAAABARxxxx | Door Operating-Activating Mechanism |
| BAAAABASxxxx | Front Mechanical Package |
| BAAAABATxxxx | Door Engine Assy. |
| | Cylinder-Large/Small |
| | Body |
| | Head |
| | Pivot |
| | Piston Rod |
| | Bearing |
| | Bushing |
| BAAAABAUxxxx | Metering Adjusting Screws |
| | Spring |
| | Cushioning Seal |
| BAAAABAVxxxx | Switch Assy. |
| BAAAABAWxxxx | Connecting Rod Assy. |
| | Connecting Rods |
| | Control Arm |
| | Push Rod |
| | Lever Front |
| | Lever Rear |
| | Lever Wedge |
| | Lever Idler |
| | Idler Support |
| | Tie Rods |

| | |
|--------------|--------------------------------------|
| BAABxxxxxxxx | Rear Door Assys. - Push Type |
| BAABAAxxxxxx | Leaf Assys. LHS |
| BAABABxxxxxx | Leaf Assys. RHS |
| BAABABAAxxxx | Glass Upper |
| BAABABABxxxx | Glass Lower |
| | Seals |
| BAABABACxxxx | Panels |
| BAABABADxxxx | Switch Assy. |
| BAABABAExxxx | Panel Bracket Assy. Exit/Lower/Upper |
| BAABABAFxxxx | Guide Arm Assy. |
| | Roof Bracket |
| | Bearings |
| BAABABAGxxxx | Lower Shaft Support Bracket Assys. |
| BAABABAHxxxx | Check Cylinder Assy. |
| | Piston |
| | Rod |
| BAABABAIxxxx | Door Shaft Lever Assy. |
| BAABABAJxxxx | Cam & Lever Assy. |
| BAABABAKxxxx | Header Assy. |
| BAABABALxxxx | Connecting Rod/Yoke Assys. |
| BAABABAMxxxx | Closing Speed Control Assy. |
| BAABABANxxxx | Unlock Solenoid Assy. |
| | Return Spring |
| BAABABAPxxxx | Door Switch Relay Assy. |

| | |
|--------------|-------------------------------|
| BAABABAQxxxx | Connecting Rod Assy. |
| | Connecting Rods |
| | Control Arms |
| | Tie Rods |
| BAABABARxxxx | Rear Door Switch Assy. |
| BAABABASxxxx | Emergency Manual Unlock Assy. |
| | Release Cable |
| | Lever |
| | Rod |
| | Yokes |
| | Adjustment Screws |
| BAABABATxxxx | Lever Cylinder Check |
| | Lever Front-Rear Door |
| | Connecting Rod |
| | Cam |
| BAABABAUxxxx | Teeter Lever Assy. |
| BAABABAVxxxx | Door Engine |
| | Cylinder |
| | Head |
| | Piston Rod |
| | Bearing |
| | Bushing |
| BAABABAWxxxx | Relay Assy. |

| | |
|--------------|--|
| BAABACxxxxxx | Rear Doors Push Type Air/Electric |
| BAABACAAxxxx | Speed Control Valves |
| BAABACABxxxx | Rectifiers |
| BAABACACxxxx | Air Supply Control Magnet Valve |
| BAABACADxxxx | Tell Tale Switch Assy. |
| BAABACAExxxx | Relays |
| BAABADxxxxxx | Rear Doors Folding Type Air/Electric |
| BAABADAAxxxx | Sensitive Edge Solenoid |
| BAABADABxxxx | Cam Switch Micro Assy. |
| BAABADACxxxx | Door Sensitive Edge Bell |
| BAABADADxxxx | Interrupter Switch Micro |
| BAABADAExxxx | Wiring Junction Block Assy. |
| BAABAExxxxxx | Rear Doors Folding Type Full Air Operated (2 types) |
| BAABAEAAxxxx | Sensitive Edge |
| BAABAEABxxxx | Non Sensitive Edge |
| BAABAEACxxxx | Valve Emergency Escape Air |
| BAACxxxxxxxx | Door Controls |
| BAACAAxxxxxx | Master Door Switch |
| BAACABxxxxxx | Push Button Switch |
| BAACACxxxxxx | Door Switch - Front/Open |
| BAACADxxxxxx | Door Open Solenoid Assy. |
| BAACAExxxxxx | Door Controller |
| BAACAEAAxxxx | Handle Assy. |
| BAACAEABxxxx | Electrical Switch |
| BAACAEACxxxx | Controller Body |

| | |
|--------------|-----------------------------|
| BAACAEADxxxx | Bullet Catch Bracket |
| BAACAEAExxxx | Index Plunger |
| BAACAEAFxxxx | Index Spring |
| BAACAEAGxxxx | Actuator Cam |
| BAACAEAHxxxx | Bracket Assy. |
| BAACAFxxxxxx | Door Control Valve |
| BAACAGxxxxxx | Door Air Pressure Regulator |
| BAACAHxxxxxx | Two Way Check Valve Assy. |
| BAACAIxxxxxx | Air Shut Off Valve |
| BAACAJxxxxxx | Air Strainer Assy. |
| BAACAKxxxxxx | Emergency Valves |
| BAADxxxxxxx | Interlock Systems |
| BAADAAxxxxxx | Brake Interlocks |
| BAADABxxxxxx | Door Switches |
| BAADACxxxxxx | Door Lock Switches |
| BAADADxxxxxx | Lock Panel Switches |
| BAADAExxxxxx | Double Check Value |
| BAADAFxxxxxx | Magnet Valve-Interlock |
| BAADAFAAxxxx | Plunger |
| BAADAFABxxxx | Coil Assy. |
| BAADAGxxxxxx | Terminal Block & Clip Assy. |
| BAADAHxxxxxx | Shell Solenoid Assy. |
| BAADAIxxxxxx | Valve Body Assy. |
| BAADAIAAxxxx | Valve |

| | |
|--------------|--------------------------|
| BAADAJxxxxxx | Pressure Regulator Valve |
| BAADAJAAxxxx | Springs |
| BAADAJABxxxx | Body |
| BAADAJACxxxx | Piston |
| BAADAJADxxxx | Seal Assy. |
| BAADAKxxxxxx | Air Separator |
| BAADAKAAxxxx | Body |
| BAADAKABxxxx | Drain Cock |
| BAADALxxxxxx | Accelerator Interlock |
| BAADALAAxxxx | Synchro Valve |
| BAADALABxxxx | Inversion Valve |
| BAADAMxxxxxx | Sensitive Edge System |
| BAADAMAAxxxx | Switch |
| BAADANxxxxxx | Crowd Gate Mechanism |
| BAADANAxxxx | Engine |
| BAADANABxxxx | Lock Release |
| BAADANACxxxx | Idler Lever |
| BAADANADxxxx | Rod |
| BAADANAExxxx | Gates |
| BAADANAFxxxx | Supports |
| BAADANAGxxxx | Bearings |
| BAADAPxxxxxx | Piping - General |
| BAADAQxxxxxx | Wiring Assys.-General |

BBxxxxxxxxxx

BBAxxxxxxxxxx

BBAAAAxxxxxx

BBAAAAAxxxxx

BBAAAAABxxxx

BBAAAAACxxxx

BBAAABxxxxxx

BBAAABAAxxxx

BBAAABABxxxx

Air Comfort System

Heater and Ventilation

Motor and Pump Assy.

Motor Assy.

Armature

Stator

Bearings

Bearing Cap

End Frame

Brush and Spring Assy.

Brushes

Holdings

Pump Assy.

Body

Impeller

Shaft Seal

Cover

Bearing

Bushing

Underfloor Heating and Cooling
Compartment

Heater Core Unit

Blower Motor

Armature

| | |
|---------------|------------------------------------|
| BBAAABACxxxx | Brush and Holder Assy. |
| | Brushes |
| | Holders |
| | Bearings |
| | Bearing |
| | End Frame |
| | Blower Wheels |
| | Fan |
| BBAAABADxxxx | Relays |
| BBAAABAExxxx | Filters |
| BBAAABAFxxxx | Condensor |
| BBAAABAGxxxx | Return Air Dampers |
| BBAAABAHxxxx | Thermostats |
| BBABxxxxxxxxx | Driver Heater and Defroster System |
| BBABAAxxxxxx | Blower Motor Assy. |
| BBABAAAxxxxx | Motor |
| BBABAAABxxxx | Wheel Fan |
| BBABAAACxxxx | Shroud |
| BBABAAADxxxx | Side-Wall Heater |
| BBABAAAExxxx | Heater Core |
| BBABAAAFxxxx | Resistor |
| BBABAAAGxxxx | Coil |
| BBABAAAHxxxx | Heater Line Filter Screen |
| BBABAAAIxxxx | Filter |

| | |
|--------------|--|
| BBABABxxxxxx | Heat Exchanger-Refridgerant |
| BBABACxxxxxx | Panels |
| BBABADxxxxxx | Dehydrator-Strainer |
| BBABAExxxxxx | Water Modulation Valves |
| BBABAFxxxxxx | Floor Discharge Water Flow Control Valve |
| BBABAGxxxxxx | Heater Boxes-Bus/Trailer |
| BBABAHxxxxxx | Shut Off Valves |
| BBABAIxxxxxx | Drain Valves |
| BBABAJxxxxxx | Transmission Heat Exchanger |
| BBACxxxxxxx | Circulating System Additional Engine Cooling |
| BBACAAxxxxxx | Circulating Unit |
| BBACABxxxxxx | Circulating Pumps |
| BBACABAAxxxx | Heater |
| BBACABABxxxx | Hoses |
| BBACABACxxxx | Thermostat |
| BBACACxxxxxx | Ventilation System |
| BBACACAAxxxx | Operator Window |
| BBACACABxxxx | Passenger Windows |
| BBACACACxxxx | Outside Air Inlet Damper |
| BBACACADxxxx | Filter Assy. |
| BBACACAExxxx | Windshield Intake Vents |
| BBACACAFxxxx | Air Intake Vents |

| | |
|--------------|-------------------------------------|
| BBADxxxxxxxx | Air Conditioning Systems |
| BBADAAxxxxxx | Compressor Assy. |
| BBADAAAxxxx | Housing |
| BBADAAABxxxx | Head |
| BBADAAACxxxx | Pistons |
| BBADAAADxxxx | Rings |
| BBADAAAExxxx | Connecting Rods |
| BBADAAAFxxxx | Crankshaft |
| BBADAAAGxxxx | Bearings |
| BBADABxxxxxx | Oil Pump End Plunger & Spring Assy. |
| BBADACxxxxxx | Oil Pump Relief Valve Assy. |
| BBADADxxxxxx | Oil Pan |
| BBADAExxxxxx | Oil Filter Assy. |
| BBADAEAAxxxx | Housing |
| BBADAEABxxxx | Canister |
| BBADAEACxxxx | Flywheel and Housing Assy. |
| | Housing |
| | Flywheel |
| BBADAEADxxxx | Rocker Arm Assys. |
| | Rocker Arms |
| | Springs |
| BBADAEAExxxx | Valves |
| BBADAEAFxxxx | Clutch Assy. |
| | Coil |
| | Pulley |

| | |
|--------------|------------------------------------|
| BBADAEAGxxxx | Gear Assys. |
| BBADAEAHxxxx | Drive Hub Assy. |
| BBADAEAIxxxx | Unloader Mechanism |
| | Cylinder Unloader |
| BBADAEAJxxxx | Suction Valve |
| BBADAEAKxxxx | Discharge Valve |
| BBADAEALxxxx | Expansion Valve |
| BBADAFxxxxxx | Condenser Unit & Assys. |
| BBADAFAAxxxx | Return Air Grill |
| BBADAFABxxxx | Return Air Thermostat |
| BBADAFACxxxx | Temperator Controller |
| BBADAFADxxxx | Temperator Changeover Controller |
| BBADAFAExxxx | Condenser Fans |
| BBADAFAFxxxx | Condenser Coils |
| BBADAGxxxxxx | Evaporator-Blower and Motors Assy. |
| BBADAGAAxxxx | Evaporator |
| BBADAGABxxxx | Assy. |
| BBADAGACxxxx | Motor Assy. |
| BBADAGADxxxx | Rotor Shaft Assy. |
| BBADAGAExxxx | Fan Cooling Assy. |
| BBADAGAFxxxx | Evaporator Coils |
| BBADAGAGxxxx | Heating Coils |
| BBADAHxxxxxx | Alternator Assy. A/C Drive |
| BBADAHAAxxxx | Alternator |
| BBADAHABxxxx | Capacitor Assy. |

| | |
|--------------|--------------------------------------|
| BBADAIxxxxxx | Retainer/Roller Bearings Assy. |
| BBADAJxxxxxx | Rotor Assy. |
| BBADAJAAxxxx | Shaft |
| BBADAJABxxxx | Rotor Drive End |
| | Rotor Hub |
| BBADAKxxxxxx | Slip Ring Assy. |
| BBADALxxxxxx | Coil Assy. |
| BBADAMxxxxxx | Brush Spring Assy. |
| BBADANxxxxxx | Fan Assy. |
| BBADAPxxxxxx | Housing Assy. |
| BBADAQxxxxxx | Rectifier Assys. |
| BBADARxxxxxx | Stator Assy. |
| BBADASxxxxxx | Pulley Assy. |
| BBADASAAxxxx | Belt |
| BBAExxxxxxxx | Receiver Tank-Liquid Refrigerant |
| BBAEAAxxxxxx | Power Assy. |
| BBAEABxxxxxx | Cage Assy. |
| BBAFxxxxxxxx | Refrigerant System Components |
| BBAFAAxxxxxx | Filter Drier |
| BBAFABxxxxxx | Accumulator |
| BBAFACxxxxxx | Liquid Solenoid Valve |
| BBAFADxxxxxx | Isolation Valve |
| BBAFAExxxxxx | EPR Valve |
| BBAFAFxxxxxx | Suction Pressure Switch |
| BBAFAGxxxxxx | Discharge Pressure Protection Switch |

| | |
|--------------|-------------------------------|
| BBAFAHxxxxxx | Evaporator Pressure Regulator |
| BBAFAIxxxxxx | Axial Plate |
| BBAFAJxxxxxx | Valve Plate |
| BBAFAKxxxxxx | Diaphragm |
| BBAFALxxxxxx | Service Valve |
| BBAFAMxxxxxx | Valve & Stem Assy. |
| BBAFANxxxxxx | Test Gauge Connection |
| BBAFAPxxxxxx | Piping - General |
| BBAFAQxxxxxx | Wiring Assys. General |
| BBAGxxxxxxxx | Air Comfort System Controls |
| BBAGAAxxxxxx | Heater Controls/Switches |
| BBAGAAAxxxx | Control Panel |
| | Heater/Defroster Switch |
| | Booster Blower Switch |
| | Control Box |
| | Blower Interlock Relay |
| | Heat Control Relay |
| | Water Solenoid Valve |
| | Mercury Tube Thermostat |
| | Bimetal Thermostat Assy. |
| BBAGAAABxxxx | Control Valves |
| | Grad U Stat |
| | Air Pressure Regulator Valve |
| | Temperature Range Control |

BBAGAAACxxxx

Air Conditioner Controls/Switches
Electrical Control Units
Climate Control Switch
Refrigerant Hi-Low Pressure Switch
Air Condition Oil Pressure Switch
Control Thermostats
Air Shutter Return Assy.
A/C Blower Motor Magnetic Switch

BDxxxxxxxxxx

Electrical System

BDAAxxxxxxxx

Generator Drive Assy.

BDAAAAxxxxxx

Generator Drive

BDAAAAAAxxxx

Drive Gear

BDAAAAABxxxx

Balance Shaft Gear

BDAAAAACxxxx

Driver Gear

BDAAAAADxxxx

Adapter

BDAAAAAExxxx

Rotor Shaft

BDAAABxxxxxx

Diode End Frame

BDAAABAxxxxx

Diodes

BDAAABABxxxx

Support Assy.

BDAAABACxxxx

Relay

BDAAACxxxxxx

Generator

BDAAACAxxxxx

Field

BDAAACABxxxx

Rotor Assy.

| | |
|---------------|-----------------------------------|
| BDAAACACxxxx | Stator Assy. |
| BDAAACADxxxx | Bearings |
| BDAAADxxxxxx | Generator |
| BDAAADAAxxxx | Field |
| BDAAADABxxxx | Rotor Assy. |
| BDAAADACxxxx | Stator Assy. |
| BDAAADADxxxx | Shaft |
| BDAAADAExxxx | Control Relay |
| BDAAAExxxxxx | Voltage Regulator |
| BDAAAEEAxxxx | Diodes |
| BDAAAEEBxxxx | Condensors |
| BDAAAEECxxxx | Resistors |
| BDAAAEEADxxxx | Transistors |
| BDAAAEEAExxxx | Insulators |
| BDABxxxxxxxx | Power Storage System |
| BDABAAxxxxxx | Batteries (24 volt-Series) |
| BDABABxxxxxx | Compartment, Battery |
| | Charging Circuit |
| | Cables |
| BDACxxxxxxxx | Lighting System External |
| BDACAAxxxxxx | Head Light Assy-Roadside/Curbside |
| BDACAAAxxxxx | Sealed Beam (Standard-Bezel) |
| BDACAAABxxxx | Shell |
| BDACAAACxxxx | Retainer Ring |
| BDACAAADxxxx | Door Assy. |

| | |
|--------------|---|
| BDACABxxxxxx | Dimmer Switch |
| BDACACxxxxxx | Directional Signals Standard - Roadside/Curbside |
| BDACADxxxxxx | Directional Signals-Foot Operated |
| BDACADAxxxxx | Body Assy. |
| BDACADABxxxx | Bulbs |
| BDACADACxxxx | Lens |
| BDACADADxxxx | Door Assy. |
| BDACAExxxxxx | Stop & Tail Light Assys. |
| BDACAEAAxxxx | Body Assy. |
| BDACAEABxxxx | Bulbs |
| BDACAEACxxxx | Lens |
| BDACAEADxxxx | Door Assy. |
| BDACAEAExxxx | Stop Light Switch |
| BDACAFxxxxxx | Hazard Warning Flasher System |
| BDACAGxxxxxx | Identification Light System |
| BDACAGAAxxxx | Body |
| BDACAGABxxxx | Bulbs |
| BDACAGACxxxx | Lens |
| BDACAGADxxxx | Door Assy. |
| BDACAHxxxxxx | Marker Lights |
| BDACAHAAxxxx | Body |
| BDACAHABxxxx | Bulbs |
| BDACAHACxxxx | Lens |
| BDACAHADxxxx | Door Assy. |
| BDACAIxxxxxx | Back Up Light System |

| | |
|---------------|---|
| BDACAIAAxxxx | Switch Assy. |
| BDACAIABxxxx | Body |
| BDACAIACxxxx | Bulbs |
| BDACAIADxxxx | Lens |
| BDACAIAExxxx | Door Assy. |
| BDADxxxxxxxx | Lighting System Internal |
| BDADAAxxxxxx | Gauge and Tell Tale Lights Assys. |
| BDADABxxxxxx | Farebox Light Assys. |
| BDADACxxxxxx | Destination Sign Light Assys. |
| BDADADxxxxxx | Engine Compartment Light Assys. |
| BDADAExxxxxx | Emergency Door Light Assy. |
| BDADAFxxxxxx | Dome Light Assys. |
| BDADAGxxxxxx | Fluorescent Light Assys. |
| BDADAGAAxxxx | Fluorescent Bulbs |
| BDADAHxxxxxx | Stepwell Light Assys. Front/Rear |
| BDAExxxxxxxx | Controls/Circuit Protection Assys. |
| BDAEAAxxxxxx | Instrument Panel Assys. |
| BDAEAAAxxxx | Power Relay |
| BDAEAAAABxxxx | Fuse Block |
| BDAEAAAACxxxx | Terminal Assy. |
| BDAEAAAADxxxx | Diagnostic Module |
| BDAEAAAExxxx | Circuit Brakers |
| BDAEABxxxxxx | Speedometer Assy Mechanical Electrical |
| BDAEABAAxxxx | Speedometer Head |
| BDAEABABxxxx | Cable |

| | |
|--------------|----------------------------------|
| BDAEABACxxxx | Worm Gear |
| BDAEACxxxxxx | Sensor & Rotor Assy (Electrical) |
| BDAEACAAxxxx | Head Assy. |
| BDAEACABxxxx | Slotted Rotor |
| BDAEACACxxxx | Wheel Speed Sensor |
| BDAEACADxxxx | Sensor Module |
| BDAEACAExxxx | Electrical Cable |
| BDAEADxxxxxx | Tachograph Assy. |
| BDAEADAAxxxx | Tachograph Indicator |
| BDAEADABxxxx | Mechanical Assys. |
| BDAEADACxxxx | Electrical Assys. |
| BDAEAExxxxxx | Voltmeter Indicator |
| BDAEAFxxxxxx | Motor Guard Control |
| BDAEAGxxxxxx | Panel Light Rheostat |
| BDAEAHxxxxxx | Test Switch Assy. |
| BDAEAIxxxxxx | Fast Idle Switch |
| BDAEAJxxxxxx | Passenger Signal Switch |
| BDAEAKxxxxxx | Headlight Switch Assy. |
| BDAEALxxxxxx | Directional Switch Assy. |
| BDAEAMxxxxxx | Hazard Switch Assy. |
| BDAEANxxxxxx | Parking Brake Stop Lamp Switch |
| BDAEAPxxxxxx | Engine Compartment Switch |
| BDAEAQxxxxxx | Emergency Door Lights |
| BDAEARxxxxxx | Door Lights Control |
| BDAEASxxxxxx | Interior Lights Control |

| | |
|--------------|-----------------------------|
| BDAEATxxxxxx | Stepwell Lights Control |
| BDAFxxxxxx | Protective Circuits General |
| BDAFAAxxxxxx | Regulators |
| BDAFABxxxxxx | Relays |
| BDAFACxxxxxx | Switches |
| BDAFADxxxxxx | Wireharness Assys. |
| BDAFAExxxxxx | Modules |
| BDAFAFxxxxxx | Terminal Assys. |
| BDAFAGxxxxxx | Fuse Blocks |
| BDAFAHxxxxxx | Circuit Breakers |
| BDAFAIxxxxxx | Connectors |
| BDAFAJxxxxxx | Cannon Plug Assys. |
| | |
| BExxxxxx | <u>Engine Systems</u> |
| BEAAxxxxxx | Diesel Engine 8 Cylinder |
| BEABxxxxxx | Diesel Engine 6 Cylinder |
| BEABAAxxxxxx | Engine Block |
| BEABAAAxxxx | Liners |
| BEABAAABxxxx | Cylinder Head |
| BEABABxxxxxx | Crank Shaft |
| BEABABAAxxxx | Bearings |
| BEABABABxxxx | Pully |
| BEABABACxxxx | Vibration Damper |

| | |
|--------------|---------------------------|
| BEABACxxxxxx | Piston Assys. |
| BEABACAAxxxx | Pistons |
| BEABACABxxxx | Rings |
| BEABACACxxxx | Pins |
| BEABACADxxxx | Connecting Rods |
| BEABACAExxxx | Bearing Caps |
| BEABADxxxxxx | Camshaft |
| BEABADAAxxxx | Bearings |
| BEABADABxxxx | Accessory Drive |
| BEABAExxxxxx | Gear Train Assy. |
| BEABAEAAxxxx | Crankshaft Gear |
| BEABAEABxxxx | Camshaft Gear |
| BEABAFxxxxxx | Valve Operating Mechanism |
| BEABAFAAxxxx | Rocker Arms |
| BEABAFABxxxx | Push Rods |
| BEABAFACxxxx | Valves-Intake/Exhaust |
| BEABAFADxxxx | Guides |
| BEABAFAExxxx | Springs |
| BEABAFAFxxxx | Cover |
| BEABAGxxxx | Engine Mount Assys. |
| BEABAGAAxxxx | Upper Support Brackets |
| BEABAGABxxxx | Engine Cradle Support |
| BEABAGACxxxx | Cushion Mount |
| BEABAGADxxxx | Bulkhead Bracket |
| BEABAGAExxxx | Cradle Hangers |

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|----------------|-----------------------------------|
| BEABAGAFxxxx | Rear Mounts |
| BEABAGAGxxxx | Stabilizer Rod |
| BEACxxxxxxxx | Engine Cooling System |
| BEACAAxxxxxx | Water Pump Assy. |
| BEACAAAxxxx | Housing |
| BEACAAABxxxx | Shaft Assy. |
| BEACAAACxxxx | Bearing |
| BEACAAADxxxx | Impeller |
| BEACAAAExxxx | By-Pass Elements |
| BEACAAAFxxxx | Water Pipe Connect |
| BEACAAAGxxxx | Seal |
| BEACAAAHxxxx | Hose |
| BEACABxxxxxxxx | Radiator |
| BEACABAAxxxx | Hoses |
| BEACABABxxxx | Shutter Assy. |
| BEACABACxxxx | Shutter Air Cylinder |
| BEACABADxxxx | Filter |
| BEACACxxxxxx | Thermostat Outlet Housing Assy. |
| BEACACAAxxxx | Housing |
| BEACACABxxxx | Thermostats |
| BEACACACxxxx | Gasket |
| BEACACADxxxx | Cover |
| BEACACAExxxx | Gauge |
| BEACACAFxxxx | Water Temperature Overheat Switch |

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|--------------|-----------------------------|
| BEACADxxxxxx | Surge Tank Assy. |
| BEACADAAxxxx | Tank |
| BEACADABxxxx | Filler Cap |
| BEACADACxxxx | Sight Gauge |
| BEACADADxxxx | Pressure Relief Valve |
| BEACADAExxxx | Piping |
| BEACADAFxxxx | Filter |
| BEACADAGxxxx | Element |
| BEACADAHxxxx | Cock Valve |
| BEACAExxxxxx | Hydraulic Fluid Drive Assy. |
| BEACAEAAxxxx | Driving Torus Housing |
| BEACAEABxxxx | Driving Torus |
| BEACAEACxxxx | Damper |
| BEACAEADxxxx | Coupling |
| BEACAEAExxxx | Fan Drive Housing HUB |
| BEACAEAFxxxx | Bearing |
| BEACAEAGxxxx | Retainer |
| BEACAEAHxxxx | Clutch Thrust Plate |
| BEACAEAIxxxx | Brake Disc |
| BEACAEAJxxxx | Piston |
| BEACAEAKxxxx | End Housing |
| BEACAEALxxxx | Piston Spring |
| BEACAEAMxxxx | Driver Plates |
| BEACAEANxxxx | Drive Shaft |
| BEACAEAPxxxx | Gear and Pinion |

| | |
|--------------|---------------------------------|
| BEACAEAQxxxx | Retainer |
| BEACAEARxxxx | Drive Pulley |
| BEACAEASxxxx | Fan |
| BEACAEATxxxx | Control Valve |
| BEACAFxxxxxx | Heat Exchanger Assy. |
| BEACAFAAxxxx | Core |
| BEACAFABxxxx | Low Coolant Relay |
| BEADxxxxxxxx | Lubricant System |
| BEADAAxxxxxx | Oil Pump Assy. |
| BEADAAAxxxx | Body |
| BEADAAABxxxx | Lobe Rotors |
| BEADAAACxxxx | Drive Gear |
| BEADAAADxxxx | Suction Pipe-Strainer |
| BEADAAAExxxx | Oil Pump Delivery |
| BEADAAAFxxxx | Oil Pan/Dipstick |
| BEADABxxxxxx | Oil Pump Scavenge |
| BEADABAAxxxx | Body |
| BEADABABxxxx | Lobe Rotors |
| BEADACxxxxxx | Oil Pressure Relief Valve Assy. |
| BEADACAAxxxx | Valve |
| BEADACABxxxx | Spring |
| BEADACACxxxx | Cap |
| BEADADxxxxxx | Oil Filter Assy. |
| BEADACAAxxxx | Shell |
| BEADACABxxxx | Element |

| | |
|---------------|---------------------------------------|
| BEADAExxxxxx | By-Pass Oil Filter Assy. |
| BEADAEAAxxxx | Filter Base |
| BEADAEABxxxx | Element |
| BEADAEACxxxx | Filter Shell |
| BEADAFxxxxxx | Oil Cooler Assy. |
| BEADAFAAxxxx | Body |
| BEADAFABxxxx | Cooler Element |
| BEADAGxxxxxx | Piston Jet Coolers |
| BEADAGAAxxxx | Valves |
| BEADAHxxxxxx | Crankcase Ventilation/Breather System |
| BEADAHAAxxxx | Breather/Ventilation Chamber |
| BEADAHABxxxx | Breather Valve |
| BEADAHACxxxx | Breather Pipe |
| BEADAIxxxxxx | Auto Oil Feed System |
| BEADAIAAxxxx | Oil Pipes |
| BEADAIABxxxx | Auto Shut Off Valve |
| BEADAIACxxxx | Ball |
| BEADAJxxxxxx | Oil Pan Float Valve Assy. |
| BEADAJAAxxxx | Reservoir |
| BEADAJABxxxx | Float Valve |
| BEAExxxxxxxxx | Air Cleaner Intake-Exhaust Systems |
| BEAEAAxxxx | Intake System |
| BEAEAAAxxxx | Body |
| BEAEAAABxxxx | Screen |
| BEAEAAACxxxx | Inlet Hose |

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|--------------|---------------------------------|
| BEAEAAADxxxx | Restriction Indicator |
| BEAEAAAExxxx | Pump Hose |
| BEAEAAAFxxxx | Boot |
| BEAEAAAGxxxx | Vacuator Valve |
| BEAEAAAHxxxx | Element |
| BEAEAAAIxxxx | Intake Duct |
| BEAEAAAJxxxx | Manifold Assy. |
| BEAEABxxxxxx | Exhaust System |
| BEAEABAAxxxx | Manifolds |
| BEAEABABxxxx | Head Pipes |
| BEAEABACxxxx | Flex Pipes |
| BEAEABADxxxx | Connecting Pipe |
| BEAEABAExxxx | Muffler Assy. |
| BEAEABAFxxxx | Straps |
| BEAEABAGxxxx | Brackets |
| BEAEABAHxxxx | Tail Pipe Assy. |
| BEAFxxxxxxxx | Electrical Distribution Systems |
| BEAFAAxxxxxx | Emergency Stop System |
| BEAFAAAxxxx | Engine Stop Solenoid Valve |
| BEAFAAABxxxx | Case and Coil Assy. |
| BEAFAAACxxxx | Plunger and Rod Assy. |
| BEAFAAADxxxx | Plunger Spring |
| BEAFAAAExxxx | Body |
| BEAFAAAFxxxx | Engine Fast Idle Solenoid Valve |
| BEAFAAAGxxxx | Engine Control-Air Cylinder |

| | |
|--------------|-------------------------------------|
| BEAFAAAHxxxx | Engine Stop-Air Cylinder |
| BEAFAAAIxxxx | Fast Idle Limiting Air Cylinder |
| BEAFAAAJxxxx | Fast Idle Air Cylinder |
| BEAFABxxxxxx | Low Oil Pressure Warning System |
| BEAFABAAxxxx | Pressure Gauge |
| BEAFABABxxxx | Pressure Switch |
| BEAGxxxxxxxx | Engine Brake Mechanism |
| BEAGAAxxxxxx | Supply Housing Assy. |
| BEAGAAAxxxx | Housing |
| BEAGAAABxxxx | Exhaust Valve Bridge |
| BEAGAAACxxxx | Slave Piston |
| BEAGAAADxxxx | Solenoid Valve |
| BEAGAAAExxxx | Drone Housing |
| BEAGAAAFxxxx | Control Valve |
| BEAGABxxxxxx | Master Piston Fork Assy. |
| BEAGABAxxxx | Master Piston |
| BEAGABABxxxx | Slave Piston |
| BEAGACxxxxxx | Engine Micro Switch |
| BEAGACAAxxxx | Buffer Switch |
| BEAGACABxxxx | Splitter Control Valve Micro Switch |
| BEAGADxxxxxx | Engine Starter System |
| BEAGADAAxxxx | Motor Assy. |
| BEAGADABxxxx | Rotor |
| BEAGADACxxxx | Collector |

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|--------------|----------------------|
| BEAGADADxxxx | Brush Assy. |
| BEAGADAExxxx | Solenoid Switch |
| BEAGADAFxxxx | Pinion Shaft Assy. |
| BEAGADAGxxxx | Multiple Disc Clutch |
| | Control Relay |
| BEAGADAHxxxx | Start-Locking Relay |
| | Capictor |
| BEAGADAIxxxx | Cable Assys. |

BFxxxxxxxxxx

Brake and Air Supply Systems

BFAAxxxxxxxx

Master Brake Cylinder Assy. & Brake Components

BFAAAAxxxxxxxx

BRAKE Lining
Brake Pedal Assy.

BFAAABxxxxxxxx

Mounting Pin Assy.

BFAAACxxxxxxxx

Plate

BFAAADxxxxxxxx

Bushing

BFAAAExxxxxx

Linkage Assy.

BFAAAFxxxxxxxx

Housing Assy.

BFAAAFAXxxxx

Diaphragm

BFAAAFABxxxx

Piston

BFAAAFACxxxx

Spring

BFAAAFADxxxx

Piston Rod Guide

BFAAFAExxxxx

Boot

BFAAFAFxxxx

Stop Light Pressure Switch

| | |
|---------------|------------------------------|
| BFABxxxxxxx | Tristop Brake Cylinder Assy. |
| BFABAAxxxxxx | Housing Assy. |
| BFABAAAxxxx | Diaphragm |
| BFABAAABxxxx | Spring |
| BFABAAACxxxx | Piston Rod |
| BFABAAADxxxx | Piston |
| BFABAAAExxxx | Spring |
| BFABABxxxxxx | Single Relay Valve |
| BFABABAAxxxx | Piston |
| BFABABABxxxx | Diaphragm |
| BFABABACxxxx | Spring |
| BFABACxxxxxx | Overload Protection Valve |
| BFABACAAxxxx | Valve Body |
| BFABACABxxxx | Pistons |
| BFABACACxxxx | Diaphragm |
| BFABACADxxxx | Air Line Strainer |
| BFABADxxxxxxx | Flow Relief Valve |
| BFABADAAxxxx | Adjusting Spring |
| BFABADABxxxx | Piston |
| BFABADACxxxx | Diaphragm |
| BFABADADxxxx | Check Valve |
| BFABADAExxxx | Plunger |
| BFABAExxxxxx | Pressure Limiting Valve |
| BFABAEAAxxxx | Housing |
| BFABAEABxxxx | Piston |

| | |
|--------------|-----------------------------|
| BFABAEACxxxx | Pressure Pad |
| BFABAEADxxxx | Valve |
| BFABAEAExxxx | Spring |
| BFABAEAFxxxx | Case, Spring |
| BFABAEAGxxxx | Cover |
| BFABAFxxxxxx | Fast Exhausting Valve |
| BFABAFAAxxxx | Upper/Lower Housing |
| BFABAFABxxxx | Diaphragm |
| BFABAFACxxxx | Coil Spring |
| BFABAGxxxxxx | Automatic Drain Valve |
| BFABAGAAxxxx | Upper/Lower Housing |
| BFABAGABxxxx | Piston |
| BFABAGACxxxx | Housing Cap |
| BFABAHxxxxxx | Two Way Valve |
| BFABAIxxxxxx | Emergency Release Valve 3/2 |
| BFABAIAAxxxx | Push Button |
| BFABAIABxxxx | Valve Plunger |
| BFABAIACxxxx | Coil Spring |
| BFABAIADxxxx | Piston |
| BFABAIAExxxx | Bushing |
| BFABAJxxxxxx | Air Drier Way Valve 3/2 |
| BFABAJAAxxxx | Piston |
| BFABAJABxxxx | Valve Plunger |
| BFABAJACxxxx | Coil Spring |

| | |
|--------------|--|
| BFABAKxxxxxx | Anti-Jack Knife Brake Way 3/2 |
| BFABAKAAxxxx | Valve, Solenoid |
| BFABAKABxxxx | Plunger |
| BFABAKACxxxx | Piston |
| BFABAKADxxxx | Spring |
| BFABAKAExxxx | Armature |
| BFABAKAFxxxx | Coil Body |
| BFABALxxxxxx | Auxiliary Way Valve 3/2 |
| BFABALAAxxxx | Electrical Control |
| BFABALABxxxx | Solenoid Coil |
| BFABALACxxxx | Spring |
| BFABALADxxxx | Armature |
| BFABAMxxxxxx | Open Door Brake Valve |
| BFABAMAAxxxx | Coil Body |
| BFABAMABxxxx | Armature |
| BFABAMACxxxx | Spring |
| BFABAMADxxxx | Solenoid Coil |
| BFABANxxxxxx | Slack Adjusters (Steerable-Drive), Automatic-Rear |
| BFABANAAxxxx | Control Disc |
| BFABANABxxxx | Spring Assy. |
| BFABANACxxxx | Worm Shaft |
| BFABANADxxxx | Cone Clutch |
| BFABANAExxxx | Rack |
| BFABANAFxxxx | Gear |
| BFABANAGxxxx | Cover Plate |

| | |
|---------------------|-----------------------------------|
| BFABANAHxxxx | Quick Release Valve |
| <u>BFABAPxxxxxx</u> | Steerable/Front-Axle Wheel Brakes |
| BFABAPAAxxxx | Bushing |
| BFABAPABxxxx | Cam Support Bracket |
| BFABAPACxxxx | Spider-Bushing |
| BFABAPADxxxx | Brake Camshaft |
| BFABAPAExxxx | Return Spring Pin |
| BFABAPAFxxxx | Return Spring |
| BFABAPAGxxxx | Anchor Plunger |
| BFABAPAHxxxx | Anchor Bushing |
| BFABAPAIxxxx | Spider Assy. |
| BFABAPAJxxxx | Backing Plate |
| BFABAPAKxxxx | Brake Drum |
| BFABAPALxxxx | Brake Shoes |
| BFABAPAMxxxx | Brake Lining |
| BFABAPANxxxx | Pin-Anchor |
| BFABAPAPxxxx | Brake Chambers |
| BFABAPAQxxxx | Actuator |
| BFABAPARxxxx | Plunger Housing |
| BFABAPASxxxx | Plunger |
| BFABAPATxxxx | Adjusting Pawl |
| BFABAPAUxxxx | Wedge Assy. |
| BFABAPAVxxxx | Adjusting Sleeve Actuator |
| BFABAPAWxxxx | Rollers |
| BFABAPAXxxxx | Lock Plate |

| | |
|---------------------|-----------------------------------|
| BFABAPAYxxxx | Cage |
| BFABAPAZxxxx | Cast Spider Housing |
| BFABAPBAxxxx | Non Pressure Housing |
| BFABAPBBxxxx | Diaphragm Plate-Push Rod |
| ✓ BFABAPBCxxxx | Diaphragm-Aux. <i>ARTICULATED</i> |
| BFABAPBDxxxx | Pressure Housing |
| BFABAPBExxxx | Pressure Plate-Aux. |
| BFABAPBFxxxx | Mechanical Release Yoke |
| BFABAPBGxxxx | Bearing |
| <u>BFABAQxxxxxx</u> | Drive/Rear Axle Wheel Brakes |
| BFABAQAAxxxx | Bushing |
| BFABAQABxxxx | Cam Support Bracket |
| BFABAQACxxxx | Bushing |
| BFABAQADxxxx | Seal Housing |
| BFABAQAExxxx | Bearing |
| BFABAQAFxxxx | Bushing |
| BFABAQAGxxxx | Return Spring Pin |
| BFABAQAHxxxx | Return Spring |
| BFABAQAIxxxx | Anchor Bushing |
| BFABAQAJxxxx | Roller Pin |
| BFABAQAKxxxx | Anchor Pin |
| BFABAQALxxxx | Spider Assy. |
| BFABAQAMxxxx | Backing Plate |
| BFABAQANxxxx | Brake Camshaft |
| BFABAQAPxxxx | Brake Drum |

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|--------------|--|
| BFABAQAQxxxx | Brake Shoes. |
| BFABAQARxxxx | Brake Lining |
| BFABARxxxxxx | Brake Pressure Governors (Vibration Dampers Drive Axle/Front Trailer) |
| BFABARAAxxxx | Piston-Upper/Lower |
| BFABARABxxxx | Check Valve |
| BFABARACxxxx | Bore |
| BFABARADxxxx | Piston-Bellows |
| BFABARAExxxx | Roller |
| BFABARAFxxxx | Lever-Upper/Lower |
| BFABARAGxxxx | Spring |
| BFABARAHxxxx | Valve Body |
| BFABARAIxxxx | Pull Rod |
| BFABARAJxxxx | Housing |
| BFABARAKxxxx | Inlet-Outlet Valve |
| BFABARALxxxx | Cylinder |
| BFABASxxxxxx | D-2 Governor Assy. |
| BFABASAAxxxx | Body |
| BFABASABxxxx | Piston Assy. |
| BFABASACxxxx | Valve |
| BFABASADxxxx | Cover |
| BFABATxxxxxx | Lead Bus Brake Application Valve |
| BFABATAAxxxx | 3-Way Switch |
| BFABATABxxxx | Switch Housing |
| BFABATACxxxx | Rubber Damper |
| BFABATADxxxx | Piston-Upper/Lower |
| BFABATAExxxx | Springs |

| | |
|--------------|-------------------------------|
| BFABATAFxxxx | Plug |
| BFABATAGxxxx | Valve |
| BFABATAHxxxx | Housing Half-Upper/Lower |
| BFABATAIxxxx | Spring |
| BFABATAJxxxx | Valve |
| BFABATAKxxxx | Tred Plate |
| BFABAUxxxxxx | Four Circuit Protection Valve |
| BFABAUAAxxxx | Valve |
| BFABAUABxxxx | Diaphragms |
| BFABAUACxxxx | Springs |
| BFABAUADxxxx | Check Valve |
| BFABUAExxxx | Overflow Valves |
| BFABAVxxxxxx | Trailer Control Valve |
| BFABAVAAxxxx | Piston |
| BFABAVABxxxx | Spring |
| BFABAVACxxxx | Valves |
| BFABAVADxxxx | Piston Tube |
| BFABAVAExxxx | Diaphragm |
| BFABAVAFxxxx | Bleeder Valve |
| BFABAVAGxxxx | Piston |
| BFABAWxxxxxx | Line Filter Assy. |
| BFABAWAAxxxx | Housing |
| BFABAWABxxxx | Cartridge |
| BFABAWACxxxx | Coil Spring |

| | |
|--------------|---------------------------------------|
| BFACxxxxxxxx | Parking Brake System |
| BFACAAxxxxxx | Parking Brake Control Valve Assy. |
| BFACAAAxxxxx | Cover Assy. |
| BFACAAABxxxx | Relay Valve, Parking Brake |
| BFACAAACxxxx | Control Lever-Hand |
| BFACAAADxxxx | Linkage |
| BFACAAAExxxx | Adjustable Lever |
| BFACAAAFxxxx | Spring |
| BFACAAAGxxxx | Plunger Rod |
| BFACAAAHxxxx | Pressure Piece |
| BFACAAAIxxxx | Valve Body |
| BFACAAAJxxxx | Staging Spring |
| BFACAAAKxxxx | Staging Piston |
| BFACAAALxxxx | Spring |
| BFACAAAMxxxx | Valve Plunger |
| BFACAAANxxxx | Drive |
| BFADxxxxxxxx | Air Supply Systems |
| BFADAAxxxxxx | Air Compressor Assy. & Supply Systems |
| BFADAAAxxxxx | Cylinder Block |
| BFADAAABxxxx | Head |
| BFADAAACxxxx | Valves-Inlet/Discharge |
| BFADAAADxxxx | Springs |
| BFADAAAExxxx | Seats |
| BFADAAAFxxxx | Guides |
| BFADAAAGxxxx | Pistons |

| | |
|--------------|---------------------------------|
| BFADAAAHxxxx | Unloaders |
| BFADAAAIxxxx | Rings |
| BFADAAAJxxxx | Pins |
| BFADAAAKxxxx | Connecting Rods |
| BFADAAALxxxx | Bearings |
| BFADAAAMxxxx | Caps |
| BFADAAANxxxx | Crankshaft |
| BFADAAAPxxxx | Bearings-Main/Ball |
| BFADAAAQxxxx | Crankcase |
| BFADAAARxxxx | Cover |
| BFADABxxxxxx | Air Tanks |
| BFADABAAxxxx | Tanks-Lead Bus/Trailer |
| BFADABABxxxx | Lines |
| BFADABACxxxx | Connectors |
| BFADACxxxxxx | Supply Reservoir |
| BFADACAAxxxx | Valve |
| BFADACABxxxx | Drain Cock |
| BFADADxxxxxx | Primary Reservoir |
| BFADAExxxxxx | Secondary Reservoir |
| BFADAFxxxxxx | Parking Reservoir |
| BFADAFAAxxxx | Check Valves |
| BFADAFABxxxx | Air Gauges |
| BFADAFACxxxx | Low Pressure Indicator Switches |
| BFADAFADxxxx | Application Valves |
| BFADAFAExxxx | Inversion Valves-TR-3 |

| | |
|--------------|-----------------------------|
| BFADAFAFxxxx | Brake Modulation Valve |
| BFADAFAGxxxx | Cables |
| BFADAFAHxxxx | Connectors |
| BFADAGxxxxxx | Muffler Assy. |
| BFADAGAAxxxx | Stand By Valve |
| BFADAGABxxxx | Pressure Regulator Valve |
| BFADAGACxxxx | Magnet Valve |
| BFADAGADxxxx | Double Check Valve |
| BFADAHxxxxxx | Alcohol Evaporator |
| BFADAHAAxxxx | Check Valve |
| BFADAHABxxxx | Toggle |
| BFADAHACxxxx | Wick |
| BFADAHADxxxx | Rod |
| BFADAHAExxxx | Tank |
| BFADAHAFxxxx | Moisture Ejector Valve |
| BFADAIxxxxxx | Remote Control Drain System |
| BFADAIAAxxxx | Control Air Valve |
| BFADAIABxxxx | Pressure Regulator |
| BFADAIACxxxx | Housing-Upper/Lower |
| BFADAIADxxxx | Springs |
| BFADAIAExxxx | Check Valves |
| BFADAIAFxxxx | Plunger |
| BFADAIAGxxxx | Safety Valve |
| BFADAIAHxxxx | Filter |
| BFADAIAIxxxx | Piston |
| BFADAIAJxxxx | Diaphragm |

BLxxxxxxxx

BLAxxxxxxxx

BLAAAxxxxxxxx

BLAABxxxxxxxx

BLAACxxxxxxxx

BLAADxxxxxxxx

BLAAExxxxxxxx

BLAAFxxxxxxxx

BLAAGxxxxxxxx

BLAAHxxxxxxxx

BLAAIxxxxxxxx

BLAAJxxxxxxxx

BLABxxxxxxxx

BLABAxxxxxxxx

BLABABxxxxxxxx

BLABACxxxxxxxx

BLACxxxxxxxx

BLACAxxxxxxxx

BLACABxxxxxxxx

BLACACxxxxxxxx

BLACADxxxxxxxx

BLACAExxxxxxxx

BLACAFxxxxxxxx

Fuel Supply Systems

Fuel Tank - Supply/Return System

Fuel Tank Assy.

Primary Service Reservoir

Filler Cap

Vent Line

Anti Spill Valve

Check Valve

Low Pressure Switch

Pressure Relief Valve

Level Control Valve

Fuel Level Sending Unit

Primary-Secondary Fuel Filters
(-Stages 1&2)

Shells

Elements

Drain Cocks

Fuel Pump Assys.

Shaft

Gears

Cover Plate

Housing

Seal

Supply-Return Lines

| | |
|----------------|--|
| BLADxxxxxxxx | Fuel Lift Pump |
| BLADAAxxxxxxxx | Pump Screen |
| BLADABxxxxxxxx | Hand Primer |
| BLAExxxxxxxx | Injection Pump |
| BLAEAAxxxxxxxx | Injection Control Lever |
| BLAEABxxxxxxxx | Relief Valve |
| BLAEACxxxxxxxx | Solenoid Valve |
| BLAEADxxxxxxxx | Return-Pressure Pipes |
| BLAEAExxxxxxxx | Leak Off Connection |
| BLAEAFxxxxxxxx | Pipe-Leak Off |
| BLAFxxxxxxxx | Governor |
| BLAGxxxxxxxx | Air Controlled Throttle System |
| BLAGAAxxxxxxxx | Treadle |
| BLAGABxxxxxxxx | Connecting Linkage |
| BLAGACxxxxxxxx | Position Transmitter |
| BLAGADxxxxxxxx | Operating Lever |
| BLAGAExxxxxxxx | Transmission Electrical Connection |
| BLAGAFxxxxxxxx | Floor Plate |
| BLAGAGxxxxxxxx | Pedal Lock Cylinder |
| BLAGAHxxxxxxxx | Control Valve |
| BLAGAIxxxxxxxx | Rod & Plunger |
| BLAGAJxxxxxxxx | Torsion Spring |
| BLAGAKxxxxxxxx | Control Cylinder |
| BLAHxxxxxxxx | Throttle & Control Linkage Assys. |
| BLAHAAxxxxxxxx | Modulation Linkage-Engine/ Transmission |

| | |
|--------------|----------------------------------|
| BLAHABxxxxxx | Modulation Lever |
| BLAHACxxxxxx | Spring |
| BLAHADxxxxxx | Intermediate Lever |
| BLAHAExxxxxx | Operating Lever |
| BLAHAFxxxxxx | Control Linkage |
| BLAHAGxxxxxx | Cable |
| BLAIxxxxxxx | Fast Idle Air Pressure Cylinder |
| BLAIAAxxxxxx | Body |
| BLAIABxxxxxx | Spring-Inner/Outer |
| BLAIACxxxxxx | Piston |
| BLAIADxxxxxx | Rod |
| BLAIAExxxxxx | Bearing |
| BLAIAFxxxxxx | Sleeve |
| BLAIAGxxxxxx | Cover |
| BLAJxxxxxxx | Engine Stop Cylinder |
| BLAJAAxxxxxx | Operating Lever |
| BLAJABxxxxxx | Cylinder-Stop |
| BLAJACxxxxxx | Air Pressure Line |
| BMxxxxxxxxxx | <u>Body & Structures</u> |
| BMAAxxxxxxx | Frame & Undercarriage Structures |
| BMAAAAxxxxxx | Shell Exterior-Interior |
| BMAAAAAxxxx | Paneling |
| BMAAAAABxxxx | Ceiling |
| BMAAAAACxxxx | Sides |

| | |
|---------------|----------------------------------|
| BMAAAAADxxxx | Floor |
| BMAAAAAExxxx | Front-Rear |
| BMAAAAAFxxxx | Floor-Covering |
| BMAAAAAGxxxx | Insulation |
| BMAAAA AHxxxx | Jack Pad |
| BMAAABxxxxxx | Front Wall Assy. |
| BMAAABAAxxxx | Access Doors |
| BMAAABABxxxx | Closure Assys. Door, (Top Sides) |
| BMAAABACxxxx | Bumper Assys., Extensions |
| BMAAACxxxxxx | Curbside Assys. |
| BMAAACAAxxxx | Finders, Front-Rear |
| BMAAACABxxxx | Rub Rail |
| BMAAACACxxxx | Trim |
| BMAAADxxxxxx | Articulated Assys. |
| BMAAADAAxxxx | Hinge Connections |
| BMAAADABxxxx | Frame Mounts |
| BMAAADACxxxx | Live Ring (Horz. Swing) |
| BMAAADADxxxx | Auxiliary Frame (Vert) |
| BMAAADAExxxx | Bellows Assy. |
| BMAAADAFxxxx | Gangway Bellows |
| BMAAADAGxxxx | Center Frame |
| BMAAADAHxxxx | Coupling |
| BMAAADAIxxxx | Roof Coupling |
| BMAAADAJxxxx | Tensioning Cable Assys. |
| BMAAADAKxxxx | Turntable Assy. |
| BMAAADALxxxx | Control Arms |

| | |
|--------------|------------------------------------|
| BMAAADAMxxxx | Tie Rod Assys. |
| BMAAADANxxxx | Articulated Brake Indicators |
| BMAAADAPxxxx | Warning System Switches |
| BMAAAExxxxxx | Windows Assys. |
| BMAAAEAAxxxx | Emergency Escape Side-Rear Windows |
| BMAAAEABxxxx | Windshield Assy. |
| BMAAAEACxxxx | Rear Window |
| BMAAAEADxxxx | Side Windows |
| BMAAAEAExxxx | Outer Frame |
| BMAAAEAFxxxx | Brace |
| BMAAAEAGxxxx | Hinge |
| BMAAAEAHxxxx | Operators Side |
| BMAAAEAIxxxx | Sash Assys. |
| BMAAAFxxxxxx | Seat Assys. |
| BMAAAFAAxxxx | Operator |
| BMAAFAFBxxxx | Passenger |
| BMAAFAFCxxxx | Hand Holds |
| BMAAFAFDxxxx | Partitions |
| BMAAFAFExxxx | Stantions |
| BMAAAGxxxxxx | Roof Hatch Assys (Vent/Emergency) |
| BMAAAGAAxxxx | Frames |
| BMAAAGABxxxx | Holdes |
| BMAAAGACxxxx | Spring Body's |
| BMAAAGADxxxx | Covers |
| BMAAAHxxxxxx | Destination Signs |
| BMAAAHAAxxxx | Front Assy. |

| | |
|--------------|---------------------------|
| BMAAAHABxxxx | Side Assy. |
| BMAAAHACxxxx | Run Number Signs |
| BMAAAIxxxxxx | Operators Control Console |
| BMAAAJxxxxxx | Miscellaneous Equipment |
| BMAAAJAAxxxx | Fire Extinguisher |
| BMAAAJABxxxx | Special Tools |
| BMAAAKxxxxxx | Sander Assy. |
| BMAAAKAAxxxx | Hopper |
| BMAAAKABxxxx | Filler Cap |
| BMAAAKACxxxx | Access Door |
| BMAAAKADxxxx | Pipe Assy. |

BNxxxxxxxxxx

Safety Equipment

| | |
|---------------|---------------------------------|
| BNAAXxxxxxxxx | Windshield Wiper-Washer Systems |
| BNAAAAxxxxxx | Windshield Wiper Assy. |
| BNAAAAAAxxxx | Motor |
| BNAAAAABxxxx | Motor Lever |
| BNAAAAACxxxx | Blade |
| BNAAAAADxxxx | Wiper Arm |
| BNAAAAAExxxx | Pivot Shaft |
| BNAAAAAFxxxx | Linkage Rods |
| BNAAAAAGxxxx | Rocker Switch |
| BNAAAAAHxxxx | Control Valve |
| BNAAAAAIxxxx | Switch Assy. |

| | |
|--------------|---------------|
| BNAAABxxxxxx | Washer Assy. |
| BNAAABAAxxxx | Reservoir |
| BNAAABABxxxx | Electric Pump |
| BNAAABACxxxx | Rocker Switch |
| BNAAABADxxxx | Lines |
| BNAAABAExxxx | Spray Nozzles |
| BNAAABAFxxxx | Jets |
| BNAAABAGxxxx | Valve Assy. |
| BNAAABAHxxxx | Diaphragm |
| BNAAABAIxxxx | Control Valve |
| BNAAABAJxxxx | Switch Assy. |

BJxxxxxxxxxx

Suspension, Steering & Tires

BJAAxxxxxxxx

Front Axle & Suspension Systems

BJAAAAxxxxxx

Steering Knuckle Assy.

BJAAAAAxxxx

Steering Knuckle

BJAAAAABxxxx

Bushing

BJAAAAACxxxx

Knuckle Pin

BJAAAAADxxxx

Steering Arm

BJAAAAAExxxx

Axle Center

BJAAAAAFxxxx

Thrust Bearing

BJAAABxxxxxx

Steering Arm Bracket Assy.

BJAAABAxxxx

Housing

BJAAABABxxxx

Bearing Shaft

BJAAABACxxxx

Bushings-Upper/Lower

| | |
|--------------|--|
| BJAAABADxxxx | End Cover |
| BJAAACxxxxxx | Front Steering Linkage |
| BJAAACAxxxx | Tie Rod |
| BJAAACABxxxx | Tie Rod Arms |
| BJAAACACxxxx | Center Tie Rod |
| BJAAACADxxxx | Ball Joints |
| BJAAACAExxxx | Drag Link |
| BJAAADxxxxxx | Shock Absorbers-Front/Drive & Trailer |
| BJAAADAAxxxx | Drive Axle Suspension |
| BJAAADABxxxx | Holder Assy. |
| BJAAADACxxxx | Crossmember |
| BJAAADADxxxx | Bushings-outer/inner |
| BJAAAExxxxxx | Air Bag & Suspension Systems-Ft/Driver Trail Axles |
| BJAAAEAAxxxx | Springs |
| BJAAAEABxxxx | Brackets |
| BJAAAEACxxxx | Mounting Plates |
| BJAAAEADxxxx | Retainers-Upper-Loser |
| BJAAAEAExxxx | Sealing Plates |
| BJAAAEAFxxxx | Bellows |
| BJAAAEAGxxxx | Roll Piston |
| BJAAAFxxxxxx | Stabilizer Bar |
| BJAAAFAAxxxx | Bushings |
| BJAAAFABxxxx | Links |
| BJAAAGxxxxxx | Height Control Valves |
| BJAAAGAAxxxx | Housing |

| | |
|--------------|----------------------------------|
| BJAAAGABxxxx | Valve Mechanism |
| BJAAAGACxxxx | Shaft Assy. |
| BJAAAHxxxxxx | Upper Control Arms |
| BJAAAHAAxxxx | Mounting Rod |
| BJAAAHABxxxx | Bushings |
| BJAAAIxxxxxx | King Pin Housing |
| BJAAAIAXxxxx | King Pin |
| BJAAAJxxxxxx | Lower Control Arms |
| BJAAAJAxxxx | Bushing-Large-Small |
| BJAAAJABxxxx | Mounting Rod |
| BJAAAKxxxxxx | Trailer Steering Linkage |
| BJAAAKAAxxxx | Turntable Drag Links-Bus/Trailer |
| BJAAAKABxxxx | Turntable |
| BJAAAKACxxxx | Frame Console |
| BJAAAKADxxxx | Coupling |
| BJAAAKAExxxx | Control Lever |
| BJAAAKAFxxxx | Drag Links |
| BJAAAKAGxxxx | Reversing Lever |
| BJAAAKAHxxxx | Center Tie Rod |
| BJAAAKAIxxxx | Tie Rods |
| BJAAAKAJxxxx | Steering Arm |
| BJAAAKAKxxxx | Bearing Assy. |
| BJAALxxxxxx | Steerable Trailer Axle Assys. |
| BJAALAAxxxx | Steering Knuckles |
| BJAALABxxxx | King Pins |
| BJAALACxxxx | Bushings |

| | |
|--------------|------------------------------|
| BJAAALADxxxx | Mounting Base-Brackets |
| BJAAALAExxxx | Traverse Arm-Upper/Lower |
| BJAAALAFxxxx | Traction Rods |
| BJAAAMxxxxxx | Rear Axle Assy. |
| BJAAAMAAxxxx | Axle Shaft |
| BJAAAMABxxxx | Housing |
| BJAAAMACxxxx | Carrier |
| BJAAAMADxxxx | Bushings |
| BJAAAMAExxxx | Seals |
| BJAAANxxxxxx | Rear Suspension |
| BJAAANAAXxxx | Air Bags |
| BJAAANABxxxx | Shock Absorbers |
| BJAAANACxxxx | Traverse Rod |
| BJAAANADxxxx | Height Control Valve |
| BJAAAPxxxxxx | Kneeling Suspension System |
| BJAAAPAAxxxx | Check Valves |
| BJAAAPABxxxx | Quick Release Valve |
| BJAAAPACxxxx | Isolation Valve |
| BJAAAPADxxxx | Kneel-Up/Down Valves |
| BJAAAPAExxxx | Air Control Valve |
| BJAAAPAFxxxx | Supply Cut Off |
| BJAAAPAGxxxx | Down Limit Micro Switch |
| BJAAAPAHxxxx | Brake Interlock Micro Switch |
| BJAAAQxxxxxx | Suspension Air System |
| BJAAAQAAxxxx | Main Air Tank |
| BJAAAQABxxxx | Air Strainer |

| | |
|--------------|---------------------------|
| BJAAAQACxxxx | Suspension Air Tank |
| BJAAAQADxxxx | Air Manifold |
| BJAAARxxxxxx | Wheels & Tire Assys. |
| BJAARAAxxxx | Steerable Axle Hub Assys. |
| BJAARABxxxx | Wheel Split Rim |
| BJAARACxxxx | Bearings |
| BJAARADxxxx | Hub |
| BJAASxxxxxx | Drive Wheel Hub Assys. |
| BJAASAAxxxx | Wheel Split Rim |
| BJAASABxxxx | Axle Casing |
| BJAASACxxxx | Hub/Planet Gear Assy. |
| BJAATxxxxxx | Tires-Front/Rear |
| BJAATAAxxxx | Tubeless |
| BJAATABxxxx | Tube |
| BJAATACxxxx | Studs |
| BJAATADxxxx | Nuts |
| BJAAAUxxxxxx | Power Steering Assys. |
| BJAAUAxxxx | Pump-Hydraulic |
| BJAAUABxxxx | Body |
| BJAAUACxxxx | Shaft |
| BJAAUADxxxx | Bearing |
| BJAAUAExxxx | Manifold |
| BJAAUAFxxxx | Cover |
| BJAAAVxxxxxx | Relief Valve Assy. |
| BJAAVAxxxx | Relief Valve |
| BJAAVABxxxx | Spring |

| | |
|--------------|--------------------------|
| BJAAAVACxxxx | Pressure Plate |
| BJAAAVADxxxx | Pump Ring |
| BJAAVAExxxx | Rotor |
| BJAAAWxxxx | Reservoir Filter Assys. |
| BJAAAWAAxxxx | Reservoir |
| BJAAAWABxxxx | Filter |
| BJAAAWACxxxx | Element Cartridge |
| BJAAAWADxxxx | Screen |
| BJAAAWAExxxx | Shell |
| BJAAAWAFxxxx | Dipstick |
| BJAAAWAGxxxx | Filler Cap |
| BJAAAWAHxxxx | Sight Glass |
| BJAAAXxxxxxx | Steering Gear Assy. |
| BJAAAXAAxxxx | Plunger |
| BJAAAXABxxxx | Actuator Shaft |
| BJAAAXACxxxx | Bearing |
| BJAAAXADxxxx | Piston |
| BJAAAXAExxxx | Valve Assy. |
| BJAAAXAFxxxx | Reversing Spring & Valve |
| BJAAAXAGxxxx | Output Shaft |
| BJAAAXAHxxxx | Gear |
| BJAAAXAIxxxx | Oil Gear |
| BJAAAXAJxxxx | Pitman Arm |
| BJAAAYxxxxxx | Steering Column Assy. |
| BJAAAYAAxxxx | Steering Wheel |
| BJAAAYABxxxx | Bearing |

| | |
|--------------|-----------------------------|
| BJAAAYACxxxx | Switch Lever |
| BJAAAYADxxxx | Horn Contact Roller Assy. |
| BJAAAYAExxxx | Jacket Tube |
| BJAAAYAFxxxx | Spring |
| BJAAAYAGxxxx | Wheel Tube |
| BJAAAYAHxxxx | Coupling Shell |
| BJAAAYAIxxxx | Rubber Shield |
| BJAAAZxxxxxx | Steering Gear Transfer Box |
| BJAAAZAAxxxx | Shaft, Vertical |
| BJAAAZABxxxx | Thrust Bearing |
| BJAAAZACxxxx | Gear, Vertical - Horizontal |
| BJAAAZADxxxx | Bearing-Needle |

BKxxxxxxxxxx

BKAAxxxxxxxx

BKAAAxxxxxxxx

BKAAAAAxxxx

BKAAAAABxxxx

BKAAAAACxxxx

BKAAAAADxxxx

BKAAAAAExxxx

BKAAAAAFxxxx

BKAAAAAGxxxx

BKAAAAAHxxxx

BKAAAAAIxxxx

Drive Train

Transmissions - Manual-Auto

Manual Transmission

Housing

1st Gears

2nd Gears

3rd Gears

Neutral Gear

Reverse

Gears

Bearings

Seals

| | |
|---------------|------------------------|
| BKAAAAAJxxxx | Oil Filter Assy. |
| BKAAAAAKxxxx | Pressure Switch |
| BKAAABxxxxxx | Shifter Fork Rod Assy. |
| BKAAABAAxxxx | Shifter Forks |
| BKAAABABxxxx | Linkages |
| BKAAABACxxxx | Gear Shift |
| BKAAACxxxxxx | Clutch Assy. |
| BKAAACAAXxxxx | Pedal Assy. |
| BKAAACABxxxx | Linkages |
| BKAAACACxxxx | Housing Assy. |
| BKAAACADxxxx | Pressure Plate Assy. |
| BKAAACAExxxx | Cover Plate |
| BKAAACAFxxxx | Springs |
| BKAAACAGxxxx | Throw Out Bearing |
| BKAAACAHxxxx | Fork-Shifter Assy. |
| BKAAADxxxxxx | Automatic Transmission |
| BKAAADAAxxxx | Governor |
| BKAAADABxxxx | Hydraulic Drive |
| BKAAADACxxxx | Direct Drive |
| BKAAADADxxxx | Clutch Assy. |
| BKAAADAExxxx | Over Drive |
| BKAAADAFxxxx | Radial Power Converter |
| BKAAADAGxxxx | Oil Filter |
| BKAAADAHxxxx | Heat Exchanger |
| BKAAADAIxxxx | Controls |
| BKAAADAJxxxx | Shift Assy. |

| | |
|--------------|------------------------------------|
| BKAAADAKxxxx | Switch Assys. |
| BKAAADALxxxx | Gear 1st |
| BKAAADAMxxxx | Gear 2nd |
| BKAAADANxxxx | Gear 3rd |
| BKAAADAPxxxx | Gear Neutral |
| BKAAADAQxxxx | Gear Reverse |
| BKAAADARxxxx | Torque Converter |
| BKAAADASxxxx | Modulator |
| BKAAADATxxxx | Valves Up-Down Shift |
| BKAAADAUxxxx | Clutches |
| BKAAADAVxxxx | Bearings |
| BKAAAExxxxxx | Air Shift Components |
| BKAAAFxxxxxx | Solenoid Shift Components |
| BKAAAFAAxxxx | Piston |
| BKAAAFABxxxx | Return Spring |
| BKAAAFACxxxx | Rachet Slide |
| BKAAAFADxxxx | Stop Plug |
| BKAAAFAExxxx | Shifter Lever |
| BKAAAFAFxxxx | Linkages |
| BKABxxxxxxxx | Differential-Planetary Drive Assy. |
| BKABAAxxxxxx | Planetary Drive |
| BKABAAAxxxx | Planet Gears |
| BKABAAABxxxx | Pins |
| BKABAAACxxxx | Bearings, Needle |
| BKABAAADxxxx | Housing, Hub Bell |
| BKABAAAExxxx | Hollow Wheel-Outer Wheel |

| | |
|--------------|----------------------------------|
| BKABAAAFxxxx | Sun Gear |
| BKABAAAGxxxx | Planet Gear Carrier |
| BKABAAAHxxxx | Outer Thrust Washers Sun Gear |
| BKABAAAIxxxx | End Cover-Bell Housing |
| BKABABxxxxxx | Drive Shaft Assy. |
| BKABABAAxxxx | Bearing |
| BKABABABxxxx | Journal |
| BKABABACxxxx | Slip Joint |
| | Propeller Shaft |
| | Universal Joint |
| | Yoke Assy. |
| | Protecting Sleeve |
| | Slip Joint |
| | Journal |
| | Needle Bearing Assy. |
| BKABADADxxxx | Differential Assy. |
| | Ring Gear-Case |
| | Pinion Cage |
| | Drive Pinion |
| | Bearings-Taper/Rooler-Flange End |
| | Spacer Bushing |
| | Ring Gear |
| | Differential Bearing |
| | Differential Spider |
| | Upper Shaft Gear |

BKABABAExxxx

Lower Trust Washer

Oil Slinger

Adjust Ring

APPENDIX A-2

GMC-ADB

DRIVE TRAIN SYSTEM

TRANSMISSION

Neutral Start Switch

Governor Valve

Power Take-Off Shaft

Converter Housing

Transmission Housing

Bevel Gear

Tachometer Drive

Oil Filter

Oil Cooler

First Clutch

Second Clutch

Third Clutch

Reverse

Shift Signal Valve

Modulator Valve

Main Pressure Regulator Valve

Control Valve

Oil Pump

Pneumatic Modulator

Transmission Shift Control
 Forward Control
 Shift Linkage
Flexible Coupling
Flywheel
Propeller Shaft Assembly
 Universal Joint Flange (Trans.)
 Bearing Assembly (needle)
 Lock Strap
 Journal
 Slip Joint Yoke
 Propeller Shaft
 Universal Joint Flange (Diff.)

FUEL SUPPLY SYSTEM

Fuel Tank
Pressure Relief Valve
Supply and Return Lines
Check Valve
Fuel Pump
Muffler (8 cylinder)
Manifold Inlet Pipe
Exhaust Outlet Pipe
Tail Pipe

SUSPENSION, STEERING, AND TIRES SYSTEM

Front Axle and Suspension

Shock Absorber

Retainer

Outer Bushing

Inner Bushing

Shock Absorber

Stabilizer Bar

Bushing Retiners

Stabilizer Bar

Retainer Clamps

Retainer

Bushing

Link

Upper Control Arm Assembly

Bushings

Upper Control Arm

Mounting Rod

Height Control Valve

King Pin Housing

King Pin

Lower Control Arm Assembly

Large Bushing

Lower Control Arm

Mounting Rod

Small Bushing
Air Spring
Upper Retainer
Bumper
Lower Retainer
Flexible Member
Back Up Plate
Wheel Spindle Assembly
Upper Wheel Spindle Bushings
Thrust Bearing
Lower Wheel Spindle Bushing
Steering Arm
Steering Arm Key
Air Strainer
Check Valve
Pressure Protection Valve
Height Control Valve
Kneeling System
Height Control Valve Bypass Solenoid
Exhaust Control Solenoid
Door Sensitive Edge Switch
Bellows Control Solenoid
Kneel Sense Switch
Kneel Relay Coil
Kneel Relay Contacts CR-1

Kneel Relay Contacts CR-2
Kneel Switch
Kneel Apparatus and Cover Assembly
Rear Axle and Suspension
Differential Carrier
 Parking Brake Drum
 Propeller Shaft Yoke
 Parking Brake Control Rod
 Parking Brake Air Chamger
Differential Assembly
 Side Gears
 Spider
 Thrust Washer
 Bearing Cones (Differential)
Pinion and Cage Assembly
 Pinion Cage
 Pinion Bearing Cone (Outer)
 Pinion Bearing Spacer
 Pinion Bearing Cone (Inner)
 Drive Pinion
 Pinion Bearing
 Bearing Retainer Ring
Differential Bearing Cup
Differential Pinion

Axle Shaft and Housing
 Axle Housing
 Axle Shaft
 Drive Flange
Height Control Valve Mounting
 Radius Rod Anchor Plate
 Link
 Height Control Valve
 Overtravel Lever
 Valve Link Bracket
Rear Air Spring
 Flexible Member
 Upper Retainer
 Piston Boot
 Piston
 Lower Retainer
Radius Rod
 Bushing
 Radius Rod
 Anchor Plates
Rear Shock Absorber
 Retainer
 Shock Absorber
 Bushings

Suspension Air System

Main Air Tank

Air Strainer

Suspension Air Tank

Air Manifold

H.C.V. Bypass Solenoid

Steering System

Power Steering Pump

Pump Flow Control and Relief Valve

Power Steering Reservoir and Filter

Steering Column and Shaft

Steering Wheel

Extension

Bearing Plate

Column Housing

Lower Shaft

Upper Bearing

Lower Bearing

Lower Universal Joint Yoke

Power Steering Gear

Steering Gear

Pitman Arm

Drag Link

Relief Valve Plunger (Right Turn)

Relief Valve Plunger (Left Turn)

Bearing
Actuating Piston
Shaft Bearing
Relief Valve
Linkage (Left and Right)
Relay Rod
Steering Arm
Tie Rods
End Socket

Wheels

Discs
Studs
Rim
Tire

ELECTRICAL SYSTEMS

Miscellaneous Electrical

Speedometer
Telltale Panel
Left Hand Switch Panel
Right Hand Switch Panel
Driver's Compartment Cir. Break. Panel
Connectors
Driver's Apparatus Panel
24V Engine Run Relay
Kneel Relay

Brake Interlock Relay
Generator "R" Terminal Relay (A/C)
12V Engine Run Relay
Heat Control Relay
Interior Lamps Relay
Horn Relay
Tone Generator
CN-02B Body to Trunk Harness Conn.
CN-11 Trunk to Front End Harness Conn.
CN-02A Body to Trunk Harness Conn.
CN-08A Chassis to Trunk Harness Conn.
CN-15 Harness Connector
CN-24 Harness Connector
CN-25 Harness Connector
CN-14B Panel Harness
CN-14A Panel Harness

Rear Electrical Apparatus Panel

Blower Motor C.B. (90 Amp)
Circuit Breakers
Blower Motor Harness (CN-26)
Engine and A/C Harness (CN-23)
Body Harness (CN-22)
Generator Stop Relay
A/C Clutch Relay
Blower Interlock Relay

Water Pump Relay

Starter Control Relay

Low Coolant Indicator

Connectors

CN-9 Trunk to Inst. Panel

CN-18 Body to Right Hand Roof

CN-18 Body to Right Hand Roof

CN-19 Body to Rear Closure Door

CN-20 Body to Rear Compartment

CN-21 Body to Engine

Batteries Compartment

Batteries

24V Disconnect SW

12V Disconnect SW

24V Regulator

12V (90 Amp) C.B.

24V (70 Amp) C.B.

Battery to Engine Harness Assy.

Battery, Regulator and Charger Harness

Assy.

Lighting

Exterior Lighting

Headlights Assembly

Headlamp Type 1A

Front Turn Signal Lamp

Harness and Connector
Headlamp (Upper) Type 2A
Stop, Tail & Directional Assy.
Stop Light
Tail Light
Wiring Harness and Connector
Connector
Resistor
Turn Signal Lamp
Reflex Lamp Assy.
Backup Light
Stop Light Switch
Directional Switches
Directional & Hazard Flasher
Interior Lighting
Gague and Panel Lights
Tell-Tale Lights
Driver and Fare Box Lamp
Front and Rear Step Lamps
Engine Compartment Lights
Fluorescent Lighting System

BRAKES SYSTEM

Front and Rear Brake Assembly
Brake Lining
Shoe Assembly

Pin
Actuator
Plunger
Return Spring
Adjusting Pawl
Wedge Assembly
Adjusting Sleeve (Actuator)
Roller
Cage
Return Spring (Wedge)
Plunger Housing
Anchor Plunger
Cast Spider (Housing)
Brake Air Chamger Assy.
 Non Pressure Housing
 Diaphragm Plate and Push Rod
 Diaphragm
 Pressure Housing
Front Brake Drum
 Hub
 Inner Bearing
 Outer Bearing
 Spider
 Service Brake Assembly
 Treadle

Boot

Dual Valve

Parking Brake

Camshaft

Roller

Roller Pin

Brake Lining

Brake Shoe

Brake Shoe Return Spring

Anchor Pin

Brake Chamger

Push Rod

Control Valve

Pressure Switch

Air Brake Valves and Reservoirs

Air Strainter

Air Reservoirs Tanks

Low Pressure Switch

Check Valve

Safety Valve

Air Dryer

Purge Tank

Purge Control

Pressure Regulator Valve

Double Check Valve

Syncro Valve Assy.
Inversion Valve Assy.
Brake Light Switch Assy.
Brake Interlock Solenoid Assy.
Quick Release Valve Assy.
Reducing Bushing
Brake Relay Valve
Spring Brake Chamger
Housing
Push Rod Assy.
Diaphragm
Compression Spring
Pressure Cap

BODY AND STRUCTURE SYSTEMS

Front End Framing
Header Reinforcement
Windshield Piller
Driver's Window Panel
Front Floor Support Panel
Post-Bulkhead Reinforcement
Longitudinal Beams
Front Door Floor Support
Front Suspension Understructure
Front Suspension Frame Assembly
Belt Inner Panel

Lower Bulkhead Reinforcement

Upper Bulkhead Reinforcement

Floor Support Beam

Beam Support

Passenger Module

Bulkheads

Longitudinal Beams

Belt Inner Panels

Side Window Framing (Fencing)

Roof Panel

Outer Roof Panel

Inner Center Panel

Inner Side Panel

Window Header Panel

Air Tank

Exit Door Understructure

Rear Stepwell Support

Rear Suspension Bulkhead Reinforcement

Rear Center Beams

Front and Rear Braces

Beam Support

Rear Suspension Understructure

Radius Rod Support Plates

Engine Bulkhead

Beam Supports

Air Spring Adapter

Longitudinal Beams

Rear End

Engine Compartment Bulkhead

Seat Back Riser Panels

Side Closure Panels

Outer Panel

Seat Upper Bulkhead Panel

Seat Lower Bulkhead Panel

Access Hole Panel (Cover)

Riser Access Hole Cover

Rear Upper Belt

Side Posts

Roof Center Rear Panel

Center Lower Panel

Center Belt Closure Plate

DOOR AND DOOR CONTROLS

Front Door

Panels

Bearings

Panel Shaft Assemblies

Upper Door Panel Bracket Assemblies

Lower Door Panel Bracket Assemblies

Lower Shaft Support Bracket Assemblies

Entrance Door Guide Arm Roof Bracket

Entrance Door Seal Assemblies

Entrance Door Guide Arm Assembly

Exit Door

Exit Door Guide Arm Assemblies

Exit Door Upper Bracket Assembly

Exit Door Guide Arm Roof Bracket

Upper Exit Door Panel Bracket Assemblies

Exit Door Panel Bracket Assemblies

Lower Door Panel Bracket Assemblies

Bearings

Lower Shaft Support Bracket Assemblies

Door Control

Door Master Switch

Door Controller

Front Door Switch

Rear Door Switch

Limit switches

Brake Interlock Relay

Sensitive Edge

Magnet Valve

Airline Regulator Valve

Air Cutoff Dump Valve

Emergency Release Valve

Sensitive Edge Switch

Front Door Engine Assembly

Air Supply Line
Air Exhaust Line
Engine Push Rod
Door Lever Wedge
Engine Control Arm
Front Door Engine

Rear Door Engine Assembly

Rear Door Engine
Relays
Air Supply Line
Air Exhaust Line
Push Rod
Left Control Arm
Right Control Arm

AIR COMFORT SYSTEM

Heat & Air Conditioning Control Panel (Control Box)
Control Cable
Air Pressure Regulator Valve
RR2-Capacity Relay
Water Pump Relay Switch PE-1
Thermostat Outside Air Change Over Switch
Outside Air Thermostat
Capillary Tube and Sensing Bulb
Air Tubing

Change-Over Solenoid EP2

Floor Heat Solenoid EP3

Return Air Damper Solenoid EP5

System Solenoid EP1

Air Tubing

Heating System Water Circulation

Surge Tank

Circulator Pump

Water Modulator Valve

Main Heater Core

Floor Discharge Water Flow Control Valve

Side-Wall Heater

Check Valve

Intake Air Filter

Blower Motors

Evaporator Coils

Air Distribution Ducts

Driver's Heater

Blower Motor

Resistor

Coil

Filter

Return Air Filter

Floor Blower Motors

Booster Blower Fan and Motor

Return Air Dampers
Return Air Thermostats
Air Conditioning Refrigerant System
Electrical Control Units
Climate Control Switch
Air Conditioning Clutch Relay
Refrigerant Hi-Lo Pressure Switch
Air Conditioning Oil Pressure Switch
Liquid Refrigerant Receiver Tank
Heat Exchanger
Dehydrator-Strainer
Refrigerant Expansion Valve
Evaporator
Air Filters
Evaporator Blowers and Motors
Connectors and Lines
Condenser
Heating and Air Conditioning Controls
Defroster Switch
Booster Blower Switch
Blower Interlock Relay
Heat Control Relay
A/C Generator "R" Terminal Relay
A/C Blower Motor Magnetic Switch
Blower Circuit Breaker

Circuit Breakers
Brake Interlock Relay
Engine Run Relay
12V Engine Run Relay
Horn Relay
Control System Air Supply Air Filter
Heating and Air Conditioning Control
 Thermostat
Return Air Shutter Assembly
Receiver
Service Valves
Air Conditioning Compressor, Drive
 Shut-Off Valves
 Drive Belt
 Compressor Cylinder Head
 Clutch Coil, Rilley and Flywheel
 Suction and Discharge Valve

ENGINE SYSTEM

Air Compressor and Governor
 Air Compressor Drive
 Air Compressor Assembly
 Discharge Valve
 Discharge Valve Spring
 Inlet Valve Spring
 Cylinder Head

Unloader Plunger
Unloader Spring
Cylinder Block
Crank Shaft Rear Bearing
Connecting Rod Bearing
Crank Shaft
Crankcase
Connecting Rod
Unloader Piston
Bushing
Piston
Piston Rings
Piston Pin
Unloader Plunger Guide
Connecting Rod Bushing
Compression Rings
Air Compressor Governor (D-2)
Engine Electrical
 Generator Drive
 End Frame
 Drive Gear
 Balance Shaft Gear
 Driven Gear
 Adapter
 Rotor Shaft

12 Volt Charge Assy.

Heat Sink

Choke

Circuit Breaker

12 Volt Regulator

Diode End Frame

Diodes

12 Volt Charger

24 Volt Regulator

Starting System

Engine Stop Air Cylinder

Engine Stop Solenoid Valve

Emergency Stop Solenoid

Drive Clutch Assembly

6 Cylinder Diesel

Radiator

Surge Tank

Cradle Hanger

Solenoid

Water Filter

Fuel Pressure Switch

Fuel Filters

Bumper Mounting Brackets

Starter

Exhaust

Engine By-Pass Oil Filter

Generator

Engine Thermostat Housing

Fluid Drive Fan

Cradle to Bulkhead Mounting Bracket

Muffler

8 Cylinder Diesel

Radiator

Radiator Surge Tank

Throttle Slave Cylinder

Water Supply Shut-Off Valve

Engine Control Panel

Air Cleaner

Primary Fuel Filter

Fuel Pressure Switch

Secondary Fuel Filter

Power Steering Reservoir

Starter

Bumper Mounting Brackets

Fluid Drive Fan

Engine By-Pass Oil Filter

Generator

Radiator Inlet Pipe

Full-Flow Engine Oil Filter

Engine By-Pass Oil Filter

Compartment Lamp Switch
Engine Control Switch
Rear Start Switch
Engine Oil Pressure Switch
Engine Oil Pressure Manifold
A/C, Engine Oil Pressure Switch
Engine Oil Pressure Gauge
Hot Engine Temp. Switch
Blower Control 120°F Switch
Water Filter
 Shut Off Valves
 Hose Lines
 Air Cleaner and Silencer
 Air Cleaner ASM
 Boot
 Vacuator Valve
 Element
 Teflon Hoses
 Fluid Fan Drive Assembly
 Drive Torus
 Seal Bushing
 Driven Gear
 Bearings
 Ring
 Pilot Ring

Drive Hub
Drive Cone
Coupling
Driving Gear
Bearing (Driving Gear)
Gear
Carrier
Bearing (shaft)
Shaft
Driven Hub
Seal Bushing
Fluid Control Valve (Vernatherm)
Override Solenoid Valve
Throttle Control System
 Throttle Control Assembly
 Treadle Valve Assembly
 Fast Idle Solenoid Valve
 Fast Idle Air Cylinder
 Fast Idle Limiting Air Cylinder

APPENDIX A-3

GMC-NLC

Doors and Door Controls System

Leaf Assy. LHS
Leaf Assy. RHS
Glass Upper
Glass Lower
Guide Channel
Guide Roller
Door Upper Seal
Bearing Assy.
Door Shaft Assy. LHS
Door Shaft Assy. RHS
Shaft Upper Pivot Bracket
Door Operating Mechanism
Door Engine Assy.
Cylinder
Piston Rod
Metering Screw Open
Metering Screw Close
Switch Assy.
Connecting Rod Front
Connecting Rod Rear

Lever Front
Lever Rear
Lever Idler
Lever Idler Support
Doors Push Type Rear
Leaf Assy. LHS
Glass Upper
Glass Lower
Door Check Cylinder Rear
Check Cylinder Assy.
Cylinder Piston Rod
Closing Speed Control Fitting
Unlock Solenoid Assy.
Return Spring
Door Switch Relay Assy.
Connecting Rod Front
Connecting Rod Rear
Rear Door Switch Assy.
Emergency Manual Unlock Rod
Emergency Manual Unlock Lever
Lever Cylinder Check
Lever Door Front
Lever Door Rear
Lever Connecting Rod Idler
Lever Cam

Air Electric Operated Push Type Rear Doors

Speed Control Valves

Rectifiers

Air Supply Control Magnet Valve

Switch Tell Tale

Relays

Air Electric Operated Folding Type Doors Rear

Sensitive Edge Selenoid

Cam Switch Micro

Door Sen Edge Bell

Interupter Switch Micro

Wiring Junction Block

Full Air Operated Folding Type Rear Doors (two types)

Valve Emergency Escape Air

Door Controls

Air Shut Off Valve

Air Strainer

Door Control Valve

Door Air Pressure Regulator

Two Way Check Valve

Interlocks

Brake Interlocks

Door Switches

Double Check Valve

Magnet Valve Interlock

Accelerator Interlock

Interlock Air Pressure Regulator Valve

Accelerator Interlock Synchro Valve

Accelerator Inversion Valve

Crowd Gate Mechanism

Engine

Lock Release Assy.

Idler Lever Assy.

Rod Assy.

Gate

Supports

Bearings

AIR COMFORT SYSTEM

Heater and Ventilation Systems

Motor Assy. and Water Booster Pump

Motor

Armature Assy.

Stator Assy.

Brush and Spring Assy.

Bearings

Pump Body

Impeller

Control Valves

Grad U Stat

Water Modulation Valve

Air Pressure Regulator Valve

Temp Range Control

Underfloor Heating and Cooling Compartment (No AC)

Heater Core Unit

Blower Motor Assy.

Motor

Armature

Brush and Holder Assy.

Bearings

Blower Wheels

Filters

Defroster Heater

Blower Motor Assy.

Motor

Wheel Fan

Shroud Assy.

Heater Core Unit

Filter

Heater Supply Line Filter Screen

Ventilation System

Operator Window

Passenger Windows

Outside Air Inlet Damper

Filter

Windshield Intake Vents

Outside Air Intake Vent (Acc-Pedal)

Heating Controls

Control Panel

Control Box

Water Solenoid Valve

Mercury Tube Thermostat

Bimetal Thermostat Assy.

Air Conditioning System

Compressor

Housing

Piston

Rings

Connecting Rod

Crankshaft

Bearings

Unloader Mechanism

Condenser Coil

Fan Cooling (Six Blade)

Motor

Rotor Shaft Assy.

Brush Assy.

Bearings

Receiver Refridgerant

Coil Evaporator

Refrigerant Expansion Valve

Refrigerant Heat Exchanger

Dehydrator Strainer

Controls Air Conditioner

Control Panel AC

Clutch Relay AC

Oil Pressure Switch Engine

Clutch Control Air Pressure Switch

Compressor Dirve Clutch Air Solenoid Valve

Refrigerant Discharge Valve Assy.

Suction Valve Assy.

Compressor Clutch Unit

Clutch Control Air Cylinder Assy.

Air Cylinder Air Strainer Assy.

Voltage Regulator Assy.

Hi Lo Refrigerant Pressure Switch

AC Control Relay

Generator Assy. (AC - Cond. Fan Drive)

Generator

Rotor Assy.

Rectifier Mount Assy.

Brush Spring Assy.

Bearings

Pulley

Belt

ELECTRICAL SYSTEM

Control Panel Driver

Control Panel Junctions (Circuit Breakers and
Electrical Apparatus)

Engine Compartment Apparatus Box

Regulator and Blower Control Panel

Entrance Door Junction Panel

Exit Door Junction Panel

Flasher and Relay Junction Panel

Wheel Lock Control Junction Panel

Miscellaneous Circuit Breakers

Tell Tale Alarm System (Warning System)

Alarm Buzzer and Rectifier Assy.

Emergency Door Buzzer

Passenger Signal Buzzer and Chime

Engine Stop Time Delay Relay System

Relays

Resistors

Rectifiers

Electric Horns

Electric Speedometer

Battery System

Compartment

Battery

Cables

Starting System

Starter

Armature

Brush Holder Assy.

Clutch Assy.

Solenoid Switch

Control Relay

Switches

Circuit Breakers

Generating System

Generator (Oil Cooled, Alternator)

Rotor Assy.

Stator Assy.

Stationary Field

Diodes

Bearings

Generator Control Relay

Regulator

Diodes

Condensers

Resistors

Transistors

Lighting System

Exterior Lights

Headlight Assy.

Sealed Beam Unit

Dimmer Switch

Stop-Tail Light System (Parking)

Stop Light Switches

Parking Brake Stop Lamp Switch

License Plate Light

Directional Signals System Standard

Directional Signals System Foot Operated

Hazard Warning System

Back Up Lights System

Marker Lights

Interior Lights

Gauge and Tell Tale Lights

Destination Sign Lights

Engine Compartment

Emergency Door Lights

Dome Lights

Fluorescent Lights

Stepwell Lights

Powerplant

ENGINE SYSTEM

Diesel Engine 8 Cylinder

Diesel Engine 6 Cylinder

Cylinder Block

Cylinder Head

Crankshaft

Bearings Main

Pulley

Vibration Damper

Flywheel

Piston

Rings

Wrist Pins

Connecting Rod

Bearing Cap

Camshaft

Bearings

Gear Train Assy. (Gears Off Cam, Crank, etc.)

Accessory Drive

Valve Operating Mechanism

Rocker Arm Assy.

Push Rods

Valves

Guides

Springs

Cover Assy.

Diesel Engine Accessories

Oil Pressure Gauge

Low Oil Pressure Switch

Solenoids

Emergency Stop

Engine Stop Solenoid Valve

Engine Fast Idle Solenoid Valve

Engine Control Air Cylinder

Engine Stop Air Cylinder

Fast Idle Limiting Air Cylinder

Fast Idle Air Cylinder

Engine Mounts

Cushion Mount Assy's. Front

Cushion Assy.

Bulkhead Bracket

Mount Bolts

Mounts Rear

Cradle Hangers

Stabilizer Rod Assy.

Engine Brake Mechanism

Supply Housing

Exhaust Valve Bridge

Slave Piston

Solenoid Valve

Drone Housings
Control Valve
Master Piston Fork Assy.
Master Piston
Slave Piston
Engine Brake Micro Switch
Buffer Switch Screw Switch
Splitter Control Valve Micro Switch
Exhaust System
Muffler
Pipes
Exhaust Diffuser
Cooling System
Surge Tank
Filler Cap
Sight Gauge
Pressure Relief Valve
Piping
Filter Water
Element
Radiator
Shutter Assy.
Radiator Shutterstat
Shutter Air Cylinder
Air Filter

Water Pump

Impeller Assy.

Shaft

Seals

Thermostat Outlet Housing Assy.

Housing

Thermostats

Gasket

Cover

Water Temperature Over Heat Switch

Temperature Gauge and Sending Unit (Alarm and Signal)

Hydraulic Fluid Drive Fan Assy. (with A/C)

Driven Torus Housing

Driven Torus

Driving Torus

Driving Torus Housing

Damper

Coupling

Fan Drive Housing

Drive Shaft

Gear and Pinion

Retainer

Drive Pulley

Fan

Control Valve Hydraulic Fan

Brake Systems

Air Compressor Assy.

Cylinder Block

Cylinder Head

Valves Discharge

Valves Inlet

Springs Valve

Valve Seats

Valve Guides

Pistons

Rings Compression

Wrist Pins

Connecting Rods

Bearings Rod

Caps Rod

Crankshaft

Bearings

Crankcase

Cover

D2 Governor Assy.

Body

Piston Assy.

Valve

Cover

Supply Reservoir

Safety Valve

Drain Cock

Primary Reservoir

Secondary Reservoir

Parking Reservoir

Check Valve

Air Gauge

Low Pressure Indicator Switch

Application Valves

TR3 Inversion Valves

Brake Modulation Valve

Calbes & Connectors

Muffler Assy.

Stand By Valve

Press Regulator Valve

Magnet Valve

Double Check Valve

Stop Light Switch

Brake Chamber

DD3 Brake Chamber

Servo Interlock

SVSI - Synchro Valve

Park Control Valve

Parking Relay Valve

Lock Port Tee
Parking Control Valve
Wheel Lock Control
R8 Relay Valve

Brake Components

Air Lines - Plumbing
Air Line Filler Valve
Air Strainer
Brake Chambers Front
Pressure Plate
Diaphragm
Return Spring
Pushrod
Brake Actuator
 Aux. Press Plate
 Aux. Diaphragm
 Return Spring
 Push Rod
 Mechanical Release Yoke
Slack Adjusters FR & RE
 Worm Shaft
 Gear
 Cover Plate

Brake Shoes and Linings

Drums

Brake Shoe and Linings Assy.

Anchor Pins

Lock Plate

Rollers

Camshaft

Brake Spider

Rear Brake Drum Vibration Dampers

Alcohol Evaporator

Check Valve

Moisture Ejector Valve

Remote Control Drain Sys.

Control Valve Air

Wheel Sensors

Cables

Parking Brake

Control lever

Control Linkage

Adjustable Lever

FUEL SYSTEM

Fuel Tank

Filler Cap

Vent Line

Anti Spill Valve
Press Relief Valve
Lever Control Valve
Fuel Level Sending Unit
Air Intake
Air Cleaner
 Element
Restriction Indicator
Primary-Secondary Fuel Filters
 Shells
 Elements
 Drain Cocks
Fuel Pump (No Brake Down)
 Supply Lines
 Return Lines
Air Controlled Throttle
 Treadle
 Control Valve
 Throttle Control Assy.

BODY AND STRUCTURES SYSTEM

Frame and Under Carriage Structures
 Shell Exterior
 Shell Interior
 Panels

Ceiling

Sides

Floor

Front

Rear

Covering Floor

Insulation

Windows

Long Side Pass

Emergency Escape Hatch

Driver Sliding Window

Windshield

Rear Windows

Seats

Operator Seat

Seats Passenger

Handholds

Stantions

Destination Sign

Front

Side

Run Number Signs

Miscellaneous Equipment

Fire Extinguisher

SAFETY EQUIPMENT

Wiper/Washer System

Motors

Wiper Blades

Control Valve

Washer

Reservoir

Valve Assy.

Diaphragm

Control Valve

SUSPENSION-STEERING & TIRES SYSTEM

FR-RE-Suspension Sys.

Jack Pad

Radius Rods Up/Lwr/Lateral

Height Control Valve

Bellows Assys.

Retainer Plates

Piston

Suspension Support

Shock Absorber

Rear Suspension Stabilizer

Air Strainer

Check Valve

Pressure Protection Valve

Steering Sys.

Wheel

Column

Support Flange

Bevel Gear

Propeller Shaft

Universal Joint

Steering Gear

Axle Assy. Front

Bearing

Steering Knuckle

King Pin

Bushings

Cover

Hubs & Seals

Tie Rod Assy.

Tie Rod

Drag Link

Drag Link Eng

Steering Arm

Rear Axle Assy.

Shaft Flange

Shaft

Bearings

Hubs & Seals

Power Steering Sys.

Pump Hydraulic

Pump Body

Pump Shaft

Bearing

Manifold

Cover

Reservoir and Filter

Shell Assy.

Filter Screen & Washer Assy.

Element Cartridge

Filler Cap

Dipstick

Sight Glass

Power Steering Gear Assy.

Housing Cover

Housing

Output Shaft

Bearings

Piston

Actuating Shaft and Bearing

Actuating Valve

Bearing Cap

Hoses

Wheel & Tire Assy.

Wheels

Wheel Studs & Nuts

Tires

Tubeless

Tube

Drive Train System

Transmission Assys.

Manual Assy.

Gears

Bearings

Seals

Oil Filter & Pressure Switch

Controls

Shifter Housing

Reverse Solenoid & Linkage

Oil Pump & Drive Coupling

Clutch Assy.

Housing

Pressure Plate Assy.

Cover Plate

Bearing, Release

Controls - Clutch

Foot Pedal

Lever

Linkages

Transmissions - Auto
Governor
Hydraulic Drive
Direct Drive
Clutch Assy.
Over Drive
Radial Power Converter
Oil Filter
Heat Exchanger
Controls
Shift Assy.

Switch Assys.

Air Shift Components
Solenoid Shift Components
Propeller Shaft Assy.

Universal Joint Flanges - Trans/Differential

Bearings - Needle

Differential Assy.

Side Gears

Pinion Drive

Bearings

Seals

APPENDIX A-4

FLX-ADB

Doors and Door Controls System

Front Door Frame

Front Door Header Cover & Panel Assy.

Front Door Assy. & Actuating Mechanism

Front Door Rear Passenger Assist Stanchion

Emergency Door Open Assy.

Curbside Front Window

Curbside Front Side-Facing Seat

Front Door Post Closeout

Front Stepwell

Front Door Trim Skirt

Front Mechanical Package

Front Wall Frame Assy.

Rear Door Frame

Door Assemblies and Controls

Entrance Door

Center Panels

Outer Panels

Door Control Level

Exit Door

Panels

Rear Door Switch
Master Door Switch
Entrance Door Operating Equipment
 Stepwell Light Switch
 Door Tie Rods
 Door Open Switch
 Door Open Solenoid
 Air Inlet
 Teeter Lever
 Door Engine
 Exhaust Valve
 Harness Disconnect
 Air Exhaust
 Emergency Door Switch
Exit Door Operating Equipment
 Emergency Release Cable
 Closing Speed Screw
 Teeter Lever
 Lock Pawl
 Spring
 Cylinder Assy.
 Door Lock Switch
 Lock Pawl Switch

Air Comfort System

Return Air Grille

Return Air Thermostat

Temperature Controller

Temperature Changeover Controller

Condenser Fans

Condenser Coils

Evaporator Coil

Heating Coil

A/C Alternator Assy.

Retainer Bearing

Capacitor Assy.

Rotor Assy.

Slip Ring Assy.

Race, Inner Bearing

Rotor, Slip Ring End

Coil Assy.

Rotor Hub

Rotor Drive End

Shaft

Fan Assembly

Housing Assembly

Housing, Slip Ring End

Housing, Brush Holder

Rectifier Assy. (+)

Rectifier Assy. (-)

Roller Bearing

Stator

Refrigerant System Components

System Piping and Units (Upper)

Expansion Valve

Filter Drier

Accumulator

Liquid Solenoid Valve

External Equalizer Line

Evaporator Outlet Line

System Isolation Valve

System Piping and Units (Lower)

EPR Valve

Suction Pressure Switch

Discharge Pressure Protection Switch

Accumulator

Liquid Solenoid Valve

Expansion Valve

Evaporator Pressure Regulator

Compressor

Compressor Shell

Clutch Coil and Housing Assy.

Pulley

Bearing

Clutch Plate and Hub Assy.
Front Discharge Valve Plate Assy.
Front Cylinder Half
Thrust Bearing
Shaft
Discharge Crossover Tube
Teflon Ring Type Piston
Axial Plate
Rear Cylinder Half
Rear Discharge Valve Plate Assy.
Needle Bearing
Inner Oil Pump Gear
Outer Oil Pump Gear
Rear Head
Pressure Relief Valve

Electrical System

Generator Drive
Drive Gear
Balance Shaft Gear
Driver Gear
Adapter
Rotor Shaft
Diode End Frame
Diode

Diode & Support Assy.
Relay
Generator
Field
Rotor Assy.
Stator Assy.
Shaft
Ball Bearings
Battery
Battery Cables
Voltage Regulator
Field Discharge Diode
Wire Wound Resistor (6 each)
Power Output Transistors (TR1)
Potentiometer (R5)
Drive Condenser (TR-2)
Feedback Condenser (C-1)
Zenner Diode
Back Bias Diode
Filter Condenser (C-2)
Feedback Connection
Insulators
Passenger Signal Switches
Instrument Panel Assembly
Power Relay

Fuse Block
Terminal Board Assy.
Flasher
Air Gauge
Diagnostic Module
Circuit Breakers
Voltmeter
Wiper Control
Washer Control
Motor Guard Control
Defroster Switch
Panel Light Rheostat
Test Switch
Fast Idle Switch
Passenger Signal Switch
Exterior Lights and Signals - Front
Identification Lamps
Roadside Directional Lights
Curbside Directional Light
Roadside Head Lamp Bezel
Curbside Head Lamp Bezel
Roadside Headlight Assy.
Curbside Headlight Assy.
Rear Light Exterior
Red Lamp Assy.

Clear Lamp Assy.

License Lamp

Front Stepwell Lamp Assembly

Rear Stepwell Lamp Assembly

Engine System

Air Intake System

Screen

Inlet Hose

Air Cleaner Body

Air Restriction Indicator

Hump Hose

Element

Intake Duct

Cooling System

Surge Tank

Vent Cock Valve

Radiator

Hoses

Heating Water Pump

Thermostat (2)

Pressure Valve

Oil Cooler

Fan Control Valve

Fan

Heat Exchanger

Low Coolant Relay

Fan Drive

Wear Sleeve

Fan Hub

Bearing Retainer

Fan Hub Bearing

Output Housing

Output Shaft

Clutch Thrust Plate

Brake Disc

Piston

End Housing

Piston Spring

Driver Plates (7)

Exhaust System

Tailpipe

Muffler

Exhaust Manifold

Bypass Oil Filter

Filter Base

Element

Filter Shell

Brake System

Front Mechanical Pneumatic & Controls

Low Pressure Sw.

Check Valve (B/W)

Check Valve (Williams)

Interlock Solenoid Valve

Air Strainer

Pressure Protection Valve (Suspension)

Pressure Protection Valve (Accessory)

Dual Reservoir

Secondary Service Reservoir

Front Brakes

Brake Changer

Pressure Plate

Diaphragm

Non Pressure Plate

Push Rod

Boot

Return Spring

Brake Shoe and Lining Assy.

Rollers

Camshaft

Brake Spider

Slack Adjuster

Quick Release Valve

Automatic Slack Adjuster

Air Reserve and Piping

Brake Interlock Solenoid Valve

Pressure Reducing Valve

Double Check Valve

Stop Light Switch

Air Throttle System

Treadle Valve Assy.

Treadle

Roller

Control Valve Rod Plunger

Torsion Spring

Control Valve

Throttle Control Cylinder

Compressor, Air

Governor

Spring-Inlet Valve

Head-Cylinder

Insert-Spring

Spring-Discharge Valve

Piston-Unloader

Spring-Unloader

Plunger-Unloader

Body-Cylinder Block

Rod Connecting

Bushing-Wrist Pin
Piston
Retainer-Bearing
Bearing-Ball (2)
Parking Brake Control Valve
Rear Brakes
 Brake Shoe and Lining Assy.
 Brake Spider
 Rollers
 Return Spring
 Camshaft
 Slack Adjuster
 Brake Chamger
 Push Rod
 Diaphram
 Compression Spring
 Service Brake Air Chamber
 Parking Brake Air Chamger
 Released Stud Assy.
 Spring Brake Valve
 Parking Brake Relay Valve
Fuel Supply System
 Fuel Tank Assembly
 Primary Service Reservoir
 Check Valve (Williams)

Low Pressure Switch

Fuel Lines

Primary Filter

Fuel Pump

Secondary Filter

Injector Manifold

Start Switch

Shift Switch

Feedback Check Valve

Safety Equipment

Windshield Wiper Assy.

Wiper Motor Assy.

Connecting Link

Idler Housing Assy.

Knurled Shaft

Blade Assy.

Wiper Arm

Idler Arm

Shaft Assembly

Defroster Assembly

Blower Motor

Blower Housing

Blower Wheel

Rear Plenum Panel

Heater Core

Air Filter
Heater Hose
Water Valve
Heater Control

Horn

Body and Structures

Front Exterior Panels

Front Closure Assy.
Destination Sign Window
Curbside Windshield
Roadside Windshield
Roadside Front Corner Panel Assy.
Curbside Front Corner Panel Assy.
Roadside Wiper Motor Access Door
Curbside Wiper Motor Access Door

Front Wall Frame Assembly

Front Access Door
Front Closure Assembly
Front Bumper Assy.
Front Doorpost Closure
Front Door Panel
Top Closures

Curbside Sidewall Assembly

Lower Exterior Trim
Transmission Door Assy.
Rear Fender
Front Fender

Rub Rail
Rear Lower Cover
Lower Cover Retainer
Intermediate Lower Cover
Intermediate Skirt
Bumper Extension Assy.

Sidewall Frame Assy.

Stub Mullion
Mullion
Top Rail
Short Mullion
Rear Upper Shear Plate
Rear Shear Plate Reinforcement
Lower Firewall & Settee Seat Reinforcement
Rear Lower Shear Plate
Rear Wheelhouse Shear Plate
Front Wheelhouse Shear Plate

Sidewall Interior Trim

Interior Trim Panels

Auxiliary Heater

Blower Motor
Blower Wheel
Motor Plate
Solenoid
Filter
Heater Core

Heater Case

Seats

Windows

Roadside Sidewall Assembly

Lower Exterior Trim

Front Fender

Rear Fender

Rub Rail

End Rub Rail

Intermediate Lower Cover

Rear Lower Cover

Radiator Grille Assy.

Bumper Extension Assy.

Rear Skirt

Battery Access Skirt

Intermediate Skirt

Front Skirt

Sidewall Frame Assy.

Stub Mullion

Mullion

Upper Rear Shear Plate

Top Rail

Front Pillar

Front Wheelhousing Shear Plate

Rear Wheelhousing Shear Plate

Lower Firewall & Settee Seat Reinforcement

Rear Shear Plate

Driver Seat

Sidewall Interior Trim

Windows

Roof Assembly

Curbside Upper Closure

Curbside Rain Gutter

Roadside Upper Closure

Roadside Rain Gutter

Emergency Hatch

Support Ring

Primary Closeout

Lid

Hinge

Floor Assembly

Curbside Rear Wheelhousing

Roadside Rear Wheelhousing

Curbside Front Wheelhousing

Roadside Front Wheelhousing

Front Stepwell

Rear Stepwell

Rear Closure Assembly

Exhaust Closeout Panel

A/C Plenum Door

Rear Upper Grille

Grille Divider Channel

Grille Door Assembly
Roadside Upper Side Panel
Rear Closure Panel
Curbside Upper Side Panel
Curbside Street Assembly
Doorhanger Assembly
Roadside Street Assembly

Engine Door Assembly

Water Fill Door Assy.
Water Fill Door Frame
Oil Fill Door Assembly
Oil Fill Door Frame
Engine Door Assy.

Suspension, Steering & Tires System

Front Axle Assembly

Bushing
Steering Knuckle
Knuckle Pin
Steering Arm
Axle Center
Thrust Bearing
Steering Arm

Kneeling Suspension System

Check Valves
Quick Release Valve
Isolation Valve

Kneel "Up" Valve
Kneel "Down" Valve
Air Control Valve
Supply Cutoff
Down Limit Microswitch
Brake Interlock Microswitch

Steering Gear Transfer Box

Housing
Shaft (Vertical)
Thrust Bearing
Gear (Vertical)
Bearing
Gear (Horizontal)
Needle Bearing

Power Steering Gear Assembly

Plunger
Actuating Shaft & Bearing
Piston and Valve Assy.
Reversing Spring & Valve
Housing
Cylinder Head
Bearing
Output Shaft Gear
Output Shaft
Oil Gear
Pitman Arm

Wheels & Tires

Tires

Rim

Front Hubs & Bearings

Bearing Adjusting Nut

Brake Drum

Outer Bearing Cone & Roller Assy.

Inner Bearing Cone & Roller Assy.

Brake Spider

Steering Knuckle

Hub

Steering Column Assembly

Steering Wheel

Bearing Assembly

Switch Lever

Horn Contact Roller Assy.

Jacket Tube

Spring

Wheel Tube

Coupling Shell

Rubber Shield

Rear Axle Assembly

Axle Shaft

Housing Assembly

Carrier Assembly

Bushing

Spider
Pinion
Gear-Side
Bearing-Cone
Gear Assembly
Cup-Bearing
Ring Adjusting
Slinger
Bearing-Cone, Outer
Bearing-Cone, Inner
Cup-Bearing, Inner
Cup-Bearing, Outer
Bearing-Roller

Rear Suspension

Air Bags
Shock Absorbers
Transverse Rod
Height Control Valve

Power Steering

Reservoir and Filter
Holddown Spring
Filter Screen Assy.
Element Cartridge
Shell Assembly

(Rear Wheels and Tires are identical to front units)

Steering Pump

Cover Housing
Relief Spring
Relief Valve
Pressure Plate Spring
Pressure Plate
Pump Ring
Rotor
Pump Housing
Inside Bearing
Bearing Drive Shaft
Drive Shaft
Drive Hub
Drive Spring
Drive Coupling

Rear Hub and Bearings

Axle Shaft
Outer Bearing Cone and Roller Assy.
Rear Hub
Brake Drum
Inner Bearing Cone and Roller Assy.

Drive Train System

V730D Transmission

External Oil Filter
Shift Solenoids
Oil Cooler
Planetary Gearing

Torque Converter
Modulator
Upshift Valve
Downshift Valve
Control Switch
1st Gear
2nd Gear
3rd Gear
Neutral Gear
Reverse Gear
Linkage
Converter
Clutches
Bearings
Shifter Ping Tank
Air Shifter Assy.
 Piston Return Spring
 Piston
 Rachet Slide
 Stop Plug
 Drive Shaft Assy.
 Bearing Assy.
 Journal
 Slip Joint
 Propeller Shaft
 Universal Joint

Slip Yoke

Journal

Needle Bearing Assy.

Differential

FLX-NCL

BODY AND STRUCTURES

Emergency Escape Side Windows

Emergency Escape Rear Windows

Windshield Glass

Standee Glass

Door Glass

Rear Window Glass

Side Window Assemblies

Outer Frame

Brace

Hinge

Block Stop

Block Catch

Spacer

Outer Frame Seal

Water Seal

Window Spacer

Inner Frame

Sash End

Glass

Sliding Sash Channel

Nylon Glide

Spine

Seal

Latch Assembly

End Seal

Seal

Spline

Slide Assembly

Handle Assembly

Destination and Run Number Signs

Windshield Wipers

Wiper Motor

Transmission Shaft

Back-up Washer

Arm Driver

Intake Fitting

Elbow Fitting

Wiper Arm

Wiper Blade

Control Valve

Control Valve Knob

DOOR AND DOOR CONTROLS SYSTEM

Entrance Door Operating Equipment

Front Door Lever

Front Connecting Rod
Step Light Switch
Door Engine Assembly
 Tie Rod
 Speed Adjustment
 Spring
 Cushioning Seal
 Large Cylinder
 Bolt
 U-Seal
 Gear and Shaft Assembly
 Roll Pins
 Rack
 Small Piston
 Cylinder Cap
 Expander
 Small Cylinder
 Body Assembly
 Large Piston
 Spring Retainer
Tetter Lever
Rear Connecting Rod
Control Valve Air Line
Constant Pressure Air Line
Terminal Strip

Rear Door Lever
Front Door Air Shut-Off Valve
Rear Door Operating Equipment
Door Shaft Lever
Check Cylinder
Cam and Lever Assembly
Solenoid Valve
Header Assembly
Base Plate
Connecting Rod and Yokes
Switch, Interlock Control
Pawl Spring
Locking Pawl
Spring Pin
Door Closing Spring
Emergency Release Connecting Rod
Emergency Release Lever
Connecting Rod and Yokes
Door Controller
Handle Assembly
Electrical Switch
Controller Body
Bullet Catch Bracket
Index Plunger
Plunger Index Spring

Actuator Cam
Bracket Assembly
Brake Interlock System
Door switches
Magnet Valve
End Cover
Plunger
Coil Assembly
Terminal Block & Clip
Shell Solenoid
Valve
Valve Body
Pressure Regulator Valve
Spring
Body
Piston
Seal Assembly
Spring
Double Check Valve
Air Separator
Clamp
Outlet
Body
Inlet
Drain Tube Fitting

BRAKES SYSTEM

Air Brake Components

Air Reservoirs

Service Reservoir Check Valve

Park and Accessory Reservoir Check Valves

Body

Washer

Valve Seal

Spring

Screw Cap

Double Check Valves

Body

Shuttle Guide

Shuttle Valve

Cap

Safety Valves

Release Pin

Adjusting Nut

Spring Cage

Spring

Ball Valve

Body

Pipe Thread

Pressure Protection Valves

Adjusting Cap

Pressure Regulating Spring

Exhaust Vent

Piston Plug

Valve Stem

Piston

Inlet Valve Spring

Spring Retainer

Inlet Valve

Air Line Strainer

Bushing

Disc

Housing

Air Strainer

Disc

Bushing

Low Air Indicators

Body

Diaphragm

Cover

Spring

Contact Points

Stop Light Switch

Dual Air Pressure Gauge

Dual Brake Application Valve

Brake Pedal

Pedal Cover

Pin Retainer Plate

Bearing

Pin & Roller

Brake Pedal

Mounting Pin Assembly

Mounting Plate

Bearing

Mounting Bolts

Toeboard & Covering

Front Brake Chambers

Non Pressure Plate

Spring

Inlet Port

Diaphragm

Pressure Plate

Clamp Ring Nuts & Bolts

Clamp Ring

Boot

Push Rod Assembly

Mounting Bolts

Quick Release Valve

Brake Chamber Port

Exhaust Port

Brake Chamber Port

Brake Valve Port

Diaphragm

Cover

Body

O-Ring

DD3 Brake Actuator System

Brake Actuator Assembly

Auxiliary Pressure Plate

Auxiliary Diaphragm

Diaphragm Senator

Auxiliary Clamp Ring

Service Pressure Plate

Service Diaphragm

Service Clamp Ring

Rear Seal Retainer

Rear Seal

Non-Pressure Plate

Return Spring

Piston Grommet

Collar

Cap O-Ring

Roller

Roller Spring

Lock Cap

Front Seal

Boot
Release Lever
Retainer
Clevis
Push Rod
Retainer Ring
Splash Plate
Piston
Stud
Lock Port
Check Valve
Service Port
Parking and Emergency Port
Mechanical Release Yoke
Yoke
Release Lever
2 Retainers
Yoke Pin
Manual Parking Control Valve
Service Interlock Assembly
Shuttle Valve
Syncro Valve
TR-3 Stand-By Valve
TR-3 Inversion Valve
Service Brake Relay Valve

Valve Bolt
Piston Return Spring
Inlet & Exhaust Valve Seat
Piston
Valve Corer
Exhaust Check
Exhaust Cover
Valve Cap
Valve Return Spring
Spring Seat
Inlet & Exhaust Valve

Parking Brake Relay Valve

Cover Assembly
Relay Piston Assembly
Sealing Ring
Piston Return Spring
Inlet & Exhaust Valve
Exhaust Cover
Diaphragm
Pressure to Spring Brake Chambers
Sealing Ring
Quick Release Diaphragm
Exhaust Cover

Front Brake Shoes, Linings & Camshafts

Brake Chamber

Brake Shoe & Lining Assy.

Anchor Pins

Lubrication Fittings

Lock Plate

Lock Bolt

Return Spring Access Hole

Rollers

Return Spring

Camshaft

Brake Spider

Rear Brake Shoes, Linings & Camshafts

Brake Shoe & Lining Assy.

Brake Spider

Lubrication Fittings

Lock Bolts

Anchor Pin Lock

Anchor Pins

Rollers

Return Spring

Camshaft

Slack Adjuster

Return Spring Access Hole

Automatic Slack Adjuster

Needle Bearing
Rear Cover
Belleville Washers
Body
Welch Plug
Return Spring, Inner
Return Spring, Outer
Worm Wheel Gear
Control Arm Lever
Cover Plate
Cover Screws
Rack
Worm Shaft
Bearing
Clutch Gear
Clutch Hub
Clutch Spring
Front Cover
Bushing
Front Bracket Assy.
Rear Bracket Assy.

Air Compressor

Air Compressor Drive

Drive Disc

Coupling

Hub
Compressor Bearing
Spring
Compressor Crankshaft
Compressor Crankcase
Cylinder Head
 Unloader Cover
 Cover Bolt
 Unloader Pin
 V-Seal
 Unloader Spring
 Exhaust Valve Stop
 Head
 Exhaust Valve Spring
 Exhaust Valve
 Exhaust Valve Seat
 Washer
 Inlet Valve
 Inlet Valve Cage
 Inlet Valve Spring
 Inlet Valve Seat
Pistons, Connecting Rods and Bearings
 Piston & Rod Assembly
 Connecting Rod
 Snap Ring

Piston Pin

Piston

Compression Rings

Snap Ring

Oil Ring

Air Compressor Governor

Housing

Filter Inlet

Retainer Spring

Springs

Housing Outlet

Valve Assembly

Valve Cap Assembly

Screw

Air Dryer

Desiccant Sealing Plate

Inlet

Cartridge Bolt

Purge Valve Piston

Control Port

Purge Valve

Electrical Terminal

Thermostat Enclosure

Heater

Oil Filter

Perforated Plate
Spring Retainer
Outlet
Check Valve

AIR COMFORT SYSTEM

Cooling System

Radiator
Fan Shroud
Surge Tank
Hose, Surge Tank to Water Pump
Fan Blades
Thermo Switch
Torus Housing
Water Pump
Vent Line
Thermostat Housing
Vent Line (Cooling System)
Vent Clock

Fluid Drive Fan

Fan Blade Assembly
Oil Seal Assembly
Washer
Transfer Tube
Seal

Outer Bearing Assembly
Adjusting Spacer
Inner Bearing Assembly
Fan Drive Coupling
Fan Drive Damper Assembly
Oil Pump Gears
Crankshaft
Crankshaft Front Cover (0.1 Pump Housing)
Fan Drive Housing
Torus Drive Shaft
Bearing Retainer
Oil Seal Ring
Gasket
Driving Torus Housing
Driving Torus Assembly
Driven Torus Housing
Driven Torus Assembly
Oil Seal Ring
Bearing
Fluid Control Valve
Element
Stem
Body Plug
Retaining Ring
Return Spring

Override Spring

Seal Retainer

Valve

Body

Valve Seal

Heating and Ventilation

Heating System Water Pump and Motor

Commutator End Frame

C.E. Bearing Assembly

Brush Cap

Brush and Spring Assembly

Armature Assembly

Stator Assembly

Drive End Bearing Assembly

Pump Body

Shim

Pump Cover Gasket

Pump Impeller

Pump Cover

Cover Screw

Pump Drain Plug

Pump Seal Assembly

Seal Seat Assembly

Rubber Slinger

Thrust Washer

Spring Thrust Washer
Retainer Ring
Air Filters
Heater Core Unit
Blower Motor
Brush Inspection Cover
Brush Retaining Spring
Brush
Brush Holder Assembly
Ground Terminal
Postive Terminal
Lead Assembly
Commutator End Frame
Bearing
Negative Terminal
Armature
Magnet
Stator
Fan
Fan End Frame
Bearing
Base
Driver's Heater & Defroster
Heater Line Filter Screen
A/C Compressor

Oil Pressure Switch

Oil Charging Valve

Clutch Assembly

Clutch Coil

Pulley Assy.

Flywheel

Retainer

Suction Valve

Discharge Valve

Cylinder Unloader

Handhole Cover Assy.

Capacity Control Actuator

Connecting Rods

Pistons

Oil Pump End Plunger & Spring Assy.

Crankshaft & Bearing Head

Condenser Unit

Condenser Fan

Capscrew

Cover

Spring

Hub

Fan

Seal

Orifice Ring

Motor Bracket
Motor Assy.
Truss Assy.
Motor Mount
Sleeve
Support Angle
Condenser Fan Drive

A/C Alternator

Key
Fan Assy.
Spacer, Fan
Housing, Drive End
Plug, Vent
Insert Mounting
Bearing
Oil Seal
Retainer Bearing
Roll Pin
Rotor Assy.
Shaft
Rotor, Drive End
Hub, Rotor
Coil Assy., Rotor
Rotor, Seal Ring
Race, Inner Bearing

Ring Assy., Slip
Stator & Terminal Assy.
Screw, Terminal
Washer, Insulation
Capacitor Assy.
Rectifier Assys.
Bushing, Insulation
Oil Seals
Bearing, Roller
Lead, Terminal Wire
Insulator
Insualtion Bushing
Housing, Seal Ring End
Bushing, Slideable
Ring, Sealing
Housing, Slip Ring End
Stud, Terminal
Brush
Jumper
Cover, Terminal

Receiver Tank

Expansive Valve
Power Assy.
Seal Cap
Seal Bonnet

Adjusting Stem
Body Flange Gasket
Cage Assy.
Body Flange
Diaphragm
External Equalizer
Connector
Remote Bulb
Pressure Gauge Set
Low Pressure & Vacuum Gauge
High Pressure Gauge
Gauge Manifold
Service Valves
Valve & Stem Assy.
Test Gauge Connection
Cap
Packing Gland
Refrigerant Lines

ELECTRICAL SYSTEM

Generator

Generator Drive

Generator End Frame

Mounting Stud

Drive Gear

Balance Shaft Gear
Gear Retaining Nut & Washer
Hex-Head Screw
Driven Gear
Tapered Setscrew
Gear Train Cover
Adapter
Rotor Shaft
Diode End Cover
Output Terminal Stud
Diode
Diode & Support Assembly
Stator Terminal Studs
Relay Terminal Stud & Lead Assy.
Insulating Washer
Field Terminal Stud
Stator Assy.
Output Terminal
Field Terminal
Rotor Assembly
Voltage Regulator
Field Discharge Diode
Wire Wound Resistor
Power (Output) Transistors
Potentiometer

Driver Transistor
Feed-Back Condenser
Zener Diode
Back-Bias Diode
Filter Condenser
Feed-Back Connection
Wire Wound Resistors
Insulators
Starter and Solenoid Assy.
Cable
Terminal
Plug
Commutator
Field Coil
Pole Shoe
Armature
Bronze Bushing
Heavy-Duty Clutch
Bronze Bushing
Oil Wick
Nose Housing
Lever Housing
Shift Lever
Linkage
Linkage Seal

Heavy-Duty Solenoid Switch
Brush
Commutator End Frame
Oil Reservoir
Driver's Switch Panel & Utility Box
Engine Apparatus Box
 Rear Start Switches
Master Switch
Alarm and Signal Systems
Bug Light Panel
Alarm Buzzer and Rectifier Assy.
Passenger Signal Chime & Buzzer
Lighting Systems
 Headlights
 Stop Light System
 Stop Light Switch
 Tail Lights
 Directional Signals
 Directional Signal Switch
 Floor-Mounted Directional Switches
 Hazard Warning Flashers
 Back-Up Lights
 Flourescent Lighting System
 Dome Lamp Socket & Lens
 Power Supply Module

Miscellaneous

Circuit Breakers

Relays

Electric Horns

Batteries

Speedometer

Sensor & Rotor Assembly

Slotted Rotor

Wheel Speed Sensor & Sensor Module

Electrical Cable

Speedometer Head

ENGINE SYSTEM

Upper Support Bracket

Engine Cradle Support

Radiator

Fan Shroud

Torus Housing

A/C Alternator

Engine Oil Dipstick

Oil Filler Tube

Emergency Stop

Emergency Stop Solenoid

Wire Terminal

Cover

Case and Coil Assembly
Plate
Plunger and Rod Assembly
Plunger Spring
Engine Stop Solenoid
Valve Body
Plunger Assembly
Spring
Sleeve Assembly
Housing
Coil
Adapter (Air)
Adapter Seal
Wiring Connector
Engine Stop Cylinder
Cylinder
Piston Cap
Piston
Cylinder Cap
Piston Rod
Heat Shield
Fuel Filters
Air Compressor
Compressor Governor
Transmission Dipstick

Transmission Oil Filter
By-Pass Oil Filter
By-Pass Filter Lines
Generator
Compressor Intake
Compressor Discharge
Oil Manifold
Stabilizer Rod
Surge Tank
Engine Cradle Mounting - Top
Temperature Gauge
Air Induction System
Oil Pressure Gauge
Engine Cradle Mounting - Top
Engine Electrical Box
Ping Tank
Fuel Line Fittings
Starter Cable and Ground Strap
Starter Access Door
Heating System Circulation Pump
Heating System Shut-Off Valve
A/C Compressor Drive
Engine Mounting - Lower
Muffler
Engine Mounting - Lower

Propeller Shaft

Radiator Lower Support Holes

SUSPENSION, STEERING, AND TIRES SYSTEM

Front Axle Assembly

Bushings

Adjusting Nut

Steering Knuckle Assembly

Knuckle Upper Bushing

Knuckle Pin Sleeve

Upper Dust Cap

Thrust Bearing

Expansion Plug

Knuckle Lower Bushing

Tapered Knuckle Pin

Knuckle Wheel Spindle

Snap Ring

Steering Arm

Set Screw

Dust Pin

Steering Arm

Rear Axle Assembly

Drive Gear

Differential Case

Differential Spider

Pinion Thrust Washer
Adjusting Ring Lock
Bearing Adjusting Ring
Axle Shaft (right)
Axle Housing
Differential Side Gear
Drive Gear Bolt
Differential Carrier
 Pinion Cage Shims
 Pinion Cage Tapered Dowel
 Pinion Cage Stud
 Pinion Oil Seal Retainer Gasket
 Pinion Oil Seal Retainer
 Oil Seal Sleeve
 Pinion Nut
 Propeller Shaft Flange
 Dust Slinger
 Pinion Oil Seal Assembly
 Pinion Cage
 Pinion Bearing Cone - Outer
 Pinion Bearing Cup - Outer
 Pinion Bearing Spacer
 Pinion Bearing Cup - Inner
 Pinion Bearing Cone - Inner
 Drive Pinion

Pinion Bearing
Bearing Retainer Ring
Carrier Stud
Axle Shaft (left)
Differential Bearing Cone
Differential Bearing Cup
Differential Bearing Cap
Differential Pinion
Differential Case Bolt

Front Suspension

Bracket, Shock Absorber Mounting
Bushing
Rubber Bushing
Retainer Plate
Transverse Radius Rod
Shock Absorber
Air Bag
Radius Rod Bushing
Transverse Rod Mounting Bracket
Shock Absorber Bushings
Air Bag Mounting Plate
Adjustable Radius Rod
Lower Radius Rod, RH
Pin, Shock Absorber Mounting
Radius Rod Bracket

Lower Radius Rod, LH
Pressure Protection Valve
Accessory Air Tank
Upper Radius Rod
Height Control Valve
Rear Suspension
Height Control Valve
Cover and Bracket
Delay Cover
Delay Piston
Valve Lever Screw
Valve Stem Lock Clip
Intake Valve Core
Valve Body
Piston Pin
Delay Plug
Exhaust Valve Core
Exhaust Screen
Exhaust Fitting
Inlet Adapter & Check Valve Assy.
Outlet Adapter Screen
Outlet Adapter
Shaft O-Ring (Medium)
Overtravel Control Shaft
Shaft O-Ring (Large)

Overtravel Body Plug
Overtravel Piston
Overtravel Spring (Large)
Overtravel Spring (Small)
Overtravel Control Body Seal
Overtravel Control Body
Overtravel Lever Stud
Overtravel Lever
Plug Retainer
Delay Cover Retainer
Intake and Exhaust Valve Lever
Air Bag
Upper Radius Rod
Shock Absorber
Spring Beam
Lower Radius Rod

Kneeling System

Air Solenoid Valve
R-6 Relay Valve
Cut-Off Valve
Two-Way Check Valve
Delco Height Valve

Bendix Height Valve
Pressure Regulator

STEERING

Drain Plug

Universal Joint

Drive Shaft

End Yoke

Journal Cross

Bearing

Lubrication Fitting

Slip Joint Sleeve Yoke

Dust Cap

Drive Shaft Tube

Fixed Joint

Steering Column and Bevel Gear

Steering Shaft

Steering Column Tube

Steering Shaft Lowr Bearing

Bevel Gear Bearing

Housing Cap Assembly

Housing Cap Bearing

Bevel Gear

Bevel Gear Housing

Housing Bearing

Retainer

Pinion Gear to Shaft Nut

Steering Shaft Pinion Gear
Housing Upper Cover Bearing
Shim Pack
Housing Vent Assy.
Housing Upper Cover
Upper Steering Column

Horn Button

Retainer

Receiver Cup

Steering Wheel

Cancelting Cam

Flat Steel Spring

Switch Assembly

Turn Signal Housing

Steering Column

Steering Shaft

Seal Plate

Steering Gear Assembly

Housing Side Cover

Pitman Shaft Side Cover Bearing

Pitman Shaft Sector Gear

Pitman Shaft Housing Bearings

Breather

Steering Gear Housing

Steering Shaft End Yoke

Housing Upper Cover
Worm Bearing Cone & Cup
Steering Shaft Oil Seal
Bearing Adjusting Shims
Worm Bearing - Lower
End Yoke Key
Steering Shaft Worm
Ball Nut Stops
Ball Guide
Clamp
Worm Balls
Clamp Screw
Pitman Shaft Oil Seal
Back-Up Adjuster Packing
Back-Up Adjuster
Back-Up Adjuster Lock Nut

Steering Drag Link Assembly

End Socket
Drag Link Tube
Socket Clamp Bolt
Clamp
End Socket
Plug
Plug Lock
Seat Spring

Grease Retainer
Socket Centering Spring
Stud Seat
Stud Bearing
Bearing Race
Dust Seal
End Stud
Steering Tie Rod
Stud
Rubber Dust Cover
Socket Bearing
Tie Rod Tube
End Clamp
Grease Cavity
End Stud Seat
Spring
Retainer Plug

WHEELS AND HUBS

Front Hub and Bearings
Hub Cap
Adjusting Nut Lock Ring
Bearing Adjusting Nut
Wheel
Brake Drum Retaining Screw

Brake Drum
Outer Bearing Cup
Outer Bearing Cone & Roller Assy.
Inner Bearing Cone & Roller Assy.
Inner Bearing Cup
Brake Spider
Oil Seal
Bearing Spacer
Steering Knuckle
Wheel Stud
Hub
Oil Seal Washer
Rear Hub and Bearings
Oil Seal Wiper & Cork Assy.
Axle Shaft
Outer Oil Seal Assy.
Bearing Adjusting Nut
Outer Bearing Cone & Roller Assy.
Outer Bearing Cup
Hub
Wheels
Brake Drum Retaining Screw
Brake Drum
Oil Slinger
Oil Seal Retainer

Inner Oil Seal

Oil Seal Wiper Sleeve

Inner Bearing Cone & Roller Assy.

Inner Bearing Cup

Wheel Stud

Wheels

Tires

FUEL SUPPLY SYSTEM

Fuel Tank

Tank

Filler Cap

Filler Neck

Fuel Return

Fuel Supply

Strap Assy.

Bracket Assy.

Hanger Bracket

Strap Bracket

Primary Fuel Filter

Secondary Fuel Filter

Air Throttle System

Throttle Control Assembly

Throttle Control Cylinder

Cover

Piston Assy.
Body
Alignment Spacer
O-Ring Seal
Piston War Ring
Compression Spring
Dust Boot
Rod End Assy.
Shell
U-Cup Seal
Bracket Assy.
Governor Housing
Extension Spring
Spring Pin
Throttle Linkage Lever
Engine Governor Plate
Air Solenoid Valve
Transmission Modulator
Treadle Valve Assy.
Treadle
Roller
Treadle Pin
Control Valve Rod Plunger
Dust Boot
Bushing

Torsion Spring
Treadle Base
Control Valve
Accessor Reservoir
Air Induction System
Air Cleaner
Service Indicator
Insulators
Brackets
Moisture Eliminator
Clamp
Rubber Elbow
Clamp
Tube
Drain Tube
Compressor Tube
Hump Hose
Air Manifold
Valve Assembly
Tube
Hose
Bracket
Hose Clamp
Drain Spout
V-6 Exhaust System

Muffler
Muffler Straps
Spacer
Bracket
Clamp
Exhaust Pipe, RH
Exhaust Pipe, LH
Tail Pipe
Bracket
Support
Aspirator
Support Tail Pipe
Resonator
Bracket
Deflector
Tail Pipe

V-8 Exhaust System

Muffler Strap
Muffler Bracket
Strap Bolt
Clamp Assy.
Aspirator
Support Bracket
Tail Pipe
Muffler

Support
Exhaust Pipe
Bracket
Strap Bracket
Bushing
Exhaust Outlet
Rubber Support
Bracket - Upper Mounting

DRIVE TRAIN SYSTEM

Transmission

Torque Converter & Housing
Oil Pump
Main Pressure Regulator Valve
Oil Pan & Filter Screen
Control Valve Body Assembly
Governor Assembly
Governor Screen
Manual Selector Shaft Seal
Lock-Up Clutch
Flywheel Housing
Flywheel
Transmission Housing
Flexible Coupling Assy.
Input Drive Gear

Oil Cooler
Oil Filter & Lines
Neutral Start Switch
Transmission Shift Modulator
Transmission Shift Control
Cable Assembly
Bracket
Control Lever
Propeller Shaft
 Universal Joint Flange @ Transmission
 Yoke Flange
 Slip Yoke
 Journal
 Lock Strap
 Needle Bearing Assy.
 Oil Reservoir
 Lubrication Fitting
 Lubricant Passage
 Gasket Retainer
Bearing Assy.
Lock Strap
Lubricant Reservoir
Gasket Retainer
Journal
Slip Joint

Dust Cap

Cork Washer

Steel Washer

Propeller Shaft

Universal Joint Flange at Differential

Lubrication Fitting

APPENDIX A-6

AM-ARTICULATED

DOORS AND DOOR CONTROL (All Doors the Same)

Pipe Holder

Ball Joint Head

Ball Joint Head Holder

Guide Holder

Rubber Liner

Finger Guard

Sealing Strip

Door Cylinder

Pivot

Pivot Counter Nut

Cylinder

Cylinder Bracket

Piston Rod

Bearing

Cylinder Head

Bushing

Push Button Switch

Solenoids

Emergency Valves

Door Panels

AIR COMFORT SYS.

Heating & Ventilation Unit

Heat/Defroster Sys.

Motors - Blower

Armature

Condenser

Brush Assy.

Fan

Relays

Heat Exchanger

Panel

Water Modulation Valves Bus/Trailer

Heater Boxes/Bus

Shut Off Valves

Drain Valves

Heater Boxes/Trailer

Circulating Pumps

Bus/Trailer

Transmission Heat Exchanger

Circulating - Optional for Eng Cooling/Heat Sys Circuit

Heater

Hoses

Thermostat - Heater Circuit

Heater Controls

Air Conditioning

Air Compressor
Body & Head Assy.
Pistons/Connecting Rod Assys.
Crankshaft/Main Bearings
Flywheel & Housing Assy.
Rocker Arm Assys.
Valves
Gear Assys.
Drive Hub
Oil Pump/Relief Valve Assy.
Oil Pan
Oil Filter Assy.
Housing
Canister
A/C Controls

COMMUNICATIONS EQUIPMENT

Microphone
Aux. Mike
Public Address Sys.
Control Box - Amplifier
Speaker Assy.
Communication Controls

ELECTRICAL SYSTEM

Batteries (24 Volt-Series)

Charging Circuit

Cables

Main Switchboard

Main Relays

Main Autom Cut Out Fuses

Auxiliary Switchboard

Instrument Panel

Tachogram

Speedometer

Horns

Buzzers

Stop Request Sys.

Switch Signal

Generator-Oil Cooled

End Frame Drive-Rectifier

Rotor

Bearings

Conductors-Rectifiers

Field/Stator Windings

Diodes

Generator Regulator

Lighting - No Sys. Breakdown

Interior - No Sys. Breakdown

Exterior - No Sys. Breakdown

Controls

Signalling/Warning Lights

ENGINE SYSTEM

Engine Block Assy.

Liners

Cylinder Heads

Valves Intake/Exhaust

Valve Seats/Springs

Rocker Arm Assy.

Pistons/Rings

Pins

Connecting Rods/Caps

Bearings

Camshaft

Bearings

Tappets

Gear

Crankshaft

Main Bearings

Timing Gear

Flywheel

Torsional Vibration Damper

V-Belt Drive Pulleys

Oil Seal
Front Cover
Engine Mounts FT/Rear
Cooling System
Radiator
Upper Shroud
Connector Ring
Frame
Surge Tank Assy.
Vent Plug
Sight Glass
Filler Cap
Low Cooling Indicating Light Sending Unit
Water Pump
Shaft Assy.
Bearing
Impeller
By-Pass Elements
Water Pipe Connect
Lubrication System
Oil Pan/Dipstick
Oil Pump Delivery
Body
Lobe Rotors
Drive Gear

Suction Pipe/Strainer Assy.

Oil Pump Scavenge

- Body
- Lobe Rotors

Oil Pressure Relief Valve Assy.

- Valve
- Spring
- Cap

Oil Filter Assy.

- Shell
- Element

Oil Cooler Assy.

- Body
- Cooler Element

Piston Jet Coolers

- Valves

Crankcase Ventilation/Breather System

- Breather/Ventilation Chamber
- Breather Valve
- Breather Pipe

Auto Oil Feed System

- Oil Pipes
- Auto Shut Off Valve
- Balls

Oil Pan Float Valve Assy.

Reservoir

Float Valve

Exhaust and Inlet Manifolds Systems

Manifolds

Head Pipes

Flex Pipes

Connecting Pipe

Muffler Assy.

Straps

Brackets

Tail Pipe

Starter System

Starter Motor

Rotor

Collector (Comm)

Brush Assy.

Solenoid Switch

Pinion Shaft Assy.

Multiple Disc Clutch

Control Relay

Start-Locking Relay

Capacitor

BRAKES SYSTEM

Brake Pressure Governors (Drive Axle Front & Trailer)

Piston (Upper)
Check Valve
Bore
Piston (Lower)
Piston (from Bellows)
Roller
Lever (Lower)
Spring
Lever (Upper)
Valve Body
Pull Rod
Housing
Inlet-Outlet Valve
Cylinder

Brake Cylinder

Diaphragm
Piston
Spring
Housing
Piston Rod Guide
Boot

Tristop Brake Cylinder

Spring
Piston Rod
Piston (Diaphragm)

Piston Spring
Diaphragm
Piston (Spring Brake)
Single Relay Valve
Diaphragm
Piston (Spring Brake)
Single Relay Valve
Piston
Diaphragm
Spring
Overload Protection Valve
Pistons
Valve Body
Diaphragm
Flow Relief Valve
Adjusting Spring
Piston
Diaphragm
Check Valve
Plunger
Pressure Limiting Valve
Housing
Piston
Pressure Pad
Valve

Spring
Spring Case
Cover
Fast Exhausting Valve
Upper & Lower Housing
Diaphragm
Coil Spring
Automatic Drain Valve
Lower Housing
Upper Housing
Piston
Housing Cap
Two Way Valve
Emergency Release 3/2 Valve
Push Button
Valve Plunger
Coil Spring
Piston
Bushing
Air Drier 3/2 Way Valve
Piston
Valve Plunger
Coil Spring
Anti-Jack Knife Brake 3/2 Way
Solenoid Valve

Plunger

Piston

Spring

Armature

Coil Body

Cable Plug

Auxiliary 3/2 Way Valve

Electrical Control Connection

Solenoid Coil

Coil Spring

Solenoid Armature

Open Door Brake Valve

Coil Body

Armature

Spring

Solenoid Coil

Slack Adjustors (Steerable & Drive)

Control Disc

Spring Assy.

Worm Shaft

Cone Clutch

Rack

Steerable Axle Wheel Brakes

Bushing

Cam Support Bracket

Spider Bushing
Brake Camshaft
Return Spring Pin
Return Spring
Anchor Bushing
Spider Assembly
Backing Plate
Brake Drum
Brake Shoes
Bearing
Drive Axle Wheel Brakes
Bushing
Cam Support Bracket
Bushing
Seal Housing
Bearing
Bushing
Return Spring Pin
Return Spring
Anchor Bushing
Roller Pin
Anchor Pin
Spider Assy.
Backing Plate
Brake Camshaft

Brake Drum
Brake Shoes
Air Tanks
Tanks (Lead Bus)
Tanks (Trailer)
Lines
Connectors
Alcohol Evaporator
Toggle
Wick
Rod
Tank
Pressure Regulator
Lower Housing
Upper Housing
Upper Spring
Check Valve
Plunger
Safety Valve
Filter
Lower Spring
Piston, F, G
Diaphragm
Lead Bus Brake Application Valve
3-Way Switch

Switch Housing
Rubber Damper
Piston Upper
Spring
Piston Lower
Plug
Spring
Valve
Lower Housing Half
Spring
Valve
Upper Housing Half
Tred Plate
Parking Brake Valve
Spring
Plunger Rod
Pressure Piece
Hand Lever
Valve Body
Staging Spring
Staging Piston
Spring
Valve
Valve Plunger
Drive

Lever Parking Brake Valve Assy.

Four Circuit Protection Valve

Valve

Diaphragms

Springs

Check Valve

Overflow Valves

Trailer Control Valve

Piston

Spring

Valves

Piston Tube

Diaphragm

Bleeder Valve

Piston

Line Filter Assembly

Housing

Cartridge

Coil Spring

FUEL SUPPLY SYSTEM

Fuel Tank

Fuel Lift Pump

Pump Screen

Hand Primer

Fuel Filter, Stages 1 & 2

Injection Pump
Injector
Relief Valve
Solenoid Valve
Return Pipe
Pressure Pipe
Leak Off Connection
Leak Off Pipe
Governor
Air Throttle System
 Accelerator Pedal
 Connecting Linkage
 Spring
 Position Transmitter
 Operating Lever
 Electrical Connection Transmission
 Floor Plate
 Accelerator Pedal Lock Cylinder
Throttle Linkage
 Injection Pump Control Lever
 Engine Modulation Linkage
 Transmission Modulation Linkage
 Injection Pump
 Intermediate Lever
 Modulator Lever

Spring
Operating Lever
Control Linkage
Bowden Cable
Stop Cylinder
Idle Stop
Fast Idle Air Pressure Cylinder
Body Cover
Outer Spring
Inner Spring
Piston Rod
Piston
Body
Bearing Sleeve
Bearing
Engine Stop Cylinder
Operating Lever
Stop Cylinder
Air Pressure Line

BODY AND STRUCTURES - SYSTEM

Frame and Under Bus Structure
Shell Exterior
Shell Interior

Floor Cover

Insulation

Jack Pad

Articulation Section

Hinge Connection

Frame Mounts

Live Ring (Horz. Swing)

Auxiliary Frame (Vert)

Bellows Assys.

Gangway Bellows

Center Frame Coupling

Center Frame

Roof Coupling

Tensioning Cables

Turntable Assy.

Control Arms

Tie Rod Assys.

Articulated Brake Indicator

Warning System Switches

Window Assys.

Windshield Fr/Rear

Side

Operator

Sash Assys.

Seat Assys.

Operator
Passenger
Handholds - Partitions
Stantions
Roof Hatch Assys. (Vent/Emergency)
Frames
Holders
Spring Bodies
Covers
Destination Signs
Front
Side
Special Equipment
Fire Extinguisher
Sander Assy.
Hopper
Filler Cap
Access Door
Pipe Assy.

SAFETY EQUIPMENT SYSTEM

Windshield Wiper System
Motor
Blade
Wiper Arm

Pivot Shaft
Motor Lever
Linkage Rods
Rocker Switch

Washer System

Reservoir
Electric Pump
Rocker Switch
Lines
Spray Nozzle
Jets

SUSPENSION-STEERING & TIRES SYSTEM

Hydraulic Steering System

Steering Gear Assy.
Housing
Cover Assy.
Pressure/Steering Limit Valves
Sector Shaft
Bearings
Pitman Arm
Rack Piston
Steering Spindle
Column Steering
Wheel, Steering

Steering Hydraulic Pump Assy.

Body

Cover/Drive End Face Plates

Input Shaft

Rotor

Valve

Flow Control Valve

Supply/Return Lines

Reservoir, Steering

Tank

Suction Line Adapter

Filter

Cover

Dipstick

Steering Arm Bracket Assy.

Housing

Bearing Shaft

Upper/Lower Bushings

End Cover

Front Steering Linkage

Steering Arms

Tie Rods

Tie Rod Arms

Center Tie Rod

Ball Joints

Drag Link

Trailer Steering Linkage

- Turntable Drag Links - Bus/Trailer
- Turntable
- Frame Console
- Turntable Coupling
- Turntable Control Lever
- Drag Links
- Reversing Lever
- Center Tie Rod
- Tie Rods
- Steering Arm
- Steering Bearings Assy.

Air Suspension System

- Air Bellows - Front/Drive & Trailer Axles
- Sealing Plate
- Bellows
- Roll Piston

Height Control Valves - Front/Drive & Steerable

- Housing
- Valve Mechanism
- Shaft Assy.

Shock Absorbers - Front/Drive & Trailer

- Upper Mount Assys.
- Drive Axle Suspension

Control Arm Upper

Holder Assy.

Crossmember

Arm Mount/Bracket Assy.

Wheels & Tires

Steerable Axle Hub Assys.

Wheel Split Rim

Brake Drum

Shaft Seals

Bearing's Tapered - Inner/Outer/Seals

Wheel Hub

Steerable/Trailer Axle Assys.

Steering Knuckles

King Pins

Bushings

Mounting Base

Traverse Arms Upper/Lower

Traction Rods

Frame Mounting Brackets

Drive Wheel Hub Assys.

Wheel Split Rim

Brake Drums

Axle Casing

Axle Shaft

Bearings - Inner/Outer/Seals

Hub/Planet Gear Assy.

Outer Gear Carrier

DRIVE TRAIN SYSTEM

Planetary Drive

Planet Gears

Pins

Needle Bearing

Hub Bell Housing

Hollow Wheel (Outer Wheel)

Sun Gear

Planet Gear Carrier

Outer Thrust Washers

End Cover, Bell Housing

Outer Thrust Washer, Sun Gear

Differential

Ring Gear and Case

Pinion Cage

Drive Pinion

Taper Roller Bearing

Spacer Bushing

Flange End Taper Roller Bearing

Differential Ring Gear

Differential Bearing

Differential Spider

Upper Axle Shaft Gear

Lower Thrust Washer

Oil Slinger

Adjusting Ring

Axle Assembly

Axle Housing

Axle Shaft

Axle Shaft Bearing

Side Gear

Drive Shaft

Upper Control Arm

Propeller Shaft

Propeller Shaft Yoke

Needle Bearings

Universal Joint

Slip Joint

Protecting Sleeve

Transmission

Heat Exchanger

Converter Housing

Clutch

Flywheel Housing

Flywheel

Diaphragm Spring Clutch

Modulator Level

Rod 1

Rod 2

Ball Joint

Lever