

Evolving Trailer Technology



V18 • 4



**Is it Time to Switch to Air Disc Brakes?
Truck Body on Tour with Big Ten
AdvantEDGE: How Compass Lease Spells Success**

4 Reefer Floors & More | 14 New FXP Sliding Suspension | 9 Sahara: Tough and Efficient

2017 Events Calendar

April

20-22 EXPO Cam
Montreal, Canada

30-May 2 NPTC - National Private Truck Council
Cincinnati, OH

May

4-6 National Truck Heavy Equipment Claims Council
Grapevine, TX

June

12 TCA Open Deck
Riverside, MO

July

12-14 TCA - Refrigerated Division Meeting
Vail, CO

14-15 Expedite Expo
Lexington, KY

28-30 PMA - Foodservice Conference Expo
Monterey, CA

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Custom Solutions to Meet Your Needs

Dear Customer,

As a transportation solutions leader, Great Dane is committed to providing its customers with custom solutions to meet their unique needs. With the help of a dedicated design team and hands-on engineering support, customers can choose options and design features that best suit their individual needs. In this issue of Evolving Trailer Technology, you'll read about some of the many custom solutions Great Dane offers.

Beyond delivering superior thermal performance, our Everest reefers feature the strongest floor system in the industry. Building on this strength, we'll look at how matching the right floor types and scuffbands will enhance your trailer's performance. Plus, we've added antimicrobial protection to our roof and wall liners to give you an edge on clean.

Trailer brakes are a vital safety feature but choosing the braking system that's best for your operation can be a tough choice. Understanding the need for proper balance between tractor and trailer systems can help make the decision easier. We'll also discuss how air disc brakes compare to drum brakes, and the improved safety and efficiency that air disc brakes can provide.

Our Sahara truck body is loaded with numerous design options, including translucent roof sheets, lighting options, floor options and more. Read about how the Big Ten Network customized a Sahara truck body to be the official equipment truck for its "BTN Tailgate" program, which aired live from college campuses this past fall.

Great Dane products are designed with an intimate understanding of the customer's needs using the highest quality components and technology available. Be sure to read the stories of three customers who are using Great Dane's custom solutions to keep their fleets efficient, safe and on the road.

At Great Dane, we strive to exceed our customers' expectations with innovative products and services that also play to our strength of custom design. I hope you'll enjoy reading about some of these design options and the many ways Great Dane is working to help our customers succeed.

Best regards,

Brandie M. Fuller
Vice President, Marketing
Great Dane



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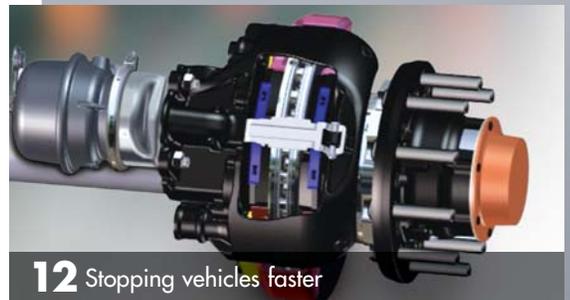
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Floors & Scuffbands

Choose a system that can withstand daily wear and tear

Loading and unloading cargo from trailers can be tough on floors and sidewalls, so it's important to have a flooring system that is strong enough to withstand daily wear and tear.

The two most common types of flooring for refrigerated trailers are flat floors and reefer duct floors. Great Dane's high-performance floor design protects cargo by helping to ensure proper temperatures. Floors are automatically welded to seal out moisture, and composite sills provide maximum support and a defense against moisture intrusion. These sills are anchored by sill screws that employ an organic multi-layer coating system that resists corrosion. An impact-resistant thermoplastic sub-pan completes the floor design, creating an extremely durable and well protected floor.

Use this QR code to link to a video about the floor design.



Flat Floors for Pallets

Flat flooring is generally used for palletized load applications. Palletized loads are concentrated and can require a higher floor rating, especially for heavy-duty grocery, dairy and foodservice operations. Great Dane's standard heavy-duty concentrated reefer cargo flat floor is rated at 20,000 pounds. It is available with four different surface types: smooth, Safety-Grip, ridged and textured. This floor is the highest forklift-rated floor in the industry and is a popular option for many grocery and foodservice applications.

Flat floors are ideal for when moveable bulkheads are used to create multiple temperature zones because the bulkheads can seal tightly across the flat floor surface. The delivery of products in and out of trailers with small-wheeled carts is easier on the flat surface than on ducted floors. Also, operations where pallet jacks and fork trucks are used to load trailers can benefit from flat floors.

Flat floors are not as prone to collect debris or snag pallets and are easy to clean.

Reefer Duct Floors Help Cooling

Reefer duct floors, also known as corrugated floors, can service a variety of loads. Great Dane's heavy-duty duct flooring is TTMA-rated at 18,000 pounds.

The floor includes an integral channel at the extreme outboard edges of the floor assembly that is unique to Great Dane's design. Air and electrical lines can be routed through this channel to eliminate the need to notch (weaken) the floor sills at the center of the floor, which is a high stress area.

Great Dane's reefer duct floors provide better air flow management, which protects cargo by helping the cooling unit operate efficiently and maintain temperature. Built with two-to-four-inch insulation, in addition to the insulation in the extrusion of the floor, these reefer duct floors are extremely thermally efficient.



A New Standard of Clean

Great Dane's PunctureGuard and ThermoGuard reefer liners now come standard with Microban® antimicrobial protection in the lining. The patented Microban technology is built into the Everest's liners during the manufacturing process, resulting in antimicrobial protection for the life of the liner. The technology does not wash off or wear away and helps provide ongoing protection against the growth of bacteria that can cause stains, odors and product degradation.

This new technology provides Great Dane customers with products that will help better prepare them to meet the more stringent standards of the Food Safety Modernization Act (FSMA).

Reefer Scuffband Protects Sidewalls

Forklifts, pallet jacks or anything moving through the trailer can damage sidewalls. Scuffbands provide extra sidewall protection and are available in various heights and materials, including integral extruded aluminum, high-density polyethylene (HDPE) plastic, and Great Dane's PunctureGuard scuffband.

Extruded aluminum integral scuffbands are available in standard and heavy-duty and are probably the most common scuffbands. These scuffbands are welded along the floorboard to create a water-tight seal. A 10-inch height is standard with six-inch pieces available for stacking, giving up to 46-inches of protection.

HDPE plastic scuffbands are commonly spec'd for grocery and food-service operations due to a high number of load and unload cycles. Very durable, HDPE scuffbands are 0.625 inches thick, which provides more standoff and better protects the lining.

Attached with recessed fasteners, pallets do not catch on or snag the sidewall, protecting it from damage caused when using the sidewall as a guide to direct pallets inside the trailer. This type of scuffband is also easy to replace if damaged.

PunctureGuard scuffbands are slim but strong. Incredibly thin at 0.200 inches, bonded PunctureGuard scuffbands provide more interior width than HDPE scuffbands, yet are extremely puncture resistant. These scuffbands are also lighter weight, resistant to delamination, and can withstand abrasion from forklifts and pallet jacks.

Bonded to the sidewall with a heavy-duty adapter at the bottom, PunctureGuard scuffbands have no fasteners. The adapter attaches the wall scuff assembly to the heavy-duty floor and protects the sidewall from impact at the floor level. 🚛



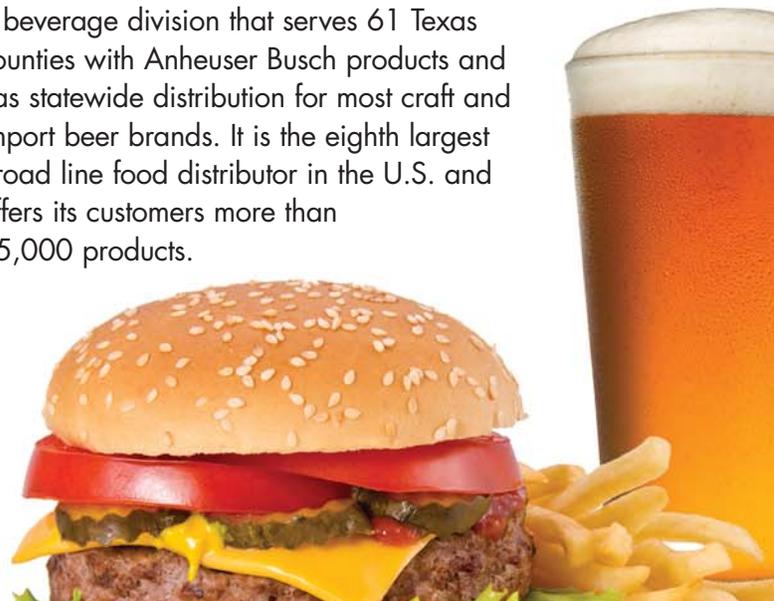
KEEPING PROMISES WITH CUSTOMIZED REEFERS

When Ben E. Keith began his career as the first salesman and junior partner of Harkrider-Morrison Company, a produce company in Fort Worth, Texas, in 1906, he wrote orders on paper and made deliveries by horse and buggy. He was a man with an astute business mind and an eye for opportunity, and he eventually took ownership of the company.

In 1928, he began selling ice cream syrups during the slow summer months through a partnership with Adolphus Busch, whose brewery was making ice cream syrups during Prohibition. When Prohibition ended in 1933, Ben E. Keith Company became a wholesaler of Anheuser Busch beers. This spirit of ingenuity and

enterprise has continued throughout Ben E. Keith Company's 110 years of operation.

Today, Ben E. Keith Company has two divisions: a foodservice division that serves 14 states, and a beverage division that serves 61 Texas counties with Anheuser Busch products and has statewide distribution for most craft and import beer brands. It is the eighth largest broad line food distributor in the U.S. and offers its customers more than 35,000 products.



Company Profile

Ben E. Keith Company

Headquarters: Fort Worth, Texas

Founded: 1906

Routes: Covers 14 states in the mid-south and southeast

Great Dane Equipment: Everest CL refrigerated trailers



Fresh from Keith's

When Ben E. Keith needed a way to connect with households and promote its fresh produce in grocery stores in 1941, Keith's assistant came up with the slogan "Fresh from Keith's." The slogan is still used today, and its influence is evident in the company's commitment to delivering products of the highest quality and value, while providing excellent service and responsiveness to its customers' needs.

To deliver on the Fresh from Keith's promise, Ben E. Keith strategically partners with companies such as Great Dane that share its values of safety, quality and customer service.

"Partnering with the right trailer manufacturer whose trailers keep

our products at the right temperature so we can keep our promise of delivering products of the highest quality is important," said John Fershtand, operations and energy management at Ben E. Keith. "We buy Great Dane trailers because of the quality and service."

Customized Trailers Meet Specific Needs

The fleet is comprised of Everest CL reefers in 28-foot, 36-foot, 48-foot, and 53-foot lengths. These trailers are customized to the company's specific operational needs. They include three multi-temp compartments to help keep products at the right temperature while in transit, two side doors for curbside deliveries, and typically a Bustin portable platform/ladder and a rear walk ramp to make deliveries safer and easier for drivers. The interiors have several dome lights plus

exterior spotlights over the doors and the rear to increase visibility and safety.

"Great Dane provides customer service from beginning to end. Our account representative coordinates all trailer specs and ordering, delivery dates, refrigerated unit installations, and keeps us informed about new options that can help our operation," said Fershtand.

Built-in Reliability

Delivering quality products on time, at the right temperature is the name of the game, and selecting partners to help achieve this goal is key.

"Great Dane's manufacturing capabilities and dealer support is invaluable to Ben E. Keith," said Fershtand. "We drive almost 3 million miles a month delivering to our customers. Our equipment has to be reliable." 



SAHARA CP Goes on Tour with **BIG**®

After seeing an impressive demonstration of the Sahara CP truck body at the BevOps show in Las Vegas last year, the team at International Truck acquired a unit to take on the International DuraStar tour, part of a Big Ten Network program.

"The International DuraStar tour vehicle featured the latest in engine, transmission and truck body technology," said Ramses Banda, medium duty marketing manager for International Truck. "We were impressed with the Sahara CP design, rear frame, mounting system and overall construction."

As part of its sponsorship of the Big Ten Conference, the vehicle was given to the Big Ten Network as the official equipment truck for "BTN Tailgate," a program that aired live from college campuses on Saturdays this past fall. International Truck requested a truck body that would be light and durable on which it could display its

graphics. The International Truck marketing team reached out to the Great Dane Truck Body sales team to purchase the unit for this promotional vehicle.

"Partnering with key truck OEMs and their dealer networks will allow us to demonstrate the features and superior construction of the Sahara product line. These initiatives are key to our distribution strategy," said Eduardo Navarro, a Great Dane director of Business Development.

International Truck believes being easy to do business with is critical to delivering the very best to its customers. It looks for the same traits when choosing partners, like Great Dane. International Truck found that Great Dane's products met spec requirements and the Great Dane team was accommodating, responsive and professional throughout the process. 🚛



Sahara Truck Bodies Use Proven Technology

When it comes to purchasing the best truck body for dry freight applications, including last-mile home deliveries, business-to-business, furniture, rental and leasing and more, Great Dane's Sahara truck body is the solution. Available in composite plate or aluminum, these truck bodies incorporate the best of Great Dane's proven trailer technology and plate construction techniques. They are safe and efficient and offer the high quality and flexibility that delivery businesses demand.

Sahara: Tough, Innovative & Efficient

Built tough, yet with the latest lightweight design and materials to maximize payload capacity

- One-piece extruded aluminum top rail across the front and side walls and aluminum bottom rail bolted to steel crossmembers provide additional strength and a better seal against moisture intrusion.
- Sleek composite sidewall panels or pre-painted aluminum plates

Innovative tie-down system has a low cost of maintenance

- System includes a sub-floor and bolt-on design, which lowers the bed height and vehicle center of gravity
- No need for U-bolts, decreasing maintenance requirements and costs

Great features & options to increase productivity

- Roof system includes galvanized steel, anti-slag roof bows
- Aluminum roof is standard, optional translucent roof
- Sturdy small and heavy fork-truck-loading floors are available; both floor types are supported with steel crossmembers
- Corrosion-resistant EnduroGuard rear frame for long lasting structural performance
- LED lights and Grote LongLife sealed harness with 10-year warranty 

Add to all these features the aftermarket support network through the Great Dane AdvantEDGE program! For more information, contact the Great Dane Truck Body team, 1-800-922-8360 extension #2 for Sales.

Snyder's Lance



A passion for snacks drives success

Employees at Snyder's-Lance Inc. are so passionate about snacking that they developed their corporate purpose around it: "Snacking is a part of life – Our passion makes it better." This passion has helped Snyder's-Lance grow its business significantly over the last several years.

The company's commitment to quality extends from the ingredients used in its products to how it moves its products to market. Snyder's-Lance delivers its snacks in Great Dane trailers that are custom spec'd to ensure safe and efficient deliveries.

Grainger Smith, DOT Compliance/Safety Program Manager for Snyder's-Lance, said that in 2006, after an acquisition, the company shifted its product mix to more salty snacks requiring larger cube trailers.

The Transportation and Logistics team worked closely with a Great Dane sales representative from the Great Dane branch in Charlotte, North Carolina, to design a custom 53' shallow drop electronic van with maximum cube capacity.

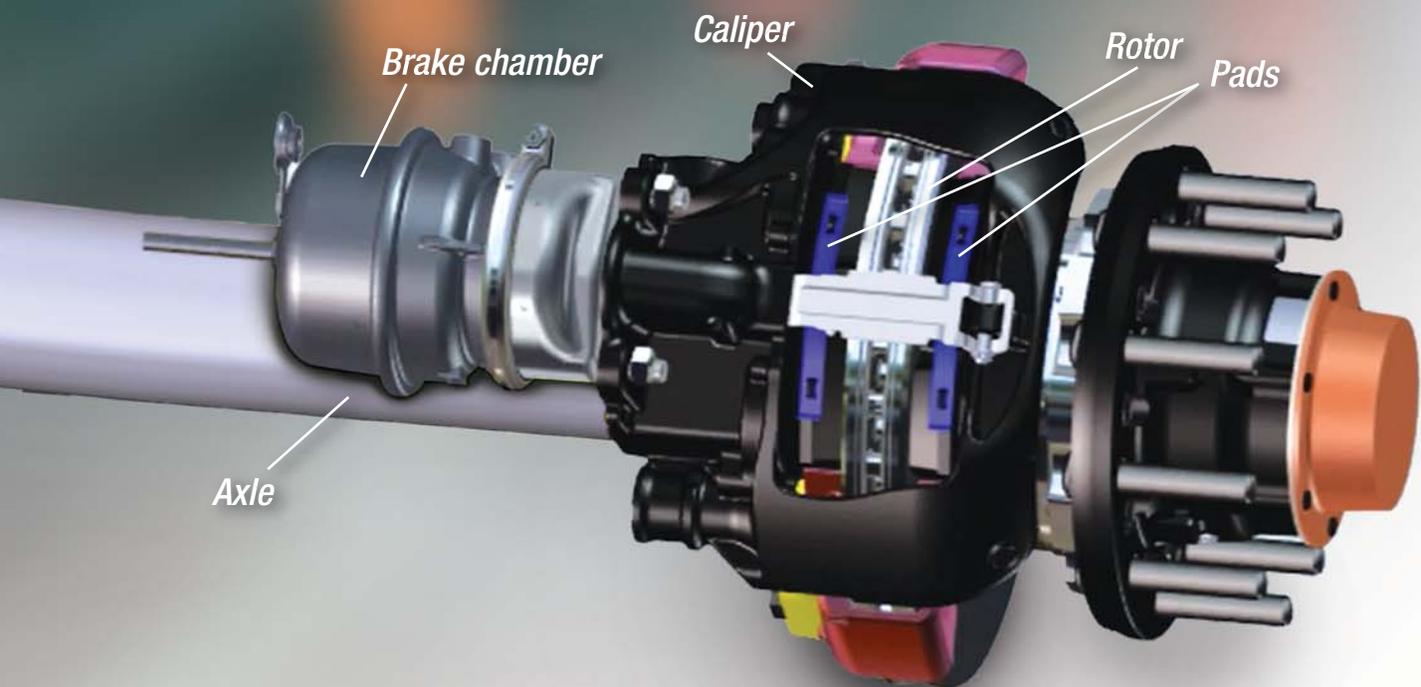
From 2007 through 2010, the company purchased 110 53' Great Dane drop van trailers.

The sheet-and-post drop vans were spec'd with:

- Two curbside doors
- PunctureGuard lining
- 1.38" hardwood floors
- 5/8" X 12" high white polyethylene scuff band
- Two rows of galvanized F-track
- Five fluorescent dome lamps
- Association of American Railroads specs
- 10' walk ramp with enclosed carrier
- Steel storage box for rear axle wheel risers to meet standard dock heights

After the merger of Snyder's of Hanover and Lance Inc. in 2010, however, the company's distribution network changed from having the majority of deliveries sent to smaller storage facilities where the cargo was hand-unloaded to palletized deliveries going through a

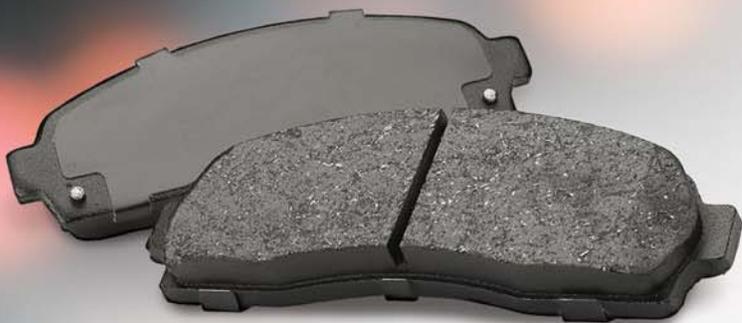
Air Disc Brakes **STOP** Vehicles Faster



Hheavy-duty truck brake technology has advanced over the years and continues to be an important safety feature for trucks and trailers. All brakes are not created equal, however, so it is important to understand the differences.

There are two types of air brakes: disc brakes and drum brakes. Though both types use the same principles of friction to slow a vehicle down, air disc brakes have many advantages over drum brakes.

The trucking industry is trending toward air disc brakes because of safety, efficiency, and in some situations, a lower total cost of ownership. Disc brakes enhance safety by providing shorter stopping distances than drum brakes and improving



trailer in-line braking stability. The stopping distance for disc brakes can be 25 to 30 feet less than drum brakes, depending on tires, speed, conditions and the braking system on the tractor. The stopping power is noticeably greater when both the tractor and trailer are equipped with air disc brakes, particularly when the vehicle is traveling at increased speeds.

Disc brakes require less maintenance than drum brakes, because they provide stable and uniform braking, which helps brake components last longer. This means they provide superior braking efficiency and remain in optimum adjustment.

Additionally, service intervals are generally longer for disc brakes than drum brakes, and service technicians can change disc brake pads in 25 percent of the time it takes to change a drum brake shoe.

While disc brakes typically have a higher upfront cost than drum brakes, they can have a lower total cost of ownership.

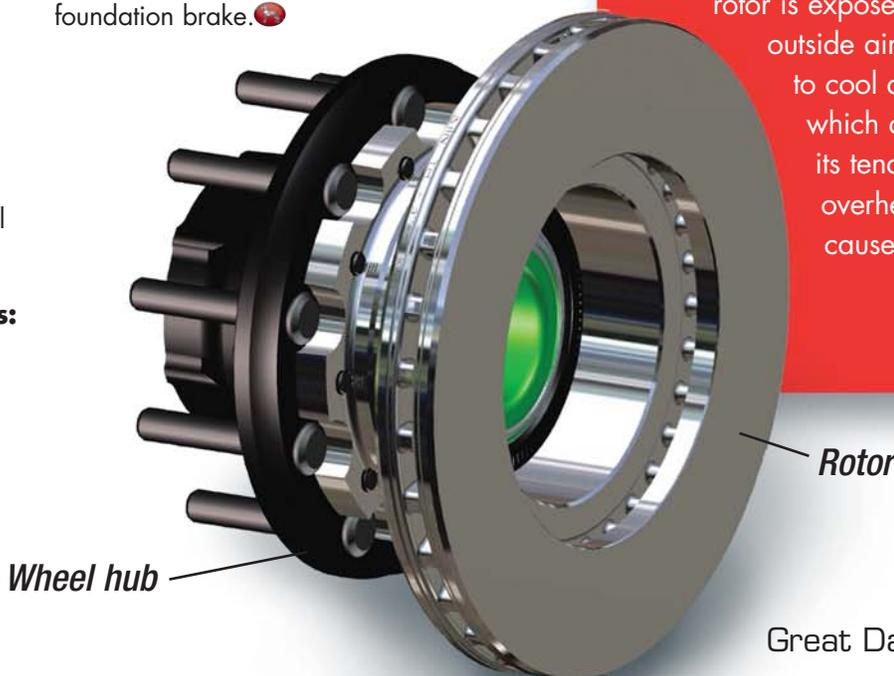
Consider the following factors:

- Longer service intervals and shorter service times equal lower maintenance costs and more uptime for the trailer

- Rust jacking, which is common on drum brake shoes, is virtually eliminated with disc brakes
- Disc brakes eliminate the need for S-cams, slack adjusters, brake drums, brake shoes and bushings, rollers, and springs in a parts maintenance inventory
- Disc brakes reduce the chance of CSA brake violations for brakes out of adjustment, which can put the trailer out of service

The Bottom Line

Though the upfront cost may be higher, spec'ing a trailer with air disc brakes can increase the overall safety and efficiency of the trailer. Great Dane continues to work with disc brake providers so we can offer this option competitively as more customers move to this style of foundation brake. 🚛



Drum Brakes vs. Disc Brakes:

How They Work

Drum brakes have friction material riveted to brake shoes. When the brake is applied, the brake shoes push outward, rubbing against the inside of the drum and slowing the wheel. Over time, the friction material wears away and the automatic slack adjuster compensates for the loss of brake shoe lining thickness. Eventually, the slack adjuster reaches a limit and the brake shoes must be replaced.

Disc brakes have friction pads that float inside the caliper adjacent to a large metal disc called a rotor. Instead of a brake drum attached to the wheel hub, a rotor is attached to the hub. A caliper is contained on the brake carrier with its own brake chamber. When the brake is applied, the caliper squeezes the brake pads against the rotating rotor, slowing the wheel. Since the rotor is exposed to outside air, it is able to cool quickly, which decreases its tendency to overheat or cause fading.



Company Profile

Snyder's-Lance Inc.

Headquarters: Charlotte, North Carolina

History: In 2010, Lance Inc. and Snyder's of Hanover merged to form Snyder's-Lance Inc.

Private Fleet Delivery Routes: East of the Mississippi

Great Dane Equipment: Champion Dry Freight Vans

network of company distribution centers. This new distribution model required new transportation equipment.

"We have transitioned from purchasing 53' custom drop vans to standard 53' Great Dane Champion dry freight trailers," Smith said. "As we move forward, we will continue to upgrade our fleet with standard 53' dry freight trailers but also keep enough 53' drop vans to make multi-stop deliveries out of various company distribution centers."

Passion Helps Create Quality and Consistency

Passion is also important to Great Dane – it's one of the company's six values. The others are safety, leadership, innovation, quality and integrity. It's a good thing when company values align because it helps the companies work together well to create better solutions.

"Great Dane has always been responsive to equipment inquiries regarding specific applications or specification changes over the years, and they stay on the cutting edge of trailer

technology," Smith said. "Over the many years of buying trucks and trailers for Snyder's-Lance, we know that Great Dane continues to be the kind of partner that goes the extra mile for its customers."

"When you buy a Great Dane trailer, you are buying quality and craftsmanship in a trailer that is consistent year-in and year-out," Smith said. "And because of that quality and craftsmanship, it provides Snyder's-Lance a low cost of ownership over the useful life of the trailer."

For Snyder's-Lance employees, passion makes snacking better. At Great Dane, our passion helps companies like Snyder's-Lance better serve their customers. 🍌



Freedom XP Gets Sliding Suspension



The Freedom XP all-aluminum flatbed now has a new sliding suspension option to enable more load flexibility.

"We are continually working to enhance the features and capabilities of our products by adopting new technologies and working with suppliers to improve product features," said Roger Roach, director, Freedom Product Engineering.

The new rear axle sliding, front axle fixed suspension option is now available on the 53-foot Freedom XP flatbed. The sliding suspension can be moved from the widespread position to close the tandem distance and be California legal. The distance from the king pin to the center line of the rear axle can be 480 inches in the forward position, 492 inches in the middle position or 540 inches in the rear position. The axle separation distance can be 61 inches, 73 inches or 121 inches.

Great Dane is committed to providing the latest innovations to help its customers ensure the safe and efficient delivery of goods. Our confidence in the performance of this product is represented by the industry's only 10-year warranty on the main structure for workmanship and material defects. For more information about Freedom XP flatbeds, visit greatdanetrailers.com/freedom-xp.



Great Dane Training Programs Receive ASE Accreditation



Last year, the Automotive Training Managers Council (ATMC) evaluated Great Dane's processes for developing and delivering training and then recommended accreditation as an ASE Accredited Training Provider of Continuing Automotive Service Education (CASE).

The ASE accreditation program is administered by the ATMC, a nonprofit organization that has been a member of ASE's Industry Education Alliance since 2009.

This is the first time a trailer original equipment manufacturer (OEM) has received ASE accreditation for its training programs.

The ASE accreditation, which covers Great Dane's online training and instructor-led training is currently being used for service technicians in our aftermarket facilities.

"ASE accreditation assures our customers that our training processes are held to a national standard," said Dave Durand, Great Dane's vice president of Aftermarket Parts and Service. "Through our training program, our technicians will prove their knowledge and skills in trailer maintenance by passing theoretical and practical tests in their specialties."

"We are proud that our online and instructor-led training program has received this accreditation," Durand said. "Our training program ensures our technicians know how to perform maintenance safely and efficiently."

The service technician training will help Great Dane technicians provide the safe, consistent and quality workmanship that Great Dane customers expect. It will also help customers increase uptime by putting trailers back on the road quickly.

Major companies in the automotive services industry that have ASE accreditation include Toyota, General Motors and Penske Truck Leasing.

Company Profile

Compass Lease

Headquarters: Chicago, Illinois

Operation: Leasing Company

Territory: Lower 48 states and Canada

Great Dane Equipment: Champion dry vans

Compass Lease Relies on AdvantEDGE

*Program exceeds expectations and
helps customers succeed*



ADVANTEDGE
National Aftermarket Parts & Service Program

When someone needs to lease a trailer, Compass Lease is there to help. The company prides itself on helping its customers with all their trailer needs, no matter how small the operation or how long they have been in business. Its customers appreciate this full-service approach because it helps them succeed by expanding their operation when necessary, sometimes on short notice.

Customer Support When Needed

To help ensure their trailers are safe and properly maintained, Compass Lease relies on Great Dane's AdvantEDGE program, a national aftermarket parts and service program that streamlines the functions of parts and service centers, including ordering, pricing and invoicing. The program also provides 24/7 emergency roadside assistance through Great Dane branches and dealers, and 245 Love's Travel Stops locations.

"We began using AdvantEDGE about three years ago," says Dave Wilke, director of operations at Compass Lease. "This program exceeded our expectations. It enables us to better manage our equipment and also that of our

customers, extending the program's benefits to them. For example, if our customers break down and need to get up and running, it is great to know that reliable support is a simple phone call away. One phone call and the problem is solved. There is no need for a fleet to spend precious driver downtime on the phone searching for vendors," he said.

One of the best AdvantEDGE features is its website because it is easy to navigate and allows users to track repair work, invoices and more, Wilke said. "Compass Lease was able to set up its branches with their own account, making simple tasks such as searching for where a breakdown occurred easy."

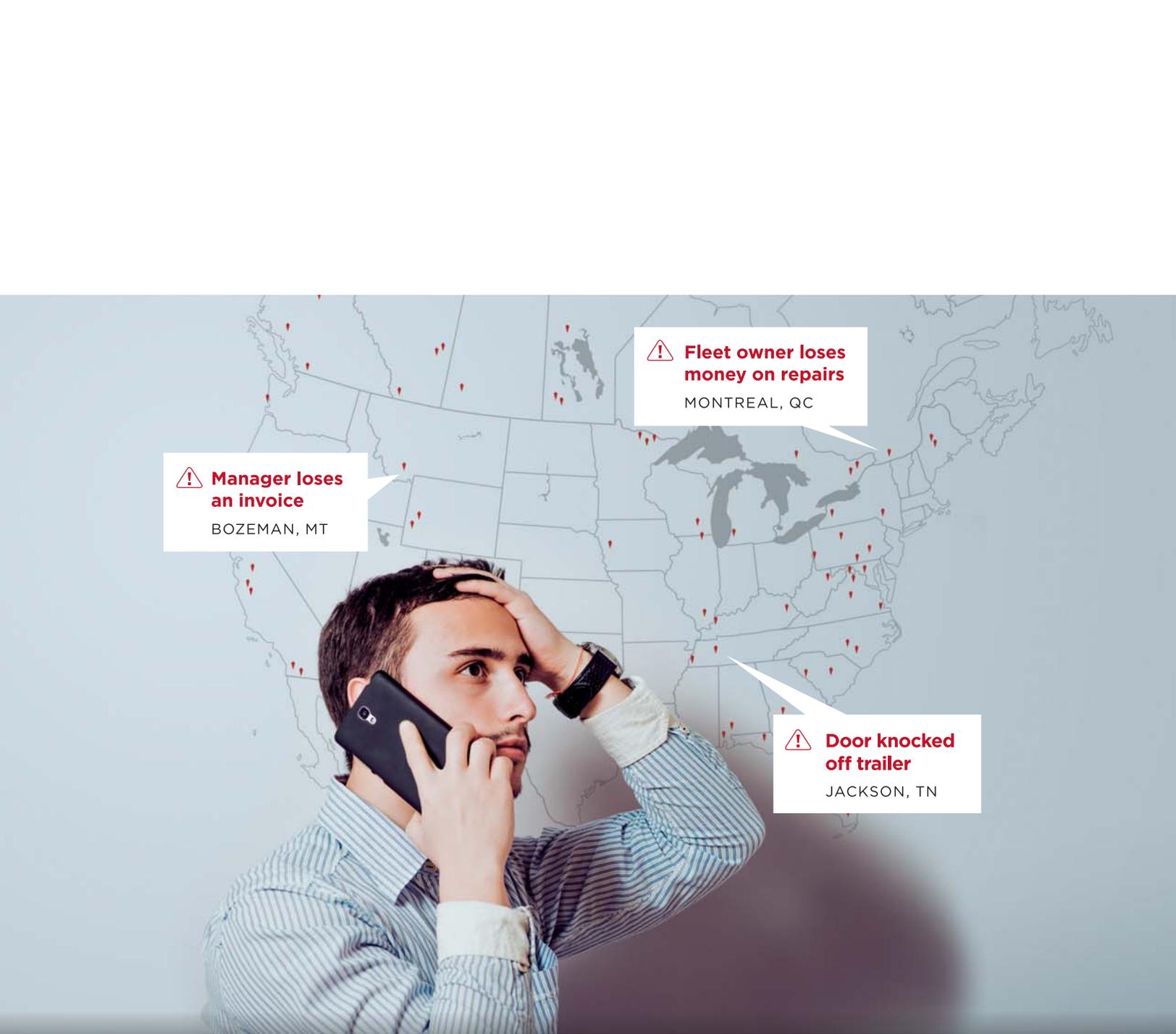
Great Dane Has Our Back

"We own thousands of Great Dane Champion dry vans that are spec'd to meet our individual customer needs," Wilke said. "Our lease trailers operate in the Lower 48 states and Canada. With the AdvantEDGE program, we know Great Dane has our back out there when it comes to servicing our trailers over the road."

Making a special effort to help customers succeed is important to Wilke, and he knows he can rely on AdvantEDGE to help Compass Lease prosper. "It is a pleasure working with the staff at Great Dane," he said. "I know that together we will navigate to success." 🐕



For **FREE** enrollment, scan the QR code,
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greatdanetrailers.com/AdvantEDGE



! Manager loses an invoice
BOZEMAN, MT

! Fleet owner loses money on repairs
MONTREAL, QC

! Door knocked off trailer
JACKSON, TN

You Can't Be In 100 Places At Once. But We Can.

Great Dane's **AdvantEDGE** program connects you to a nationwide parts and service network with more than 100 locations—giving you a single point of contact for ordering and invoices, a fixed pricing model and 24-hour emergency road service for your trailer. Together, we can ensure the safe and efficient delivery of your goods. **Let's go.**

Enroll for free today: GreatDaneTrailers.com/AdvantEDGE



ADVANTEDGE
National Aftermarket Parts & Service Program