

Evolving Trailer Technology



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Lightweight but XP Tough

The redesigned Freedom XP all-aluminum flatbed

Breaking Tradition with Wood-Free Reefers

Composite furring protects thermal integrity

Avoiding CSA Violations

Helping fleets keep trailers safe and in compliance

2015 Events Calendar

-  Great Dane Event
-  Johnson Refrigerated Truck Bodies Event

April

-  April 16
Innovation Unleashed: Great Dane Road Tour
Titans Football Stadium, Nashville, Tennessee
-  April 16-18
ExpoCAM
Montreal, Canada
-  April 26-28
NPTC-National Private Truck Council
Cincinnati, OH

May

-  May 4
Innovation Unleashed: Great Dane Road Tour
Great Dane of Utah, Salt Lake City, Utah
-  May 21
Innovation Unleashed: Great Dane Road Tour
Dallas Cowboy Football Stadium, Dallas, Texas

June

-  June 3
Innovation Unleashed: Great Dane Road Tour
Great Dane of Montreal, Montreal, Quebec
-  June 18
Innovation Unleashed: Great Dane Road Tour
Motor Speedway, Charlotte, North Carolina

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Questions or Comments?

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Driven by Innovation

Dear Customer,

At Great Dane, innovation means challenging the status quo and reframing the pressing questions of the industry to come up with the best possible solutions for our customers.

Inside the pages of this issue of *Evolving Trailer Technology* you can see how we're continually coming up with new manufacturing techniques and partnering with leading vendors to develop and incorporate the best components. We also introduce our redesigned Freedom XP all-aluminum flatbed; explain the benefits of our wood-free refrigerated trailer; and describe a cutting-edge manufacturing technique now used on composite vans.

You'll read about a customer who buys Great Danes for their durability and quality, and learn about the specs they rely on to keep their fleet on the road. We also feature another customer who has moved from 48' to 53' flatbeds while still keeping weight down to maximize payload.

Great Dane works every day to make innovation a reality instead of just another corporate buzzword. We are committed to creating solutions our customers can count on today and down the road.

Regards,

Brandie M. Fuller
Vice President, Marketing
Great Dane

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*Evolving Trailer Technology is published by
Great Dane.*

Lightweight but **XP Tough**

The already proven Freedom XP all-aluminum flatbed has just gotten better. The FXP has always provided top value for Great Dane customers, but the newly redesigned trailer has raised the bar in the industry for flatbed functionality, safety and design.

Lightweight & Durable

The redesigned FXP is now under 8,700 lbs., a weight reduction of 200 lbs. and rated for a 52,000 lb. load concentrated in four feet. The redesign increases safety and ease-of use. With features like minimal use of fasteners, weight is taken out while reducing maintenance time, which cuts operational costs.



Safe & Secure

Safety is top of mind at Great Dane. The new FXP now comes with a sure-grip floor surface for increased traction and load stability. The contour of the new main beam provides greater swing radius. It has an improved profile, which is lighter and stiffer. Another new feature is the extended rub rail, which has no fasteners and increases load securement.

The new FXP provides a streamlined wiring harness with the lines now located above the crossmembers. In addition, there is a significant improvement in suspension reinforcement—both structural and cosmetic.

Styling & Functionality

The redesigned Freedom XP has increased visual impact. It now offers low profile turn signals, a slim main beam design as well as upgraded front and rear corner construction. The new FXP also includes an improved landing gear, which is lighter and has more cosmetic appeal. 🚛



Maintaining HIGH STANDARDS



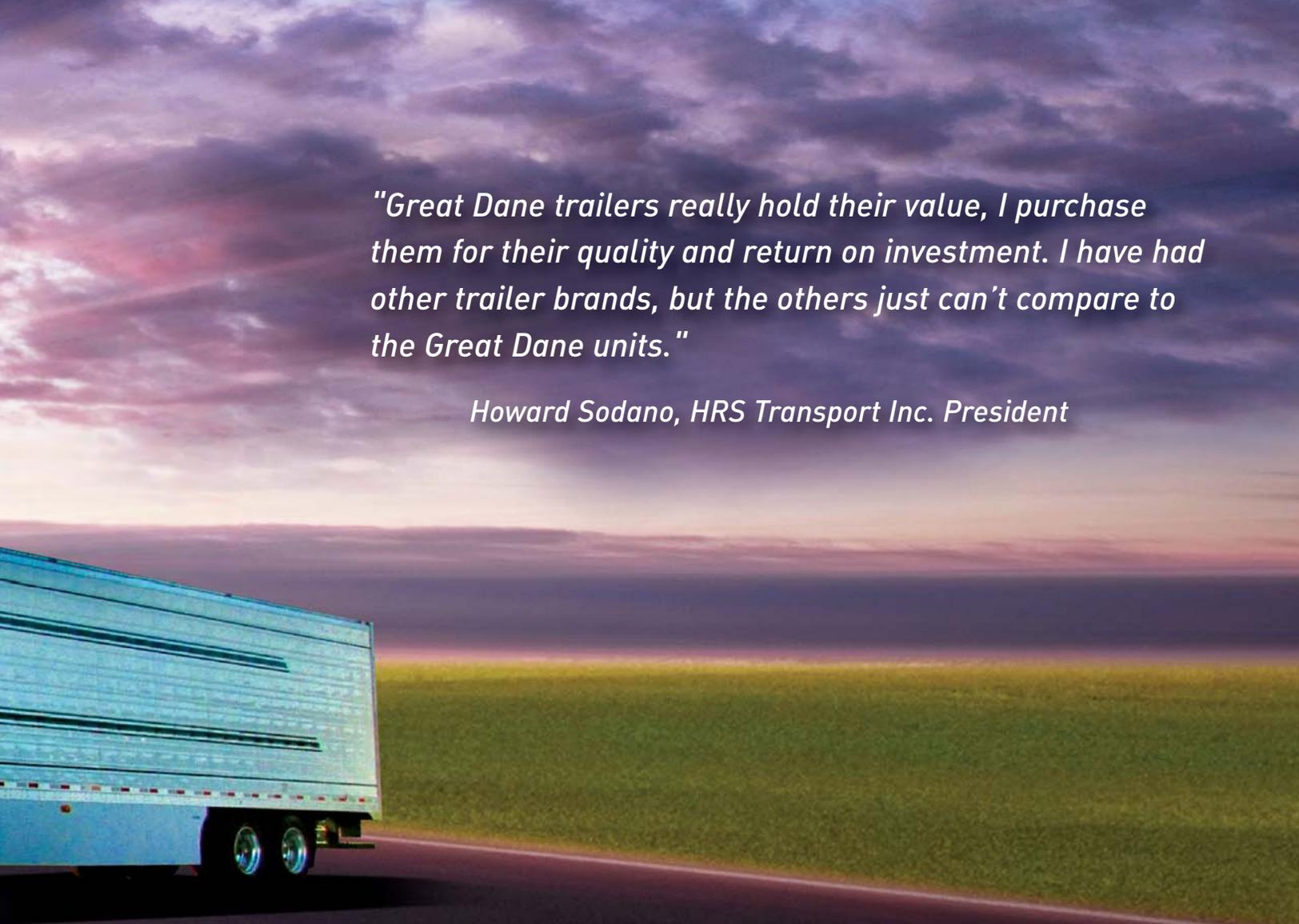
HRS Transport relies on its equipment to ensure customer satisfaction

HRS Transport, specializing in temperature-controlled transportation, is a family-owned and operated business headquartered in Phillipsburg, New Jersey. What began as a single truck operation in 1982 is now a 45-tractor-trailer fleet that covers routes from western Michigan, Florida, and Maine. The company prides itself on its dedication to

using cutting edge technology and superior equipment to provide exceptional services to its customers.

Start with the right equipment

Howard Sodano, HRS Transport President knows that hauling temperature-controlled loads require reliable trailers. He says, "We have been running Great Dane

A white Great Dane trailer is parked on the left side of a road. The background shows a vast green field under a dramatic sunset sky with purple and orange clouds.

"Great Dane trailers really hold their value, I purchase them for their quality and return on investment. I have had other trailer brands, but the others just can't compare to the Great Dane units."

Howard Sodano, HRS Transport Inc. President

trailers for the last 25 years and I have never been disappointed with their performance. In my book, Great Dane stands for durability and quality. The trailers provide the value I look for in a piece of equipment. In all the years that I have owned Great Dane trailers I have never had a serious maintenance issue."

Service and support

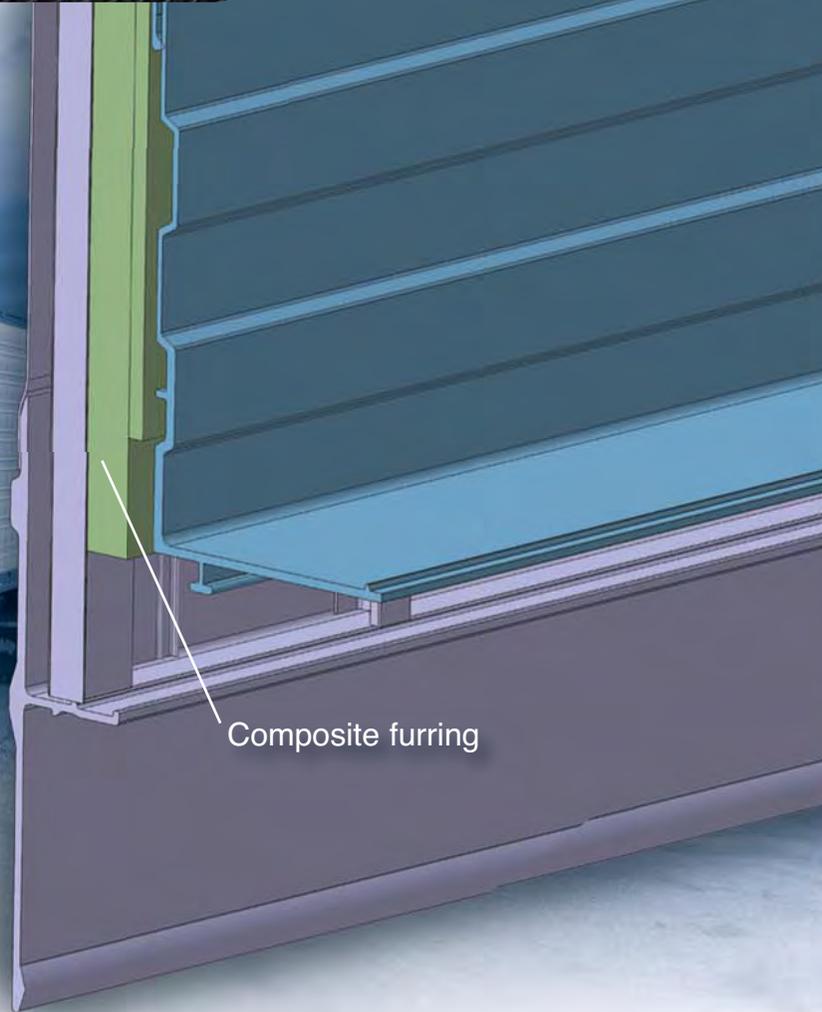
Not only do the trailers meet his needs, but also the dealership provides the extra attention Sodano has come to expect. "The dealer sales and service staff at Northeast

Great Dane have been a great help," he notes. "They assisted in spec'ing our current fleet of Great Dane Everest TL reefers equipped with flat reefer heavy-duty aluminum cargo floors and a reinforced rear sill—plus 4S/2M anti-lock brakes (two sensors on the wheel ends and two modulators on the axles), which decrease panic stopping distances, increase overall safety, and help avoid flat-spotting tires."

He goes on to say, "The Everest TL has a lot of great features—they are lightweight, durable and come with

PunctureGuard interior lining, so I haven't had to add to the specs. However, I do spec extra LED lights and aluminum wheels, which add a little more bling and in my opinion the aluminum wheels are easier to maintain. In addition, Great Dane trailers really hold their value," Sodano states. "I purchase them for their quality and return on investment. I have had other trailer brands, but the others just can't compare to the Great Dane units." 🚛

Breaking Tradition with Wood-Free Reefers



Composite furring in reefers provides exceptional performance and protection

For many years, wood has been used in trailers as a thermal break in trailer floors at the crossmember connection as well as on the side-wall uprights, scuff bands and logistic track attachments. Commonly called “furring”, the wood acts as an insulator between the outside temperature and the internal walls to prevent direct thermal bleed at the connection points, which can cause freezing or sweating on the inside or outside of the trailer. Great Dane has chosen to use composite materials to replace all instances of wood construction in its refrigerated trailers to better protect the thermal integrity of the trailer and add value for its customers.

Features and benefits

The features and benefits of composite furring include resistance to moisture absorption, rot, and mildew. Composite materials are also not affected by cleaning-related chemicals, road residue, or exposure to the elements. These materials are very thermally efficient and provide significant benefits over traditional wood, and they do not gain weight over time if water is absorbed. In addition, they foster a more sanitary environment because they do not absorb bacteria from contaminated water.

Composites raise the bar

When it comes to exceptional protection, the use of composites raises the bar for refrigerated trailers, to give Great Dane customers the extra quality they have come to expect. Fleets that haul temperature-controlled loads look for assurance that their cargo is in a better-protected thermal environment. For fleets hauling temperature-sensitive loads, refrigerated trailer construction must help protect cargo from the outside environment and keep the inside temperatures stable to protect the cargo. 🚛

BENTLEY

TRUCK SERVICES, INC.



Leasing the Best

Bentley Truck Services NationalLease adds JRTB Alpine to its leasing options

Bentley Truck Services NationalLease, a well-established leader in commercial truck leasing, offers locations throughout the United States that provide unsurpassed leasing options, service and support. According to company President, Fred Bentley, "We use only the best commercial trucks. Toward the end of this past year we added Johnson Refrigerated Truck Bodies' Alpine to our list of leasing options."

Customers in Mind

The company had its customers in mind when it chose the Alpine. "The Alpine offers ease of operation and is well-spec'd to help our customers maintain temperatures for their temperature-controlled loads," says Bentley. "This helps our customers control their costs and assist them in best practice cold chain solutions. In addition, we have found that the quality of the trucks helps to keep maintenance in check —we haven't seen any unexpended maintenance expenses."

The Alpine units offered through Bentley Truck Services NationalLease are specified with 16-ft to 26-ft up to 102-inch wide bodies and 103-inch roof

heights. They have side doors and roll-up rear doors with door track protection, as well as interior and exterior LED lighting. The interior also includes eTrack for load securement and heavy-duty aluminum flooring. Custom designed bodies are also available for specialized operations.

"We worked with the Great Dane branch in Philadelphia on the specifications and purchase of the Alpine truck body," says Bentley. "We are impressed with the location's service and the structural integrity of the Alpine truck body. Johnson stands behind its truck body and we are pleased to work with a company that enjoys such brand loyalty." 🇺🇸



Johnson's Innovative Body Tie-Down System

Exclusive from Johnson, the innovative body tie-down system for secure mounting with reduced maintenance. It eliminates U-bolts, U-bolt maintenance, filler strip compression, rot and kick-out. Tie-down angles are welded to the body-long stringers. Angles are then fastened to the chassis frame with grade 8, 5/8 inch flanged frame hex bolts. This system also facilitates easy body transfer from chassis to chassis.



Spec'd for Service

Melton Truck Lines meets demands with combo flatbed trailers



One of the nation's leading flatbed trucking companies, Melton Truck Lines, boasts a large and growing fleet of modern, safe, and well-maintained equipment—and a 98% on-time pick-up and delivery record. Founded in 1954 with routes in Missouri, Arkansas, Texas, Oklahoma and New Mexico, the fleet is managed by President, Bob Peterson.

According to Jeff Robinson, Senior Vice President, Maintenance, Melton Truck Lines, "At the end of 2015 we will have roughly 1,100 Great Dane Freedom LT's combo flatbed trailers in our fleet. We don't have fixed routes, but do run in all 48 lower states, including Canada and Mexico. Our customers are varied, and carry loads of raw material such as live trees, coiled or flat steel, roofing and building materials.



"GREAT DANE SELLS A STRONG FLATBED TRAILER PRODUCT AT A COMPETITIVE PRICE. FOR US, THE RETURN ON INVESTMENT COMES FROM THE RELIABILITY AND QUALITY OF THE TRAILERS..."

Jeff Robinson, Senior Vice President, Maintenance, Melton Truck Lines

Melton

Truck Lines, Inc.

Spec'd for the Loads

Robinson notes that over the years, "With the help of Great Dane sales and manufacturing we have managed to change our flatbed trailer specifications from 48' to 53' and have kept the weight at an acceptable level. This allows us to build a broader base of customers who have commodities that can benefit from the added length and it still allows our combination tractor/trailer units to haul 48,000 lbs. All our tractor/trailer units are 100% air-ride equipped. Our flatbeds are spec'd with PSI tire inflation systems, extra winches have been added to our trailer, they have 10' 1" fixed spread axles, and aluminum cross members, which helps with weight savings.

Reliability Equates to ROI

"The residual value of our Great Dane trailers after years of service is strong," notes Robinson. "This is a big factor since, when buying equipment, to get the best value you need to know what you will have in the future. Great Dane sells a strong flatbed trailer product at a competitive price. For us, the return on investment comes from the reliability and quality of the trailers, and Great Dane supports us with a large service network based throughout the country." 🇺🇸

The Glue that Binds

Bonded composite trailers rely on adhesives

Call it glue if you must, but the adhesives used as bonding agents for composite trailers have the potential to solve some sticky situations. Bonded trailers have been touted as the trailer manufacturing technique of the future, and Great Dane has been testing the best techniques for this construction.



Growing Use of Adhesives

Increasingly, manufacturers of trailers, truck bodies, buses, construction machinery and even automobiles, are using adhesives to assemble frames, panels, and cabs made of metal, plastic and composites. By using adhesives instead of traditional welds, threaded fasteners, or rivets, engineers can distribute stress more uniformly; build trailers more efficiently, minimize areas susceptible to corrosion and—improve the look of the finished products.

The Future is Now

Great Dane has been successfully using adhesive technology for many years, specifically in bonded roof manufacturing. Now, we're applying the same know-how to our trailer sidewall assembly. This approach eliminates over 700 rivets per 28-ft. trailer, which means there are fewer potential leak points and a smoother surface. The ship-lapped design results in a durable connection that works very well with adhesives. In addition, graphics are easier to apply and decal "tenting" is eliminated.

Clean Finish

The additional benefits for our customers include exterior sidewalls that are easy to clean, which means there is less decal peeling and delamination. So decals look better and potentially last longer which is a win-win situation. 🐕

Hendrickson's SMARTLIFT

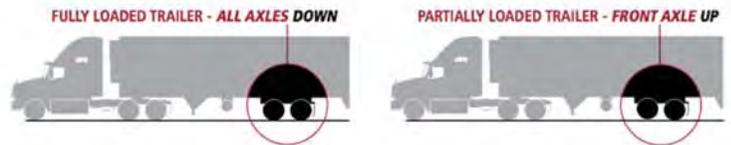
Hendrickson's SMARTLIFT liftable slider reduces tire-wear, toll charges, and helps increase fuel efficiency. The liftable slider raises and lowers one axle, without driver interaction, based on an automatic weight sensing mechanism. It is designed for varying load operations such as beverage distribution, less-than-truckload, food service and other multi-stop fleets, as well as fleets running empty miles.



Hendrickson's SMARTLIFT is available on Great Dane vans and reefers in conjunction with VANTRAAX slider systems.

How it works:

The SMARTLIFT system paired with an automatic weight sensing control system raises or lowers the front axle on VANTRAAX slider systems to provide the optimum axle configuration based on operating conditions. The pressure in the air springs determines whether the front axle should remain on the ground or be raised to the lifted position. Based on this pressure, the suspension controls calculate the weight of the trailer load, and if the front axle is not required to support the load the axle is automatically lifted.



Solutions for Flatbeds: Sturdy-Lite's Lock Rod Toolbox

Sturdy-Lite's Lock Rod Toolbox, is:

Catch-free

It has no moving latch parts on the inside of box lid, so it is impossible for tarps, tarp rope, rubber bungees, cargo straps, chains or any other storage item to tangle in a latch.

Can't shake it off

It counters the effects of gravity. Most flatbed trailer boxes are 60" long and double door for ease of operation. A 30" or greater door cantilever from the connecting hinge point with standard folding T locks will eventually yield to the effects of gravity, time, road conditions and age. The lock rod boxes help eliminate that problem. A four-point connection is provided.

Looks great

According to Phil Bays, Sturdy-Lite President, "On a Great Dane Freedom Flatbed the lock rod box just simply looks great so one might say that we live up to the Great Dane standard of excellence. With the added strength we provide with our corrugations and lock rod connection, Sturdy-Lite lives up to our name being extremely sturdy, yet light."



Maintaining Trailers: Avoiding CSA Violations!

Great Dane helps fleets keep trailers safe and in compliance

The Compliance, Safety, Accountability (CSA) program, governed by the Federal Motor Carrier Safety Administration (FMCSA), is in its fifth year of monitoring vehicles safety performance and compliance. The program measures safety performance, using inspection and crash results to identify carriers whose behaviors could reasonably lead to crashes. It covers the full spectrum of safety issues, from how data is collected, evaluated, and shared to how enforcement officials can intervene most effectively and efficiently to improve safety on our roads. Fleets have learned that the best way to avoid CSA violations depends on properly maintaining vehicles.

While maintenance is only a part of a carrier's CSA score, it can cause a negative impact on a fleet's rating. When maintenance violation data is analyzed, vehicle out-of-service violations at roadside inspections for trailers often include brake issues, broken, burned out or obscured lights; damaged or worn tires, damaged or obscured conspicuity reflectors; as well noting failures to make required repairs. In order to avoid violations, fleets need to be diligent about scheduled maintenance and inspections. To keep trailers in good repair to avoid

violations, Great Dane AdvantEDGE customers are turning to Great Dane locations for help.

Rely on those who know your trailer

Customers who choose Great Dane service locations are able to work with trailer experts who know the most about their Great Dane trailers—how to repair and how inspect them. With their factory-direct connection, these locations have access to genuine parts, which are offered at their authorized service centers. In addition, Great Dane service providers are staffed with well-trained technicians who not only have the latest information on trailer repair procedures, but also the proper tools to make those repairs.

Utilizing a Great Dane service location in conjunction with the AdvantEDGE program also helps fleets control costs through the consolidated billing and invoicing program, custom purchasing controls and 24-hour road service. 🚛



ADVANTEDGE
National Aftermarket Parts & Service Program



TONY'S TECH TIP

Pre- and Post-Trip Inspections Can Save You From Violations

While drivers are required to perform pre- and post-trip vehicle inspections, evidence suggests most trailer problems are either not being detected, or if they are detected, they aren't being repaired. In fact most of the CSA violations on the FMCSA's list of most frequent violations in roadside inspections are not the type that spontaneously occur. Drivers can greatly reduce the fleets CSA score with effective pre- and post-trip inspections.



Tony Neven
Great Dane Aftermarket
Service Manager

What are you waiting for?

Enroll **FREE** today to start enjoying the benefits.



For **FREE** enrollment, scan the QR code, call (877) 600-3433 or visit greatdanetrailers.com/AdvantEDGE



**ON TIME.
AT TEMPERATURE.**



AND EVENTUALLY, IN BUTTER.

Twenty tons of lobster tails are twenty tons of pure gold. And you can't risk losing an ounce of it. That's why Everest Reefers feature the most advanced void-free foaming process, premium liners and modular panel construction. And unlike traditional trailer assembly, Great Dane has eliminated every scrap of wood from our reefer design. All of which provides industry-leading thermal efficiency, reduced moisture intrusion and a safer, more sanitary container. Plus, at the end of the line, a promise delivered.

greatdanetrailers.com/refrigerated

GREAT DANE **EVEREST TRUCKLOAD REEFERS**

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COMMIT WITH CONFIDENCE