

FEDERAL SIGNAL CORP /DE/
Form 10-K
February 28, 2019
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 1-6003

FEDERAL SIGNAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

36-1063330

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

1415 West 22nd Street,

60523

Oak Brook, Illinois

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code (630) 954-2000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
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Common Stock, par value \$1.00 per share	New York Stock Exchange
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Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

As of June 30, 2018, the aggregate market value of voting stock held by non-affiliates was \$1,371,933,852. For purposes of the foregoing calculation only, executive officers and directors of the registrant have been deemed to be affiliates.

As of January 31, 2019, the number of shares outstanding of the registrant’s common stock was 60,148,935.

Documents Incorporated By Reference

Portions of the registrant’s definitive proxy statement for the 2019 Annual Meeting of Stockholders are incorporated by reference in Part III.

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FEDERAL SIGNAL CORPORATION

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (“Form 10-K”) is being filed by Federal Signal Corporation and its subsidiaries (referred to collectively as the “Company,” “we,” “our” or “us” herein, unless the context otherwise indicates) with the United States (“U.S.”) Securities and Exchange Commission (the “SEC”), and includes comments made by management that may contain words such as “may,” “will,” “believe,” “expect,” “anticipate,” “intend,” “plan,” “project,” “estimate” and “objective” terminology, or the negative thereof, concerning the Company’s future financial performance, business strategy, plans, goals and objectives. These expressions are intended to identify forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) and the Private Securities Litigation Reform Act of 1995.

Forward-looking statements include information concerning the Company’s possible or assumed future performance or results of operations and are not guarantees. While these statements are based on assumptions and judgments that management has made in light of industry experience as well as perceptions of historical trends, current conditions, expected future developments and other factors believed to be appropriate under the circumstances, they are subject to risks, uncertainties and other factors that may cause the Company’s actual results, performance or achievements to be materially different.

These risks and uncertainties, some of which are beyond the Company’s control, include, but are not limited to, the risk factors described under Item 1A, Risk Factors as set forth in Part I, as well as those discussed elsewhere in this Form 10-K. These factors may not constitute all factors that could cause actual results to differ materially from those discussed in any forward-looking statement. The Company operates in a continually changing business environment and new factors emerge from time to time. The Company cannot predict such factors, nor can it assess the impact, if any, of such factors on its results of operations, financial condition or cash flow. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. The Company disclaims any responsibility to update any forward-looking statement provided in this Form 10-K.

ADDITIONAL INFORMATION

The Company is subject to the reporting and information requirements of the Exchange Act and, as a result, is obligated to file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other reports and information with the SEC, as well as amendments to those reports. The Company makes these filings available free of charge through our website at www.federsignal.com as soon as reasonably practicable after such materials are filed with, or furnished to, the SEC. Information on our website does not constitute part of this Form 10-K. In addition, the SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically.

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PART I

Item 1. Business.

Federal Signal Corporation, founded in 1901, was reincorporated as a Delaware corporation in 1969. The Company designs, manufactures and supplies a suite of products and integrated solutions for municipal, governmental, industrial and commercial customers. The Company's portfolio of products that it manufactures includes sewer cleaners, vacuum trucks, street sweepers, waterblasters, dump truck bodies, trailers, and safety and security systems, including technology-based products and solutions for the public safety market. In addition, we sell parts and provide service, repair, equipment rentals and training as part of a comprehensive aftermarket offering to our customers. Federal Signal Corporation and its subsidiaries operate 14 principal manufacturing facilities in five countries and provide products and integrated solutions to customers in all regions of the world.

Narrative Description of Business

Products manufactured and supplied, and services rendered, by the Company are divided into two reportable segments: the Environmental Solutions Group and the Safety and Security Systems Group. The individual operating businesses are organized as such because they share certain characteristics, including technology, marketing, distribution and product application, which create long-term synergies. Corporate contains those items that are not included in our reportable segments.

Financial information concerning the Company's two reportable segments for each of the three years in the period ended December 31, 2018, is included in Note 16 – Segment Information to the accompanying consolidated financial statements and is incorporated herein by reference. Information regarding the Company's discontinued operations is included in Note 18 – Discontinued Operations to the accompanying consolidated financial statements and is incorporated herein by reference.

Environmental Solutions Group

Our Environmental Solutions Group is a leading manufacturer and supplier of a full range of street sweeper vehicles, sewer cleaner and vacuum loader trucks, hydro-excavation trucks, high-performance waterblasting equipment, dump truck bodies and trailers. The Group manufactures vehicles and equipment in the U.S. and Canada that are sold under the Elgin®, Vactor®, Guzzler®, Westech™, Jetstream®, Ox Bodies®, Crysteel®, J-Craft®, Duraclass®, Rugby® and Travis® brand names. Products are sold to both municipal and industrial customers either through a dealer network or direct sales to service customers generally depending on the type and geographic location of the customer. The acquisition of substantially all of the assets and operations of Joe Johnson Equipment, Inc. and Joe Johnson Equipment (USA), Inc. (collectively, "JJE") in 2016 extended the Environmental Solutions Group's existing sales channel and increased the number of service centers through which its parts, service and rental offerings can be provided to current and potential customers. The acquisition of JJE also broadened the Environmental Solutions Group's product offerings to include other products, such as refuse and recycling collection vehicles, camera systems, ice resurfacing equipment and snow-removal equipment. In addition to vehicle and equipment sales, the Group also engages in the sale of parts, service and repair, equipment rentals and training as part of a complete offering to its current and potential customers through its service centers located across North America.

Under the Elgin brand name, the Company sells a leading U.S. brand of street sweepers primarily designed for large-scale cleaning of curbed streets, parking lots and other paved surfaces utilizing mechanical sweeping, vacuum and recirculating air technology. Vactor is a leading manufacturer of vacuum trucks used to maintain sewer lines, catch basins and storm sewers, as well as hydro-excavation trucks to meet the need for safe and non-destructive excavation. Guzzler is a leader in industrial vacuum loaders used to manage industrial waste or recover and recycle valuable raw materials. Westech is a manufacturer of high-quality, rugged vacuum trucks. Jetstream manufactures high pressure waterblast equipment and accessories for commercial and industrial cleaning and maintenance operations. The Company manufactures and sells dump truck bodies and trailers under the Ox Bodies, Crysteel, J-Craft, Duraclass, Rugby and Travis brand names.

Safety and Security Systems Group

Our Safety and Security Systems Group is a leading manufacturer and supplier of comprehensive systems and products that law enforcement, fire rescue, emergency medical services, campuses, military facilities and industrial sites use to protect people and property. Offerings include systems for campus and community alerting, emergency vehicles, first responder interoperable communications and industrial communications, as well as municipal networked security. Specific products include vehicle lightbars and sirens, public warning sirens, general alarm systems, public address systems and public safety software. Products are sold under the Federal Signal™, Federal Signal VAMA® and Victor® brand names. The Group operates manufacturing facilities in the U.S., Europe and South Africa.

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Marketing and Distribution

Depending primarily on the type and geographic location of the end-customer, the Environmental Solutions Group uses either a dealer network, including JJE, or direct sales to serve customers. The 2017 acquisition of Truck Bodies and Equipment International (“TBEI”) increased the number of dealers within our network and also added additional direct sales resources. The dealer network serves both municipal and industrial end markets. Within municipal markets, the majority of our dealers operate exclusively in their assigned territory. In conjunction with selling vehicles to end-customers, dealer representatives demonstrate vehicle functionality and capability and provide vehicle service. In addition to selling products manufactured by the Company, JJE distributes and re-sells products manufactured by other companies. The Company believes its regional, national and global dealer networks for vehicles is a distinguishing factor from its competitors. The Environmental Solutions Group’s direct sales channel concentrates on the industrial, utility and construction market segments, and the service centers provide post-sale service, ancillary parts and equipment rentals. The acquisition of JJE increased the number of service centers through which its parts, service and rental offerings can be provided to current and potential customers.

The Safety and Security Systems Group sells to industrial customers through wholesalers and distributors who are supported by Company sales personnel or independent manufacturer representatives. Products are also sold to municipal and governmental customers through active independent distributors, as well as through original equipment manufacturers and the direct sales force. The Company sells comprehensive integrated warning and interoperable communications through a combination of the direct sales force and independent distributors. International sales are made through independent foreign distributors or on a direct basis.

Customers and Backlog

No single customer accounted for 10% or more of the Company’s net sales in any year within the three-year period ended December 31, 2018. Of the \$1,173.2 million total orders reported in 2018, approximately 31% were from U.S. municipal and governmental customers, 47% were from U.S. commercial and industrial customers and 22% were from non-U.S. customers.

During 2018, the Company’s U.S. municipal and governmental orders increased by 3% compared to 2017 levels, primarily due to improved orders for sewer cleaners and public safety products, partially offset by lower orders for outdoor warning systems. During 2017, the Company’s U.S. municipal and governmental orders increased by 18% compared to 2016 levels, driven by improved orders for street sweepers and sewer cleaners, as well as additional orders for dump truck bodies following the acquisition of TBEI.

During 2018, the Company’s U.S. industrial and commercial orders increased by 29% from 2017 levels, largely attributable to improved orders for vacuum trucks, the effects of a full year of TBEI orders in 2018 compared to seven months of activity in 2017, and increased orders for outdoor warning systems within the Safety and Security Systems Group. During 2017, the Company’s U.S. commercial and industrial orders increased by 140% from 2016 levels, largely attributable to improved orders for sewer cleaners and vacuum trucks, the addition of orders following the TBEI acquisition, the effects of a full year of JJE orders in 2017 compared to seven months of activity in 2016, and increased orders from industrial markets within the Safety and Security Systems Group.

During 2018, the Company’s non-U.S. orders increased by 8% from 2017, largely due to a \$7.8 million increase within the Environmental Solutions Group, reflecting increased orders for vacuum trucks, sewer cleaners and street sweepers, as well as the effects of higher aftermarket demand. These increases were partially offset by lower orders for refuse trucks. Within the Safety and Security Systems Group, non-U.S. orders increased by \$11.7 million, driven by improved orders from international public safety markets. During 2017, the Company’s non-U.S. orders increased by 21% from 2016, largely due to a \$35.6 million increase within the Environmental Solutions Group, reflecting increased Canadian orders following the acquisition of JJE in June of 2016. Within the Safety and Security Systems Group, non-U.S. orders increased by \$5.2 million, driven by improved orders in industrial and coal markets, partially offset by reduced orders from international public safety markets.

Of the Company’s non-U.S. orders received in 2018, approximately 62% were from Canada, 19% were from Europe and less than 10% were from any other particular region. Non-U.S. municipal and governmental markets are similar to

the U.S. municipal and governmental markets in that they are largely dependent on tax revenues to support spending and orders may be subject to budgetary cycles and public-entity bid procedures.

The Company's backlog totaled \$337.7 million at December 31, 2018 compared to \$257.5 million at December 31, 2017. The increase of \$80.2 million, or 31%, was attributable to higher demand for vacuum trucks, sewer cleaners and street sweepers. Backlogs vary by group due to the nature of the Company's products and the buying patterns of its customers. TBEI's product lines typically experience average lead times ranging from one to three months. Following the acquisition of TBEI, the Environmental Solutions Group typically experiences an average backlog of approximately three to six months of shipments.

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The Safety and Security Systems Group typically experiences an average backlog of approximately two months of shipments. Production of the Company's December 31, 2018 backlog is expected to be substantially completed during 2019.

Suppliers

The Company purchases a wide variety of raw materials from around the world for use in the manufacture of its products, although the majority of current purchases are from North American sources. To minimize risks relating to availability, price and quality of key products and components, the Company is party to numerous strategic supplier arrangements. Although certain materials are obtained from either a single-source supplier or a limited number of suppliers, the Company has generally identified alternative sources to minimize the interruption of its business in the event of supply disruptions.

Components critical to the production of the Company's vehicles, such as engines, are purchased from a select number of suppliers. The Company also purchases raw and fabricated steel, as well as commercial chassis, from multiple sources. In addition, we may incorporate chassis provided directly by our customers in our production process. As a distributor of equipment manufactured by other companies, JJE relies on the availability of equipment supplied by others to meet customer demand.

While there are risks and uncertainties with respect to the supply of certain raw materials and components that could impact price, quality and availability in sufficient quantities, the Company believes it has adequate supplies and sources of availability of the raw materials and components necessary to meet its needs.

Competition

Within the Environmental Solutions Group, Elgin is recognized as a market leader among domestic sweeper competitors and differentiates itself primarily on product performance. The Vactor and Guzzler brands each maintain a leading domestic position in their respective marketplaces by enhancing product performance with leading technology and application flexibility. Jetstream is a market leader in the in-plant cleaning segment of the U.S. waterblast industry, competing on product performance, rapid delivery and solutions services. JJE is a leading Canadian-based distributor of maintenance equipment for municipal and industrial markets. TBEI includes a portfolio of regional brands with market leadership positions in distinct geographies and product categories, differentiating itself with its broad regional distribution network, focus on customer responsiveness and operational expertise. Within specific product categories and domestic markets, the businesses within the Safety and Security Systems Group are among the market leaders. The Group's international market position varies from leader to ancillary participant depending on the geographic region and product line. Generally, competition is intense within all of the Group's product lines and purchase decisions are made based on price, features, reputation, performance and service, often within competitive bidding situations.

Patents and Trademarks

The Company owns a number of patents and possesses rights under others to which it attaches importance, but it does not believe that its business as a whole is materially dependent upon any such patents or rights. The Company also owns a number of trademarks, including those listed within the "Narrative Description of Business" section above. We believe these trademarks are important in connection with the identification of our products and associated goodwill with customers, but no material part of the Company's business is dependent on our trademarks.

Employees

The Company employed approximately 3,300 people in its businesses at December 31, 2018, with the Company's U.S. hourly workers accounting for approximately 52% of its total workforce. Approximately 17% of the Company's U.S. hourly workers were represented by unions at December 31, 2018. The Company believes that its labor relations with its employees are good.

Governmental Regulation of the Environment

The Company believes it complies with federal, state and local provisions that have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment. The Company endeavors to establish environmentally-friendly policies and objectives, and believes that these actions

are also consistent with cost-effective operating practices. Capital expenditures in 2018 attributable to compliance with such laws were not material. The Company believes that the overall impact of compliance with environmental regulations will not have a material adverse effect on our financial position, results of operations or cash flow. In May 2012, the Company sold a facility in Pearland, Texas. The facility was previously used by the Company's discontinued Pauluhn business, which manufactured marine, offshore and industrial lighting products. As of December 31, 2018 and 2017,

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\$0.4 million and \$0.5 million, respectively, of reserves related to the environmental remediation of the Pearland facility have been included in liabilities of discontinued operations on the Consolidated Balance Sheets. The Company's estimate may change as more information becomes available; however, the costs are not expected to have a material adverse effect on the Company's results of operations, financial position or cash flow.

Seasonality

Certain of the Company's businesses are susceptible to the influences of seasonal factors, including buying patterns, delivery patterns and productivity influences from holiday periods and weather. In general, the Company tends to have lower equipment sales in the first calendar quarter of each year compared to other quarters as a result of these factors. In addition, rental income and parts sales are generally higher in the second and third quarters of the year, because many of the Company's products are used for maintenance activities in North America, where usage is typically lower during periods of harsher weather conditions.

Executive Officers of the Registrant

The following is a list of the Company's executive officers, their ages, business experience and positions as of February 1, 2019:

Jennifer L. Sherman, age 54, was appointed President and Chief Executive Officer effective January 1, 2016. Ms. Sherman was also appointed to the Board of Directors effective January 1, 2016. Since joining the Company in 1994, Ms. Sherman has served in various roles of increasing responsibility, most recently as Senior Vice President and Chief Operating Officer from April 2014 to December 31, 2015. Ms. Sherman also previously served as Senior Vice President, Chief Administrative Officer, General Counsel and Secretary from 2010 to April 2014, Senior Vice President, Human Resources, General Counsel and Secretary from 2008 to 2010, and Vice President, General Counsel and Secretary from 2004 to 2008.

Daniel A. DuPré, age 62, was appointed Vice President, General Counsel and Secretary in November 2015. Mr. DuPré joined the Company in 2006, most recently serving as its Deputy General Counsel. Mr. DuPré previously held senior legal positions at Sears Holdings Corporation, Bank One Corporation, and Brunswick Corporation and served as an Assistant United States Attorney for the Northern District of Illinois.

Lauren B. Elting, age 37, was appointed Vice President and Corporate Controller in May 2018. Prior to joining the Company in January 2017, Ms. Elting worked at Ernst & Young LLP from 2004 to 2016, most recently as Senior Audit Manager.

Robert E. Fines, age 60, was appointed Vice President and General Manager of TBEI in June 2017, following the Company's acquisition of TBEI, where Mr. Fines had served as Chief Executive Officer since 2008. Prior to joining TBEI, Mr. Fines held senior management positions at Kirtland Capital, Avery Dennison and GE Plastics.

Ian A. Hudson, age 42, was appointed Senior Vice President and Chief Financial Officer in October 2017. Mr. Hudson joined the Company in August 2013 as Vice President and Corporate Controller. Prior to joining the Company, Mr. Hudson served as Director of Accounting – Latin America and Asia Pacific at Groupon, Inc. from June 2012 to August 2013. Prior to that role, Mr. Hudson worked at Ernst & Young, LLP from 1998 to 2012, most recently as Senior Audit Manager.

Svetlana Vinokur, age 39, was appointed Vice President, Treasurer and Corporate Development in April 2015. Prior to joining the Company, Ms. Vinokur worked as Assistant Treasurer at Illinois Tool Works Inc. Prior to that role, Ms. Vinokur served as Finance Head of M&A Strategy at Mead Johnson Nutrition Company and as a senior associate for Robert W. Baird & Company's Consumer and Industrial Investment Banking group. Ms. Vinokur started her career at Ford Motor Company, serving in various finance roles.

Mark D. Weber, age 61, was appointed Senior Vice President and Chief Operating Officer in January 2018, upon rejoining the Company after four years at Supreme Industries, Inc. ("Supreme"). Mr. Weber joined Supreme in May 2013 as President and Chief Executive Officer, serving in that capacity up to the sale of Supreme to Wabash National Corporation, which was completed in September 2017. Prior to joining Supreme, Mr. Weber worked for 17 years as an executive within the Company's Environmental Solutions Group, including a decade as Group President.

These officers hold office until the next annual meeting of the Board of Directors following their election and until their successors have been elected and qualified.

There are no family relationships among any of the foregoing executive officers.

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Item 1A. Risk Factors.

We may occasionally make forward-looking statements and estimates such as forecasts and projections of our future performance or statements of our plans and objectives. These forward-looking statements may be contained in, but are not limited to, filings with the SEC, including this Form 10-K, press releases made by us and oral statements made by our officers. Actual results could differ materially from those contained in such forward-looking statements. Important factors that could cause our actual results to differ from those contained in such forward-looking statements include, but are not limited to, the risks described below.

Our financial results are subject to U.S. economic uncertainty.

In 2018, we generated approximately 78% of our net sales in the U.S. Our ability to be profitable depends heavily on varying conditions in the U.S. governmental and municipal markets, as well as the overall U.S. economy. The industrial markets in which we compete are subject to considerable cyclicity, and move in response to cycles in the overall business environment. Many of our customers are municipal government agencies, and as a result, we are dependent on municipal government spending. Spending by our municipal customers can be affected by federal, state and local political circumstances, budgetary constraints, changing priorities, actual or potential government shutdowns and other factors. The U.S. government and municipalities depend heavily on tax revenues as a source of spending and accordingly, there is a historical correlation that suggests a lag of one to two years between the condition of the U.S. economy and our sales to the U.S. government and municipalities. Therefore, downturns in the U.S. economy are likely to result in decreases in demand for our products. During previous economic downturns, we experienced decreases in sales and profitability, and we expect our business to remain subject to similar economic fluctuations in the future. In addition, the Tax Cuts and Jobs Act of 2017 (the “2017 Tax Act”) may result in changes in federal, state and local tax revenues which could impact governmental spending and demand for our products.

We have international operations that are subject to compliance with domestic and foreign laws and regulations, economic and political uncertainties and foreign currency rate fluctuations.

Our business is subject to fluctuations in demand and changing international economic, legal and political conditions that are beyond our control. In 2018, approximately 22% of our net sales were to customers outside the U.S. and we expect a significant portion of our revenues to come from international sales in the foreseeable future. Operating in the international marketplace exposes us to a number of risks, including the need to comply with U.S. and foreign laws and regulations applicable to our foreign operations, such as the Foreign Corrupt Practices Act, the United Kingdom (“U.K.”) Bribery Act and their counterparts in other foreign jurisdictions in which we operate, restrictive domestic and international trade regulations, changes in these laws, regulations and policies by the U.S. and foreign governments. In addition, we may be exposed to risks associated with actual or threatened imposition of tariffs or trade barriers on our products or materials incorporated into our products, actual or threatened trade disputes, including so-called “trade wars,” political and economic instability in the jurisdictions in which we operate, foreign receivables collection risk, local labor market conditions, and, in some cases, international hostilities. The costs of compliance with these various laws, regulations and policies can be significant and penalties for non-compliance could significantly impact our business.

To the extent that our international operations are affected by adverse foreign economic or political conditions, we may experience disruptions and losses which could have a material impact on our financial position, results of operations or cash flow. To mitigate the risk of foreign receivables collection, we may obtain letters of credit from international customers to satisfy concerns regarding the collectability of amounts billed to customers.

Some of our contracts are denominated in foreign currencies, which may expose us to risks of fluctuating currency values and exchange rates, hard currency shortages and controls on currency exchange. Changes in the value of foreign currencies over the long term could increase our U.S. dollar costs for, or reduce our U.S. dollar revenues from, our foreign operations. Any increased costs or reduced revenues as a result of foreign currency fluctuations could adversely affect our results of operations.

We are subject to a number of restrictive debt covenants.

Our credit facility contains certain restrictive debt covenants and customary events of default. Our ability to comply with these restrictive covenants may be affected by the other factors described in this “Risk Factors” section, as well as other factors outside of our control. Failure to comply with one or more of these restrictive covenants may result in an event of default which, if not cured by us or waived by our lenders, allows our lenders to declare all amounts outstanding as due and payable. Such an acceleration of the maturity of our indebtedness may cause us to incur substantial costs and may prevent or limit us from engaging in transactions that benefit us, including responding to changing business and economic conditions and taking advantage of attractive business opportunities.

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The execution of our growth strategy is dependent upon the continued availability of credit and third-party financing arrangements for our customers.

Economic downturns result in tighter credit markets, which could adversely affect our customers' ability to secure financing or to secure financing at favorable terms or interest rates necessary to proceed or continue with purchases of our products and services. Our customers' or potential customers' inability to secure financing for projects could result in the delay, cancellation or downsizing of new purchases or the suspension of purchases already under contract, which could cause a decline in the demand for our products and services and negatively impact our financial position, results of operations or cash flow.

Our efforts to develop new products and services or enhance existing products and services involve substantial research, development and marketing expenses, and the resulting new or enhanced products or services may not generate sufficient revenues to justify the expense.

We place a high priority on developing new products and services, as well as enhancing our existing products and services. As a result of these efforts, we may be required to expend substantial research, development and marketing resources, and the time and expense required to develop a new product or service or enhance an existing product or service are difficult to predict. We may not succeed in developing, introducing or marketing new products or services or product or service enhancements. In addition, we cannot be certain that any new or enhanced product or service will generate sufficient revenue to justify the expense and resources devoted to the related product diversification effort.

We could incur restructuring and impairment charges as we continue to evaluate opportunities to restructure our business and rationalize our manufacturing operations in an effort to optimize our cost structure.

We continue to evaluate opportunities to restructure our business and rationalize our manufacturing operations in an effort to optimize our cost structure. These actions could result in significant charges that could adversely affect our financial condition and results of operations. Future actions could result in restructuring and related charges, including but not limited to impairments, employee termination costs and charges for pension and other postretirement contractual benefits and pension curtailments that could be significant and could have an adverse effect on our financial condition, results of operations or cash flow.

We operate in highly competitive markets.

The markets in which we operate are highly competitive. Many of our competitors have significantly greater financial resources than we do. The intensity of this competition, which is expected to continue, can result in price discounting and margin pressures throughout the industry and may adversely affect our ability to increase or maintain prices for our products. In addition, certain of our competitors may have lower overall labor or material costs. In some cases, our contracts with municipal and other governmental customers are awarded and renewed through competitive bidding. We may not be successful in obtaining or renewing these contracts, which could have an adverse effect on our financial condition, results of operations or cash flow.

We may incur material losses and costs as a result of lawsuits or claims that may be brought against us which are related to product liability, warranty, product recalls, client service interruptions or other matters.

We are exposed to product liability and warranty claims in the normal course of business in the event that our products actually or allegedly fail to perform as expected, or the use of our products results, or is alleged to result, in bodily injury and/or property damage. For example, we have been sued by firefighters seeking damages claiming that exposure to our sirens has impaired their hearing and that the sirens are, therefore, defective. In addition, we are subject to other claims and litigation from time to time as further described in the accompanying notes to our consolidated financial statements. We could experience material warranty or product liability costs in the future and incur significant costs to defend ourselves against these claims. While we carry insurance and maintain reserves for product liability claims, our insurance coverage may be inadequate if such claims do arise, and any defense costs and liability not covered by insurance could have a material adverse impact on our financial condition, results of operations or cash flow. A future claim could involve the imposition of punitive damages, the award of which, pursuant to state laws, may not be covered by insurance. In addition, warranty and certain other claims are not

typically covered by insurance. Any product liability or warranty issues may adversely impact our reputation as a manufacturer of high quality, safe products and may have a material adverse effect on our business.

Failure to keep pace with technological developments may adversely affect our operations.

We are engaged in an industry that will be affected by future technological developments. The introduction of products or processes utilizing new technologies could render our existing products or processes obsolete or unmarketable. Our success will depend upon our ability to develop and introduce on a timely and cost-effective basis new products, applications and

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processes that keep pace with technological developments and address increasingly sophisticated customer requirements. We may not be successful in identifying, developing and marketing new products, applications and processes and product or process enhancements. We may experience difficulties that could delay or prevent the successful development, introduction and marketing of product or process enhancements or new products, applications or processes. Our products, applications or processes may not adequately meet the requirements of the marketplace and achieve market acceptance. Our financial condition, results of operations or cash flow could be materially and adversely affected if we were to incur delays in developing new products, applications or processes or product or process enhancements, or if our products do not gain market acceptance.

Increased information technology security threats and more sophisticated cyber-attacks pose a risk to our systems, networks, products and operations.

We have observed a global increase in information technology security threats and more sophisticated cyber-attacks. Our business could be impacted by such disruptions, which in turn could pose a risk to the security of our systems and networks and the confidentiality, accessibility and integrity of information stored and transmitted on those systems and networks. We have adopted measures to address cyber-attacks and mitigate potential risks to our systems from these information technology-related disruptions. However, given the unpredictability of the timing, nature and scope of such disruptions, our systems and networks remain potentially vulnerable to attacks. Depending on their nature and scope, such attacks could potentially lead to the compromising of confidential information, misuse of our systems and networks, manipulation and destruction of data, misappropriation of assets or production stoppages and supply shortages, which in turn could adversely affect our reputation, financial condition, results of operations or cash flow.

Infringement of, or an inability to protect, our intellectual property rights could adversely affect our business.

We rely on a combination of patents, trademarks, copyrights, nondisclosure agreements, information technology security systems, physical security and other measures to protect our proprietary intellectual property and the intellectual property of certain customers and suppliers. However, we cannot be certain that our efforts to protect these intellectual property rights will be sufficient. Intellectual property protection is subject to applicable laws in various jurisdictions where interpretations and protections differ or can be unpredictable and costly to enforce. Further, our ability to protect our intellectual property rights may be limited in certain foreign jurisdictions that do not have, or do not enforce, strong intellectual property rights. Any failure to protect or enforce our intellectual property rights could have a material adverse effect on our competitive position, financial condition, results of operations or cash flow.

The inability to obtain raw materials, component parts and/or finished goods in a timely and cost-effective manner would adversely affect our ability to manufacture and market our products.

We purchase from suppliers raw materials, component parts and finished goods to be used in the manufacturing and sale of our products. In addition, we may incorporate vehicle chassis provided directly by our customers in our production process. Changes in our relationships with suppliers, shortages or production delays, whether due to our suppliers or customers, regulatory restrictions or work stoppages by the employees of our suppliers or the chassis suppliers for our customers could have a material adverse effect on our ability to timely manufacture and market products. In addition, increases in the costs of purchased raw materials, component parts or finished goods could result in manufacturing interruptions, delays, inefficiencies or our inability to market products. In addition, our profit margins would decrease if prices of purchased raw materials, component parts or finished goods increase and we are unable to pass on those increases to our customers.

Our ability to operate effectively could be impaired if we fail to attract and retain key personnel.

Our ability to operate our businesses and implement our strategies depends in part on the efforts of our executive officers and other key employees. In addition, our future success will depend on, among other factors, our ability to attract and retain qualified personnel. The loss of the services of any key employee or the failure to attract or retain other qualified personnel could have a material adverse effect on our business or business prospects.

Disruptions within our dealer network or the inability of our dealers to secure adequate access to capital could adversely affect our business.

We rely on national and global dealer networks to market certain of our products and services. A disruption in our dealer network, or with a significant dealer, or within a specific market, could have an adverse impact on our business within the affected market. In addition, our dealers require adequate liquidity to finance their operations, including purchases of our products. Dealers are subject to numerous risks and uncertainties that could unfavorably affect their liquidity positions, including, among other things, continued access to adequate financing sources on a timely basis on reasonable terms. These sources of financing are vital to our ability to sell products through our dealer network. Deterioration in the liquidity or credit worthiness of our dealers could have a significant adverse effect on our business. The loss or termination of a significant dealer,

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or a significant number of dealers, could cause difficulties in marketing and distributing our products and have an adverse effect on our business, financial condition, results of operations or cash flow.

Our business may be adversely impacted by work stoppages and other labor relations matters.

As a portion of our workforce is unionized, we are subject to risk of work stoppages and other labor relations matters. As of December 31, 2018, approximately 17% of our U.S. hourly workers were represented by labor unions and were covered by collective bargaining agreements with various unions. Many of these agreements include provisions that limit our ability to realize cost savings. Our current collective bargaining agreement with the International Brotherhood of Electrical Workers is due to expire in April 2019. Any strikes, threats of strikes or other organized disruptions in connection with the negotiation of new labor agreements or other negotiations could materially adversely affect our business as well as impair our ability to implement further measures to reduce costs and improve production efficiencies.

Our pension funding requirements and expenses are affected by certain factors outside of our control, including the performance of plan assets, the discount rate used to value liabilities, actuarial assumptions and experience and legal and regulatory changes.

Our funding obligations and pension expense for our defined benefit pension plans are driven by the performance of assets set aside in trusts for these plans, the discount rate used to value the plans' liabilities, actuarial assumptions and experience and legal and regulatory funding requirements. Changes in these factors could have an adverse impact on our financial condition, results of operations or cash flow. In addition, a portion of our pension plan assets are invested in equity securities, which can experience significant declines if financial markets weaken. The level of the funding of our defined benefit pension plan liabilities was approximately 79% as of December 31, 2018. Funding of the Company's U.S. defined benefit pension plan is determined in accordance with guidelines set forth in the Employee Retirement Income Security Act ("ERISA"). The current year funding status was impacted by a lower discount rate than in the prior year. Our future pension expenses and funding requirements could increase significantly due to the effect of adverse changes in the discount rate, asset values or the estimated expected return on plan assets. In addition, we could become legally required to make increased cash contributions to the pension plans, and these contributions could be material and negatively affect our cash flow.

The costs associated with complying with environmental and safety regulations could lower our margins.

We, like other manufacturers, continue to face heavy governmental regulation of our products, especially in the areas of the environment and employee health and safety. Complying with environmental and safety requirements has added and will continue to add to the cost of our products, and could increase the capital required to support our business. While we believe that we are in compliance in all material respects with these laws and regulations, we may be adversely impacted by costs, liabilities or claims with respect to our operations under existing laws or those that may be adopted. These requirements are complex, change frequently and have tended to become more stringent over time. Therefore, we could incur substantial costs, including cleanup costs, fines and civil or criminal sanctions as a result of violation of, or liabilities under, environmental laws and safety regulations. These requirements may increase the cost of our products, which may diminish demand for those products. In addition, uneven application of environmental or safety regulations could place our products at a cost or features disadvantage, which could reduce our revenues and profitability.

An impairment in the carrying value of goodwill, intangible assets or long-lived assets could negatively affect our financial position and results of operations.

As of December 31, 2018, goodwill and intangible assets represented 37% and 14% of total consolidated assets, respectively. Rental equipment and properties and equipment are long-lived assets which also represented more than 5% of our total consolidated assets as of December 31, 2018. Goodwill and indefinite-lived intangible assets are tested for impairment annually, or more frequently if indicators of impairment exist. Definite-lived intangible assets and long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In evaluating the potential for impairment of goodwill, intangible assets and long-lived assets, we make assumptions regarding future operating performance, business trends, competition and

market and general economic conditions. Such analyses further require us to make certain assumptions about our sales, operating margins, growth rates and discount rates. There are inherent uncertainties related to these factors. An impairment charge may result from, among other things, a significant decline in operating results, adverse market conditions, unfavorable changes in applicable laws or regulations, or a variety of other factors. Our total consolidated assets and results of operations for the applicable period could be materially adversely affected if any such charge is recorded.

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We may be unsuccessful in our future acquisitions, if any, which may have an adverse effect on our business.