

# DATAMAC® Truck & Bus MEXICO Update 9

The Commercial Vehicle Parts & Service Market



A Multi-client Study to be conducted by



### DATAMAC® TRUCK & BUS MEXICO: Update 9

### DATAMAC® TRUCK & BUS MEXICO BACKGROUND

In 2018, MacKay & Company completed its eighth comprehensive aftermarket study of the medium and heavy duty truck, trailer and transit bus/motor coach parts and service business in Mexico since initiated in 1992. As in past years, 2018 survey data was gathered by way of face-to-face interviews with vehicle maintenance personnel in nearly 400 truck and bus/coach fleets operating in Mexico and was conducted by MacKay's research partner. This research methodology has been utilized to gather data for the previous seven DataMac® Mexico reports.

### THE ECONOMIC LANDSCAPE IN MEXICO

The Mexican economy remains dependent on the general trend of the U.S. economy but perhaps not quite to the same degree it did in years past. However, there is little doubt that the two economies are directly linked.

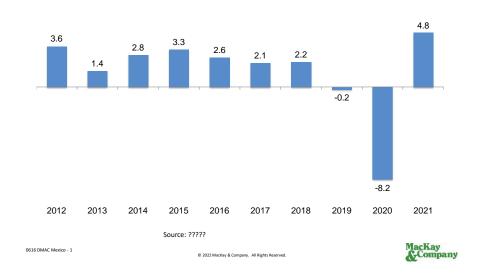
Since MacKay & Company's initial study of the Mexican heavy duty market in 1992, many of the economic – and vehicular – differences between Mexico and the United States have become less significant. Vehicle maintenance practices, for example, are changing to mirror more of those practices common in the United States. And parts purchasing practices have also shifted, again to more closely resemble those in the U.S.

There are many positive economic signs in Mexico and, like the U.S., some concerns.



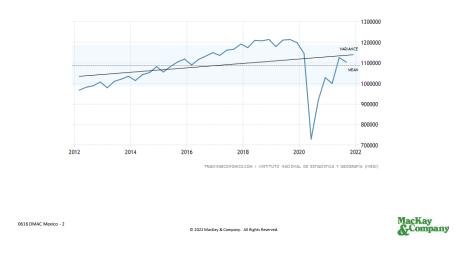
Annual GDP bounced back after the effects of the pandemic in 2020 to 4.8% and the forecast is for continued growth in the 3% range for the next few years.

### **Mexico Annual GDP**



GDP from the Transport sector has bounced back as well, but is still not back to pre-pandemic levels.

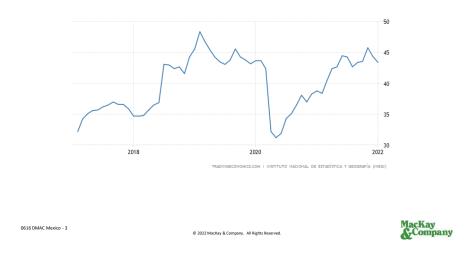
### **GDP From Transport in Mexico**





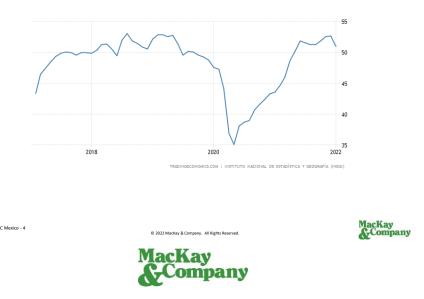
A strong bounce back in consumer confidence has helped support and grow transport GDP and Total GDP. Consumer confidence is expected to continue at high levels over the next few years. This translates into continued strong consumption of products and goods which is the largest driver of trucking activity.

### **Consumer Confidence**



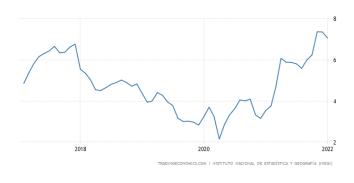
Business confidence, another good indicator of economic and transport activity has also bounced back strong and is expected to continue to be at high levels.

### **Business Confidence**



Similar to countries north of Mexico, inflation is a concern for the Mexico economy. While Mexico has more frequent experience with inflation, it is still a potential threat to the economic growth over the next 12-18 months. Inflation is forecast to subside slightly this year, however, it is predicted to still be at an historically high level by the end of the year.

### **Mexico Inflation Rate**



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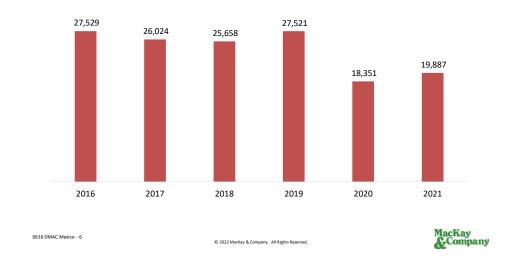




### **RETAIL SALES IN MEXICO**

Since 2000, heavy duty truck retail sales have followed similar peaks and valleys as those experienced in the U.S. 2009 was the lowest year for retail sales in both countries, followed by nearly steady growth for the next six years. Since 2015, retail sales have been fairly dynamic as the pandemic impacted sales in 2020, dropping by 33%, but since then have bounced back 8% in 2021. Supply chain issues and product shortages have impacted this market as they have in the U.S.

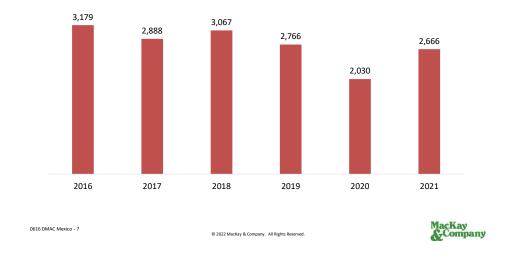
### Mexico Class 8 Retail Sales





Medium duty retail sales have remained relatively stable in the years prior to the pandemic. In 2020, medium duty sales declined 27%, but climbed to near pre-pandemic times in 2021.

### **Mexico Medium Duty Retail Sales**





### **VEHICLE UNIVERSE IN MEXICO**

Combined populations of medium and heavy duty commercial trucks, tractors and buses in operation in Mexico during 2017 were estimated to total 557,100 units. This population of operating power units grew by 16,700 vehicles or 3% during the 2 years since MacKay & Company's 2015 survey.

Medium duty trucks comprised 100,100 or 17% of power units in 2017. Since 2015, operating population of medium duty trucks declined by approximately 11%.

The 2017 population of heavy duty trucks and tractors was up 8% from 2015. Mexican fleets at that time were estimated to operate 324,900 heavy duty trucks and tractors.

The population of transit buses and motor coaches in Mexico in 2017 was estimated to be 148,800, up 2% from 2015.

There were estimated to be approximately 234,200 trailers in operation in Mexico during 2017. This represented an increase of 10% from the level of 2015.

### Mexico Commercial Vehicle Universe 2011, 2015 and 2017

	2011	2015	2017	% Change in 2 Years
Medium Duty Trucks	144,300	112,100	100,100	-11%
Heavy Duty Trucks	255,100	299,500	324,900	8%
Total Buses*	139,700	145,500	148,800	2%
Trailers	175,300	212,000	234,200	10%
TOTAL	714,400	769,100	808,000	5%

\* Includes Transit Buses & Motor Coaches

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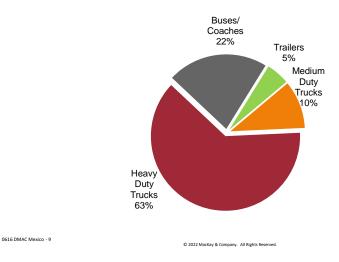




The total value of medium and heavy duty vehicle, trailer and bus replacement parts demand in 2017 was estimated at \$3,700 million at 2017 retail prices. This parts market value was 2% higher than estimated for 2015. This nominal increase in the overall parts market appeared as 1% gains in heavy duty truck and trailer parts demand shares, driven primarily by increases in value of drivetrain and undercarriage component sales.

Replacement demand for medium duty trucks comprised 10% of the 2017 parts market. Heavy duty trucks and tractors generated 63% of all replacement demand. Buses were estimated to account for 22% of the parts market in both 2015 and 2017. Trailer parts generated 5% of 2017.

Mexico – 2017 Total Market Potential By Type of Vehicle \$3,693 Million



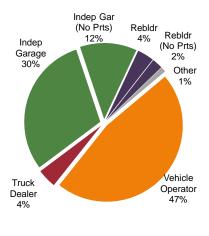




### TOTAL VEHICLE SERVICE ACTIVITY

The 2017 portion of the value of parts and components replaced by vehicle operators is 47%. The portion of service labor provided by independent garages grew to 42% by 2017.

# Mexico – 2017 Total Market Point of Service



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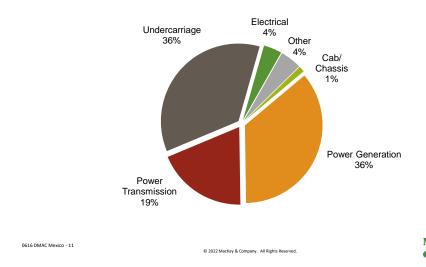
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### **HEAVY DUTY AFTERMARKET**

Total medium and heavy duty truck and bus parts potential in Mexico totaled \$3,600 million in 2015. During the 2 years since then, this parts market value has gained 2% to \$3,700 million.

Power generation parts comprised 36% of total 2017 Mexican parts demand, down 3 share points in 2 years with 7% lower value. While electrical parts demand maintained 4% share of 2017 parts volume in Mexico, value fell 10%.

# 2017 Mexico Parts Demand \$3,693 Million

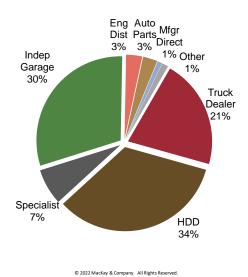




Combining the value of parts sold over the counter with the value of parts installed by vendors on customers' vehicles in their shops yields market share at the point of final sale. Heavy Duty Independent Distributors (HDDs) represent the largest share at 34%, followed by independent garages at 30% and truck dealers at 21%.

### Mexico – 2017 Total Replacement Market Market Share – Point of Final Sale \$3,693 Million

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### **OBJECTIVES OF DATAMAC® TRUCK & BUS MEXICO**

The objectives of this study are to provide participants with a comprehensive "DataMac® style" overview of the commercial vehicle parts and service market in Mexico. As with previous MacKay & Company studies in Mexico, the commercial vehicle market is defined as medium duty trucks (9 - 15 tons), heavy duty trucks (over 15 tons), buses (transit and motor coach) and trailers.

The 2018 DataMac<sup>®</sup> Mexico study included data on 409 components for medium and heavy duty trucks, buses (transit and motor coach) and trailers, up from 314 in 2015. While it is not possible to survey every component for each study year, those non-surveyed components are updated with populations and other model inputs. Study participants are encouraged to share requests for components. A component list from the last study is included in Appendix A.

When looking for additional components to include, we have researched emissions-related components, as this is the largest growing aftermarket segment in the United States. Emission standards in Mexico are a few years behind the United States. The newest regulations state that vehicles sold at the beginning of 2018 will need to comply with U.S. 2010 standards. Given COVID, a one-year extension was granted, and these standards are now expected to begin in 2022.

The upcoming 2022 research program will be the ninth time MacKay & Company has profiled the Mexican market as a DataMac® aftermarket type study. We will be able to provide eight reference points in time to analyze this market where there are shifts and changes meriting such an analysis. This information will be included, when pertinent, as a tool to identify trends or highlight significant changes in the aftermarket. In the process, inventory levels, prices, margins, shifts in the customer base and a series of related issues will be evaluated in detail.

When appropriate, MacKay & Company will also compare and contrast the Mexican commercial vehicle aftermarket with the United States and Canada.

MacKay & Company has 40 years of U.S. DataMac® historical data to reference.



In addition, new objectives are part of the DataMac® Truck & Bus Mexico study going forward:

- MacKay & Company will attempt to update the DataMac<sup>®</sup> Mexico study every three years to provide our clients with more current and regular updates on the Mexico aftermarket.
- Given our proposed updates, MacKay & Company will and has, over time, expanded the product coverage to meet the product coverage currently included in our DataMac<sup>®</sup> Truck services for the U.S. and Canada. Eventually, if there is enough support from our clients, we may decide to increase the frequency, possibly every 1 to 2 years.

### WHAT IS DATAMAC®?

DataMac<sup>®</sup> is MacKay & Company's term for services that monitor current and projected replacement demand for individual parts and components. DataMac<sup>®</sup> is also segmented by product category and vocation or application on each type of equipment.

In addition, DataMac<sup>®</sup> tracks service patterns (where parts are removed and replaced) and the type of replacement. Finally, DataMac<sup>®</sup> examines the channels of distribution from basic manufacturer or marketer to the end user.

In order to maintain consistency, our DataMac<sup>®</sup> Mexico reports are formatted in the same manner for each part and/or component. These reports provide information on each component, including replacement demand in units and dollars – as well as detailed information on component replacements and sourcing by truck operator vocation.



### RESEARCH METHODOLOGY

As the initial step for this study, MacKay & Company will review with each participating company the primary product areas of interest. Similar to our DataMac® services in the U.S. and Canada, MacKay & Company will update all components based on changes in average annual kilometers and operating populations.

MacKay & Company will be surveying new product areas in this study and in future studies to expand the current coverage to be similar to what we have in the United States and Canada. Participating companies will have input, if provided soon enough, to add components to coverage.

The research tools to complete DataMac<sup>®</sup> Truck & Bus Mexico in 2022 will be a combination of telephone interviews, on-site interviews and online surveys with commercial vehicle operators across Mexico. Market research conducted over the telephone or online is much more difficult in Mexico than in the U.S. or Canada, but we are incorporating more of this type of research in 2022 as the pandemic has opened some avenues with these methods. Mail surveys are still not a viable option.

There are a number of trucking associations that represent fleets by vocations — for-hire carriers, large and small private fleets and motor coach operators, to name a few. Our research partners have contacted and interviewed these associations in the past as they are knowledgeable and representative of their members. We will, once again, make these contacts to glean industry and study-related information and data.



As with previous studies MacKay & Company has conducted in Mexico, we will work with a firm based in Mexico that has a depth of experience in the aftermarket. This firm has successfully completed the field work for all past DataMac<sup>®</sup> Mexico studies as well as assisted MacKay & Company on other proprietary research studies on the Mexican truck market. While this firm will not be our lead researcher, they are continuing to assist us with this project.

The primary research will be conducted by a separate market research firm with vast experience across many markets. MacKay & Company is excited to be working with this new partner in our research efforts in Mexico.

As in past studies, our research partner will gather feedback from truck and bus fleets across the country in a variety of states.

Similar to surveys MacKay & Company sends to vehicle operators in the U.S. and Canada, vehicle operators in Mexico will be asked several questions about their fleets. These questions will range from:

- profiles of their fleet (size, brands, age, vocation, purchase patterns, etc.)
- details on their parts purchasing habits (sourcing, brands, type and rationale)
- and the method by which service is completed on their vehicles for specific parts and components.



### **DELIVERABLES**

Each participant in DataMac® Truck & Bus Mexico will receive:

- An electronic copy of the report. DataMac® Mexico will include a detailed market overview, a distribution analysis by product category (power generation, power transmission, undercarriage and electrical) and detailed demand tables on each component by application (heavy truck, medium duty truck, buses and trailers), where it is applicable.
- Each company will be provided with a final presentation of the findings at their offices or via webinar.
- Each participating company will receive access to an online interactive application that details DataMac<sup>®</sup> replacement demand results by component. The application includes a user-friendly front end allowing easy data analysis, as well as chart and table creation for reports.
- Each company that participates in this study will also have the opportunity to
  purchase access to a Fleet Profile (<a href="www.PartsPotential.com">www.PartsPotential.com</a>) service for Mexico.
  This is a service-based website that allows users to input a profile of a fleet
  (number of trucks [by size and vocation], buses or trailers, by age) and receive
  the related report on the aftermarket parts opportunity for that specific fleet by
  several product categories. More information can be found at
  www.PartsPotential.com.



### WHY MACKAY & COMPANY?

MacKay & Company is a specialized management consulting and market research firm. The company's focus for more than 54 years has been, and continues to be, commercial on-highway vehicles, construction equipment, farm field machinery and related components, such as engines and transmissions. We assist clients in evaluating their markets through individual client assignments, participation in multi-client studies or with regular input from our DataMac® services.

MacKay & Company has provided our clients with market overviews, strategic planning recommendations, direct market feedback and forecasts, as well as a valuable variety of business solutions pertinent to today's markets. MacKay & Company has proven to be a respected organization within the industry. Through our extensive market knowledge, MacKay & Company has, over the years, established itself as the leader in assisting businesses with their important decision making in the heavy duty truck aftermarket, construction and agricultural equipment markets.

In 1983, MacKay & Company launched its first on-going DataMac® service for the U.S. truck parts and service market. Since then, four other similar services have been added. These include the Canadian truck market, the U.S. farm field equipment market, the U.S. truck tire market and the U.S. off-highway equipment market.

In 1992, our inaugural DataMac® Mexico was completed, followed by seven additional studies in 1995, 1999, 2004, 2007, 2011, 2015 and our latest in 2018. Adding to our DataMac® products, MacKay & Company expanded to include the Brazilian truck market, the largest commercial vehicle market in South America, in 2012.



#### PROJECT MANAGEMENT

The overall direction of the project will be under the supervision of John Blodgett, vice president. The day-to-day assignment activities will be under the direction Molly MacKay Zacker, vice president of operations and Dave Kalvelage, senior market analyst and client consultant, all of MacKay & Company. They will be assisted by other MacKay & Company staff members as outlined below.

John Blodgett began working for MacKay & Company in 1994 as project manager overseeing single- and multi-client research projects. Today, he is responsible for client contact for single- and multi-client projects as well as directing research activities and consulting projects. Prior to MacKay & Company, John worked for John Fluke Manufacturing, Gould Electronics and Syracuse Supply Company (Caterpillar Dealer) in a variety of sales positions.

John is a regular speaker at industry events and has presented at AASA (Automotive Aftermarket Suppliers Association) Technology Conference, HDAD (Heavy Duty Aftermarket Dialogue), HDAW (Heavy Duty Aftermarket Week), TMC (Technology Maintenance Council), AEM (Association of Equipment Manufacturers), HDBF (Heavy Duty Business Forum), MERA (Motor & Equipment Manufacturers Association), Northwood Aftermarket University, ATD (American Truck Dealers Association), SSA (Service Specialist Association), SOLD (Service Opportunities Learning Days), as well as many corporate events.

John has been a guest on Autoline TV show, Transport Topics Radio (Sirius) show and is a regular contributor to industry publications.

John received his BS in Interdisciplinary Engineering and Management from Clarkson University and an MBA from Pepperdine University Graziadio School of Business and Management. John has served as vice president of the M.P.S.A. (Midwest Parts & Service Association) and is a member of TMC (Technology & Maintenance Council), AEM (Association of Equipment Manufacturers) and IAC (Intermodal Association of Chicago).

**Molly MacKay Zacker** is MacKay & Company's vice president of operations. In this capacity, she coordinates many behind the scenes activities, manages the research department, authors reports and presentations, and conducts research.

Molly holds a bachelor's degree in Economics and Business Management from Goucher College in Towson, Maryland and a Master's degree in Early Childhood Education from Western Michigan University in Kalamazoo, Michigan.



**David Kalvelage** joined MacKay & Company in 2002 as manager of database services and information technology. As a senior market analyst and client consultant, he currently works on providing market intelligence to clients to assist them in making management and marketing decisions. Dave manages the data analysis and reporting for single- and multi-client projects as well as the development, analysis and reporting of local area parts market potential reports for counties, states and metropolitan areas. He prepares MacKay & Company's Aftermarket Index reports and DataMac<sup>®</sup> Tire report and also manages the data that drives PartsPotential.com.

Dave received a bachelor's degree from Iowa State University and earned his MBA and Masters in Information Systems from the University of Colorado at Denver. Prior to coming to MacKay & Company, he worked as a project manager at Lucent Technologies.

**Travis Kokenes** joined MacKay & Company in December 2007 after receiving his Bachelor of Liberal Arts & Sciences in Communication Studies, with a minor in Business from the University of Kansas.

Travis heads our research department and handles data collection and processing for our DataMac® and proprietary studies. He oversees both our phone and direct mail surveys and is responsible for the design of web-based surveys; working with clients to design questionnaires that fit their specific areas of interest.

In April 2010, **John Moery** joined MacKay & Company as manager of multi-client services. To this position, John brings nearly 40 years of experience in the truck, agricultural equipment, construction equipment and parts distribution industries.

John joined International Harvester Company in 1973 as a Product Design Engineer, advancing to Senior Project Development Engineer before moving to operations management in 1981 as manager of Worldwide Production Programming. He then served three years with Case IH, managing worldwide product distribution. Returning to Navistar in 1988, John held positions of increasing responsibility in operations research, business information services and business analysis.

John holds a B.S. degree from the University of Illinois in Agricultural Power and Machinery Engineering and an M.B.A degree from the University of Chicago.



**Brian VanCamp** joined MacKay & Company in December of 2020 as a Market Analyst. Brian has 12+ years of experience in the heavy truck industry and industrial sales/marketing roles. Brian is a hands-on technical learner. He worked alongside service managers, customer technicians, customers and end users while with Hendrickson and BettsHD. He transitioned from a MacKay & Company product user to an author and researcher as he now contributes across multiple products including DataPulse, DataMac® and various multi-client and proprietary projects.

Brian earned a Bachelor of Science in Marketing degree from Indiana University and a Master's in Business Administration from Lewis University.

**Dick Ilseman** joined MacKay & Company in September 2014 after 40 years with Navistar International. While at Navistar, Dick moved through a number of management positions in both Truck and Parts. He has a strong background in assembly plant scheduling, demand forecasting, data analysis, distribution and supply chain and inventory management.

While at Navistar, Dick piloted, designed, implemented and supported a vendor-managed inventory system that provided centralized forecasting and inventory replenishment for over 250 of International's truck dealers. Participating dealers realized significant improvements in inventory turns, fill-rates to customers and reduced obsolescence.

Dick holds a BA degree in Economics from Wabash College and an MBA with a concentration in operations management from the University of Chicago.

#### **TIMETABLE**

DataMac® Mexico will be launched in the third quarter of 2022. MacKay & Company anticipates that it will be completed by the first quarter of 2023, but this will be dependent on participation levels. Study participants will receive updates on the progress of this research program throughout its execution.



### STUDY PURCHASE OPTIONS

Purchase of this study is open to all interested manufacturers and marketers in the medium and heavy duty truck, trailer and bus markets.

Purchase options for DataMac® Truck & Bus Mexico is modular. Base purchase price (one product category) includes:

- All vehicle universe and vehicle universe characteristics information
- Detailed product demand and channel of distribution information for any of the six DataMac® modules of the truck and trailer components and parts to be researched (power generation, power transmission, undercarriage, electrical, cab & chassis and other).
- Transit and intercity buses are a significantly more important part of the operating vehicle universe in Mexico than either the United States or Canada. A separate report section with information on the bus market in Mexico will be included at all levels of participation.
- Access to the DataMac<sup>®</sup> Mexico online aftermarket parts interactive application
- Overview of results with MacKay & Company staff

Product category options include:

- Power Generation
- Power Transmission
- Undercarriage
- Electrical
- Cab & Chassis
- Other



A complete listing of components covered in the 2018 report are included in Appendix A by product category. *Additional products can potentially be added if requested prior to field research launch*.

New this year, MacKay & Company is offering a three-year payment option. This study is typically updated every 3-4 years, so this option provides clients the opportunity to spread the study's cost over time.

**New this time!** MacKay & Company will offer an Executive Overview Report option for first time buyers. This option will provide a thorough review of the findings, but none of the component level detail and no access to the online DataMac® Truck & Bus Mexico application.

If you are interested in purchasing this study or have any questions, please contact: John Blodgett at 630-916-6110 or by email: john.blodgett@mackayco.com.

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### **APPENDIX A**

The following tables show a list of the components profiled in the 2018 DataMac<sup>®</sup> Truck & Bus Mexico Report.

MacKay & Company will update all of these components but may not survey for all. We plan to survey fleets about those components that make up the majority of demand, or our participants are most interested in and/or would like to see added.

## Participating companies can request additional products based on their specific needs and interest

Product Category	Type Component	Component	MD	HD	Buses**	Trailers
Power Generation	Diesel Component	Air Filters	х	Х	X	
	Diesel Component	Belts	Х	Х	Х	
	Diesel Component	Coolant Filters	Х	Х	Х	
	Diesel Component	Cylinder Heads	Х	Х	Х	
	Diesel Component	Engine Assembly New & Rebuilt	Х	Х	Х	
	Diesel Component	Exhaust Clamps	Х	Х	Х	
	Diesel Component	Exhaust Piping	Х	Х	Х	
	Diesel Component	Fan Clutches	х	Х	х	
	Diesel Component	Fuel Filters	х	Х	Х	
	Diesel Component	Fuel Pumps	Х	х	Х	
	Diesel Component	Gasket & Seal Kit Equivalent	х	Х	х	
	Diesel Component	Injectors	Х	Х	Х	
	Diesel Component	Liners	Х	Х	Х	
	Diesel Component	Lube Oil Filters	х	Х	Х	
	Diesel Component	Mufflers	Х	Х	Х	
	Diesel Component	Pistons	Х	Х	Х	
	Diesel Component	Piston Liners	х	Х	х	



Product Category	Type Component	Component	MD	HD	Buses**	Trailers
Power Generation	Diesel Component	Piston Rings	Х	Х	Х	
	Diesel Component	Radiator Hoses	Х	Х	Х	
	Diesel Component	Rod & Main Bearing Set	Х	х	Х	
	Diesel Component	Turbochargers	х	Х	х	
	Diesel Component	Valves & Springs	х	Х	Х	
	Diesel Component	Water Pumps	Х	Х	Х	
Power Transmission	Manual Transmissions	Clutches	Х	Х	Х	
	Manual Transmissions	Complete New & Rebuilt	Х	х	х	
	Manual Transmissions	Gasket Kits	Х	Х	Х	
	Manual Transmissions	Overhaul Kits	х	Х	х	
	Manual Transmissions	Seal & Bearing Kits	х	Х	х	
	Automatic Transmissions	Complete	х	Х	х	
		Axle Overhaul Kits*	х	Х	х	
		Axle Overhaul Loose Parts/Gears	Х	Х	х	
		Axle Pinion Bearings	Х	х	х	
		Axle Pinion Seals	х	Х	х	
		Center Bearings	х	Х	Х	
		Complete Differential Carriers*	х	Х	Х	
		Cross & Bearing Kits	х	Х	Х	
		Differential/Transmission Yokes	х	Х	Х	
		Propshaft Assembly	Х	Х	Х	
		Wheel Bearings	х	Х	Х	х
		Wheel Seals - Grease	Х	Х	Х	х
		Wheel Seals-Oil Bath	Х	Х	х	х
	Automated Manual Transmissions	Complete New & Rebuilt	х	х	х	



Product Category	Type Component	Component	MD	HD	Buses**	Trailers
Undercarriage	Air Brakes	Air Dryers - Complete Units	х	Х	х	х
	Air Brakes	Air Dryers - Desiccant Cartridges	Х	Х	Х	
	Air Brakes	Brake Block Sets	х	Х	Х	х
	Air Brakes	Brake Chamber	х	Х	Х	х
	Air Brakes	Brake Drums	х	Х	х	х
	Air Brakes	Brake Hardware & Foundation Parts	х	Х	Х	х
	Air Brakes	Brake Shoes	х	Х	х	х
	Air Brakes	Brake Valves	х	Х	Х	Х
	Air Brakes	Compressors	х	Х	Х	
	Air Brakes	Disc Calipers	х	Х	Х	Х
	Air Brakes	Disc Pad Kits	Х	Х	Х	Х
	Air Brakes	Disc Rotors	Х	Х	Х	Х
	Air Brakes	Slack Adjusters	Х	Х	Х	
	Air Brakes	Spring Brakes	х	Х	Х	
	Hydraulic Brakes	Brake Drums	х		х	
	Hydraulic Brakes	Brake Lining Set	х		х	
	Hydraulic Brakes	Disc Calipers	х		х	
	Hydraulic Brakes	Disc Pad Kits	х		х	
	Hydraulic Brakes	Disc Rotors	х		х	
	Hydraulic Brakes	Master Cylinders	Х		Х	
	Hydraulic Brakes	Wheel Cylinders	Х		Х	
	Front End Part	Draglink & Idler	х	Х	Х	
	Front End Part	Kingpin Sets (Bolts & Bushings)	х	Х	х	
	Front End Part	Steering Knuckles	Х	Х	Х	
	Front End Part	Tie Rod Ends	X	Х	X	



<b>Product Category</b>	Type Component	Component	MD	HD	Buses**	Trailers
Undercarriage	Power Steering Pumps	Complete Units	х	Х	Х	
	Power Steering Pumps	Seals & Bushing	х	Х	Х	
	Power Steering Gears	Complete Units	х	Х	Х	
	Power Steering Gears	Seals & Bushing Kit Equivalent	х	Х	Х	
	Springs	Front	х	Х	Х	
	Springs	Rear	х	Х	Х	
	Springs	Trailer				Х
	Suspension	Torque Rods	х	Х	Х	Х
	Suspension	Air Bags	х	Х	Х	Х
	Suspension	Shock Absorbers	Х	Х	Х	Х
	Suspension	Spring Hangers & Parts	Х	Х	Х	Х
	Tandem Part	Bushings & Pins - Kit Equivalent		Х		Х
Electrical		Alternators	X	Х	Х	
		Starter Motors	х	Х	х	
		Batteries	Х	Х	Х	
	Lights	Headlight Bulbs	х	Х	Х	
	Lights	Stop/Tail/Turn	х	Х	х	х
	Lights	Stop/Tail/Turn (LED)	х	Х	х	Х
	Lights	Marker Lights	х	Х	х	х
	Lights	Marker Lights (LED)	Х	Х	Х	Х

<sup>\*\*</sup> Buses includes both Transit and Motor Coach components. These are reported separately in our online application.



<sup>\*</sup>Medium duty & heavy duty tandem applications also profiled.