

# *Evolving Trailer* **Technology**

Volume • 11 / Issue • 2



Great Dane

## ***Passing a Higher Test***

Great Dane Floor Ratings Exceed Industry Standards

## ***Combating an Old Enemy***

Upper Coupler Enhancements Heighten Corrosion Protection

## ***Fighting the Elements***

Van Door, Reefer Scuff Changes Defend Against Moisture



***Great Dane Trailers***

# CALENDAR

## July

July 8 – 10  
Truckload Carriers' Association  
(TCA) Refrigerated Division Annual  
Meeting  
Hilton La Jolla Torrey Pines  
La Jolla, CA

July 28 – 31  
Texas Motor Transportation  
Association Annual Conference  
Hyatt Regency Lost Pines Resort  
Bastrop, TX

## August

August 20 - 22  
Great American Trucking Show  
Dallas Convention Center  
Dallas, TX

## September

September 14 – 17  
Technology and Maintenance  
Council (TMC) 2009 Fall Meeting  
Raleigh Convention Center  
Raleigh, NC

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# Great Dane Helps Offer a Greater Return on Your Investment

Dear Customer,

Helping you get the greatest return on your investment is just one of the many ways we can assist you at Great Dane Trailers. Now more than ever, getting more for your money is a priority, and with our durable, superior quality trailers, you can.

For more than a century, Great Dane Trailers has been a name you can trust, thanks in part to our highly skilled Engineering and R&D departments. By holding our products to a higher standard in testing and design, they help further enhance the performance of the floors, scuffbands, doors and other components of our trailers, as you will read in this issue of Evolving Trailer Technology.

Our customers not only benefit from this expertise, but also we are able to use it to their advantage in helping meet their diverse needs. For example, Great Dane assisted a bakery with in-town delivery routes address its requirements for corrosion resistance and lightweight components. For a regional food systems distributor, Great Dane's multi-temp reefers help ensure product integrity while meeting their time-sensitive delivery.

We regard your business as an investment, and with our sales, parts and service support, we are committed to helping you get a solid return on your Great Dane trailers. In doing so, we look forward to putting our expertise and experience to work for you.

Regards,

Jim Pines  
Executive Vice President  
Great Dane Trailers



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### Comments for the editor?

*E-mail:*  
ett@greatdanetrailers.com

*Or write to:*  
Evolving Trailer Technology  
Great Dane Trailers  
P.O. Box 67  
Savannah, GA 31402

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# Signs of Hope

## *Some Light at End of Very Dark Economic Tunnel for Trucking Industry*

**T**here have been a few rays of hope in recent economic reports. Initial signs that a rise in trucking activity is poised to begin are coming from several sectors.

One of the largest and most encouraging indicators is that wholesale inventories are declining, while sales have posted their first increase since June 2008. Less inventory on hand means trucking companies will be called on to replenish that stock. The government has also reported a rise in durable goods sales, an encouraging indicator of the need for freight transportation to haul finished products and raw materials, as well as a signal that manufacturing companies could see increased production as a result.

In early April, the U.S. Department of Transportation's Bureau of Transportation Statistics reported a 2 percent increase in its Freight Transportation Services Index (TSI) for February, the largest one-month rise since January 2008. The TSI measures month-to-month changes in the output of services provided by the for-hire trucking industry.

Trucking profitability is improving as well, a change due in large part to the dramatic decline in fuel prices. In the first quarter of 2009, diesel averaged \$2.18 a gallon compared with \$3.52 in 2008. That drop followed a decline of \$1.60 a gallon in the fourth quarter of 2008, a welcome relief from last summer's record high prices.

Preliminary data on Class 8 truck orders for all major North American OEMs also indicates that a turnaround is beginning. In March, sales were up 26 percent over February 2009, including orders for the U.S., Canada, Mexico and export markets.

The optimism appears to be contagious. According to a survey by the Heavy Duty Manufacturers Association, companies that manufacture heavy-duty truck parts have become "a little more optimistic" after the first quarter of 2009. The quarterly survey, known as the "Heavy Duty Barometer," indicates that the proportion of those who were optimistic grew by 12 percent (over the fourth quarter of 2008) and those who are significantly more pessimistic dropped 10 percent. Overall, 47 percent said that

the 12-month outlook for their businesses was positive.

The long-term outlook for trucking also remains positive. The latest "U.S. Freight Transportation Forecast to 2020" prepared for the American Trucking Associations says that the nation's freight pool is likely to grow 26 percent over the next 11 years and that trucking will continue increasing its total freight share to 70.9 percent in 2020 from 68.8 percent in 2008. The annual forecast is based on projections on manufacturing and consumer spending, business investment, trade, employment, housing starts, vehicle sales, as well as other key drivers of freight.

"Like many other industries, trucking is experiencing a very difficult time during the current economic recession," said ATA President Bill Graves. "Yet, all signs point to a strong, vital, long-term future for our industry. Trucking exclusively serves 80 percent of all communities in the U.S. for the products and goods they receive. When the recovery begins, trucks will help lead the way." 



# Above the Norm

*Great Dane Testing Requirements  
for Floor Ratings Exceed  
Industry Standards*

**T**he industry standard known as The Truck Trailer Manufacturers Association (TTMA) Recommended Practice (RP) No. 37-02 provides Great Dane customers with an accurate and relatively comparative idea of the load rating of a particular trailer floor system. While Great Dane subscribes to the TTMA standard, its historical testing requirements exceed those in the Recommended Practice.

TTMA requirements under RP No. 37-02 include dynamic testing by cycling a lift truck in and out of the trailer. Floor ratings provided by Great Dane have traditionally been derived from a test procedure that equates to performance over the life of the vehicle. Those ratings are typically based on 10,000 loading cycles over an unvarying path, while TTMA ratings are based on lower loading cycles and altering paths across the floor. Great Dane's testing is more stringent.

In the simplest of terms, trailer floors consist of floorboards spread across the width of the trailer and secured lengthwise to crossmembers that run between the bottom rails. In truth, a trailer floor is structurally complex. It is, in fact, a system of components designed to distribute forklift or cargo loads effectively throughout

the vehicle's structure. The floor system in a trailer allows weight to be transferred to bottom rails and walls, and eventually to tractor and trailer suspensions and to the ground.

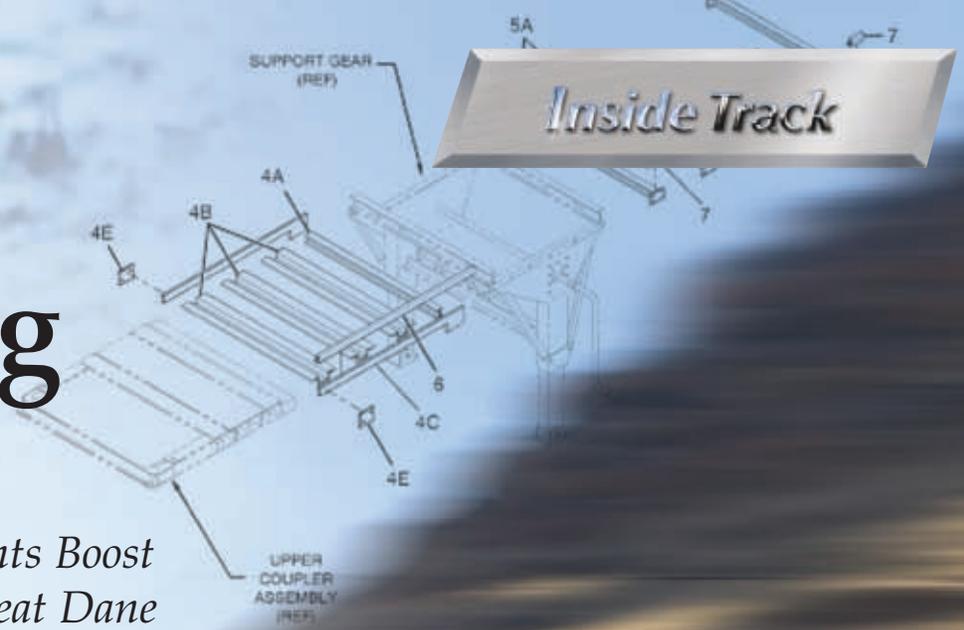
Technically, flooring is not given a load rating; only the floor system is rated. The intended use of the trailer can help determine which rating method is most applicable depending on frequency of loading and other service factors.

To increase a trailer floor's rating, customers may choose to install a thicker floor. Specifying closer crossmember spacing may be preferable, however, because with more crossmembers, the crossmembers and floorboards bend less and end connections are stressed less. This is particularly important when forklift loads create the possibility of end connection failure.

Simply using TTMA test procedures to determine a floor system rating will not provide a complete indication of the higher standards to which Great Dane trailer floor systems must adhere, or reflect the superior service life that customers can expect from Great Dane trailer floors. 🚛

# Improving Designs

*Upper Coupler Enhancements Boost Corrosion Protection for Great Dane Classic Vans, Reefers*



NOTE: REFER TO YOUR PARTS LIST FOR THE TOTAL NUMBER OF CROSSMEMBERS AND RIVETS

10103404\_09(1)



All new Great Dane Classic dry freight vans and reefers will soon feature improved upper couplers. The design changes are aimed at improving structural performance and enhancing protection against corrosion caused by moisture, dirt and road salt intrusion into the cavities of the assembly.

In the approach plate area on the new upper coupler, longitudinal reinforcing has been revised to add additional stiffness to the high impact areas. The new design includes four channels over the approach plate on reefers and six channels on dry freight vans.

Changes to the upper coupler design on Classic dry freight vans and reefers also include one-piece main-beam and approach plates whenever the plates are specified with the same thickness. The only option for a two-piece plate will be on refrigerated trailers and will be limited to a 1/4-inch main-beam plate paired with either a 3/16-inch full or tapered approach plate.

Classic dry freight vans undergoing upper coupler revisions include both the 3.50-inch coupler and the 4.25-inch coupler. The 4.25-inch coupler, designed for a floor-over installation in Classic vans, will now incorporate the steel bulkhead as an integral part of the assembly, extending 4 inches above the coupler surface, and giving all Great Dane dry freight trailers the same feature.

Other changes to Great Dane's upper coupler design involve revisions to minimize the amount of holes that potentially allow splash and spray into the structure. With the changes, conduit holes for routing air, electrical and fuel lines through the coupler and hand-holes along the side of the coupler are kept to a minimum. Although conduit routing in the new upper coupler design has been optimized, there will remain available space for aftermarket accessories such as liftgate harnesses.

Great Dane's new upper coupler designs will be featured on Classic dry freight and refrigerated models starting June 1, 2009.





# Fighting Moisture

*Composite Doors on Vans, Redesigned Integral Reefer Scuff Provide Enhanced Protection, Value*

Customers ordering dry freight vans can now reap the benefits of Great Dane's composite door design for side as well as rear doors. The new side door option joins the standard rear swing composite doors in the Classic van product line. Composite roll-up rear doors remain available as an option.

Great Dane's 3/4-inch composite side doors feature pre-painted white galvanized steel exterior and interior skins with a polymer core. The design eliminates corrosion issues associated with moisture absorption in plywood door cores.

## **Integral Reefer Scuff**

Great Dane reefer customers can now order a newly redesigned integral scuffband on Classic models. The enhanced design improves durability and moisture control.

The redesigned integral scuffband for reefer models is offered in a standard 10-inch height with stackable options in 6-inch increments to give customers the ability to specify a desired scuff height.

A new lining adapter at the top of the 10-inch scuff incorporates a receptacle to receive the bottom edge of the lining that minimizes the chance for moisture intrusion into the foam cavity.

The durability and protection against sidewall impact from cargo and pallets is increased in the new design. The standard scuff is tapered with heavy-duty lower material that decreases in thickness at the top. There is also a heavy-duty option with a uniform thickness over the full height of the scuffband. Since the first joint on the new reefer scuffband is 10 inches above the

floor, and further away from the primary impact area as compared previous design, the possibility of damage to the joint is reduced. The new design's single row of exposed fasteners located 8 inches above the floor is shielded against damage by the new lining adapter.

The new integral reefer scuffband offers an opportunity to save weight over the previous 14-inch high scuff. On standard 53-ft models, a savings of 50 lbs is possible with the new 10-inch tapered scuffband compared to the previous 14-inch standard version. On heavy-duty reefers, the savings is 115 lbs. Customers opting for the 10-inch scuff with a single 6-inch stackable top section will realize a minimal weight increase over the 14-inch design. 

CASE STUDY



# Northeast Foods

*Great Dane Classic Vans Ensure On-Time, Productive Delivery of Fresh Baked McDonald's Buns*

A key supplier to McDonald's since 1965, Northeast Foods (NEF) is the largest producer of buns for the fast food chain's U.S. restaurants. "While it's impossible to imagine a McDonald's hamburger without a bun, it's impossible for us to imagine meeting the needs of the more than 3,300 restaurants we serve without Great Dane trailers," says John Sfakianos, Director of Corporate Distribution and Transportation.

The NEF direct store delivery operation currently includes 70 Great Dane Classic dry freight trailers operated on delivery routes from its Automatic Rolls Bakery locations in Maryland, New Jersey, Connecticut and Virginia. About 80 other Classic and P-Series dry vans and Classic reefers are also part of the fleet.

For nearly 20 years, NEF has relied on Great Dane to supply its route trailers. The Great Dane branch in Mt. Joy, Pennsylvania has been meeting those needs for the past 12 years.

"We deliver to each location every other day, three times per week," Sfakianos relates. "The buns are moved directly from our ovens to trays and loaded onto trailers. They have to be delivered fresh, so trailer integrity and productivity are key considerations for us."

For the past five years, NEF has worked closely with the Mt. Joy branch and with Joe Marino in particular, to develop route trailer specifications. NEF's latest trailers, including some 2009 models, are 48-ft by 96-inch by 13-ft two-inch high insulated Classic dry vans. The trailers' length, Sfakianos notes, addresses the need for a tighter turning radius in parking lots while shorter and narrower models are lighter and more aerodynamic, which saves fuel.

Ease of operation is a consideration that NEF addresses in its route trailers with two roadside doors and Maxon SL-30 Swivel liftgates. Great Dane preps the trailers to accept the liftgates by adding reinforcements below the vehicle and to the side door frames and headers. Also installed are side door thresholds, which allow dollies to be moved smoothly from the trailer floor to the liftgate platform, reducing the possibility of tipping. A 12-ft walk ramp is also carried on the trailers in the event both liftgates are inoperative.

Safety and productivity are also part of NEF's trailer specs. Included are three double hole skylights in sidewalls and four interior LED dome lights. There is also an LED strobe back up light in the rear frame post that flashes during deliveries, and a back up alarm.

"The 96-inch wide Classic model allows four rows of product to be carried without any side-to-side movement," Sfakianos also relates, "and we spec three rows of 'A' track to secure the load and protect sidewalls from dolly damage by acting as an interior rub rail. In addition, interior markings are added to ensure proper dolly placement."

Product integrity is a large concern for NEF. As a result, its specs call for block foam insulation in side and front walls, and in the ceiling. "This keeps temperature variances where they need to be to protect the product," Sfakianos explains. "It helps prevent condensation from forming on the inside of the bun bags, which tends to happen when a warm product is placed in a cold trailer."

Interiors of NEF's Great Dane Classic route trailers are also lined with .090 Kemplite to protect the product by preventing wood splinters from piercing bun bags. Additionally, a 1.33-



inch aluminum safety grip floor not only allows for ease of dolly movement, but, with the fiberglass lining, also makes cleaning interiors easier.

Other route trailer specs at NEF include 24-inch extruded aluminum sidewall scuffbands and a 1/4-inch thick, 36-inch smooth aluminum front wall scuff to protect against dolly damage. A plastic-faced Whiting roll up rear door and stainless steel rear frames are used to help prevent corrosion, while a Hendrickson Air Ride Suspension provides a smooth ride that helps keep the product from shifting and allows NEF to adjust the trailer to match its dock height.

"With Great Dane's help, our route trailer specifications have evolved to better serve McDonald's, reduce maintenance costs and downtime, and ultimately extend the life of our trailers," Sfakianos says. "Great Dane meets our needs with the right product and with the highly responsive support of its branch, and its engineering staff in Savannah and at the plant in Brazil, Indiana. These trailers that are built to fit our requirements, much like our buns are designed precisely for the burgers they hold."

## LIFTING PRODUCTIVITY

To enhance efficiency in loading and unloading operations, fleets can specify trailer-mounted liftgates in all-steel, steel-and-aluminum or all-aluminum conventional, rail type, flip away and side loading styles. The correct liftgate ensures safer operations, enables drivers to deliver greater quantities of cargo in less time, and minimize cargo damage and injuries.

Liftgate specifications are based on the type, weight and size of the cargo that is being hauled along with the material handling devices used to load and unload the product. The number of times per day a driver will use the liftgate and the travel time between each stop are also important in determining the type of liftgate needed.



# Maxon GPSLR Series Liftgate

*Level, Smart,  
Tough Solution  
for Easy Loading,  
Unloading*

**M**axon Lift Corp GPSLR slide-type liftgates available on Great Dane trailers offer the benefit of a level ride from top to bottom, similar to a rail liftgate, and a platform design that allows for easy loading and unloading.

With the ability to sit completely flat on the ground, the liftgate's platform also features a lightweight aluminum flip over section. In addition, its stress-optimized lift arm design results in no significant arm deflection, providing ample support even when the liftgate is loaded to its rated capacity.

The GPSLR Series, designed and manufactured by MAXON in North America also features SmartStow™, a function that enables the gate to automatically be stowed safely and securely. Not requiring multiple steps, the GPSLR can be stowed by using the one-button solution, which automatically detects the correct height and slides in, stows and secures the gate in place, eliminating the potential for operator error and damage.

The GPSLR works effectively with all types of rear trailer doors and is securely stowed away during dock loading operations. Its sophisticated design allows it to clear up to 15-inch buck plates without notching. During transit, its hydraulic locking system automatically locks when the gate is in the stow position requiring no additional operator effort.

Options on GPSLR slide type liftgates include single and dual aluminum retention ramps;

single and dual cart stops; battery box and cable kits; trailer charge line kits; a cycle counter; and a low voltage sensor.

Standard features of the Maxon GPSLR Series liftgates include motor thermal protection and a pump box that can be conveniently accessed from the rear of the trailer. Additionally, all MAXON liftgate products are finished using the MaxPro painting process that consists of pre-treatment, one of two primer options (standard aluminum or zinc rich) and an exclusive patented polyurea top coat. 



**MAXON®**



Prolam

**WAXIN***"Perfect Umbrella" Offers Water-Resistant Protection for Trailer Floors***WATER OUT**

**P**rolam, a provider of laminated trailer floors to Great Dane, recently introduced WAXIN, a process designed to help protect a trailer floor from deterioration caused by the effects of weather.

WAXIN, which makes floors highly water resistant and preserves the wood's effectiveness even as the floor surface thins due to normal wear, incorporates solid paraffin wax into the hardwood. This creates a virtually waterproof barrier of protection at the rear 8 feet of the trailer, the area of the floor most exposed and vulnerable to inclement weather.

During the production process using WAXIN, hardwood is heated to expand its fibers and solid paraffin wax is allowed to penetrate 0.060 to 0.120 inches deep into its surface. When the mix cools, the paraffin hardens and coats the wood fibers.

WAXIN will not only protect the trailer floor's surface from water damage, wood checking and de-lamination, but also helps

maintain a lower variation in moisture, preserving its strength. Fluctuating moisture levels caused by temperature variations, heat exposure from the sun and penetration by rain lead to changes in the structure of the wood and speed up its deterioration.

WAXIN also reduces swelling in wood weight and volume due to weather conditions by as much as 80 percent. When the moisture content of wood exceeds 25 to 30 percent, a floor can lose nearly 50 percent of its intended strength, or floor rating, prematurely leading to wood failure and/or decay. The less moisture content in the wood, the stronger and more durable the floor will be over its life.

Penetrating the wood and remaining solid, WAXIN also slows wood's natural deterioration by limiting the impact of environmental factors. WAXIN, which does not deteriorate, maintains its effectiveness and water resistance even as the surface of the floor is worn.



WAXIN is now available as standard on Great Dane dry freight trailers produced between May 1 and December 31, 2009. 

**PROLAM**  
Driven by Innovation

CASE STUDY

# Willow Run Foods

## Great Dane Classic Reefers Help Provide Second-to-None Food Distribution Service

“Having an extremely well-built trailer” is how Len Basso, Vice President of Transportation at Willow Run Foods, sums up his company’s equipment needs. “Durability and quality workmanship are of great concern,” he says. “Equipment utilization is high in our operation as we depend on our trailers to ‘turn-around’ within a couple of hours of their return to our facility. For more than 25 years, Great Dane has provided us with superior equipment at competitive pricing.”

Willow Run Foods, headquartered in Kirkwood, NY, is a casual dining and fast food systems distributor that delivers frozen, refrigerated and dry products in a service area covering 14 states in the Northeast and Mid-Atlantic regions and Canada. Customers include well-known names like Wendy’s, Arby’s, Boston Market, Popeye’s Chicken & Biscuit, Quizno’s and Sonic, among others.

The Willow Run fleet consists of 118 Great Dane 48-ft Classic reefers. In the past five years, the company has purchased 65 new trailers, including 20 in the past year. With a planned service life of seven to eight years, Willow Run has ordered 12 new units for delivery in 2009.

To meet customer needs for a variety of products, Willow Run specifies multi-temp Classic reefers equipped mainly with Thermo King refrigeration units. Other standard specs include Hutchens spring suspensions, Hendrickson tandem axles, Meritor WABCO



“Great Dane is a valued business partner and is a direct part of the success of our operation.”

Len Basso,  
Vice President of Transportation



ABS, Meritor Tire Inflation Systems (M.T.I.S.) and Grote Long Life Light Systems with LED exterior lamps and LED interior dome lights.

“All of our trailers are equipped with rear swing and two 40-inch curbside doors,” Basso relates. “Using front and rear evaporators, we can set up the front of the trailer to just past the first side door as a freezer compartment, then use a 4-inch insulated bulkhead to create a middle section, which includes the second side door, for refrigerated goods. A second bulkhead keeps the rear of the trailer, loaded with dry goods, at ambient temperature.”

Willow Run’s Classic reefers are also fitted with two rows of logistics track so load bars can be used to secure shrink-wrapped palletized products. In addition, the side doors are equipped with 30-inch pull out platforms with aluminum safety grip decking. The freezer compartment’s platform is integrated into the trailer floor and the refrigerated section’s platform is mounted on the underside of the trailer.

“At the rear of our trailers there is a 14-ft Roll-o-Matic Road Warrior ramp stored between the trailer tandems in a sheet-metal housing,” Basso also points out. “The ramp is used at all three doors to maintain product integrity. We do not allow any products to be

stacked on the ground for food safety reasons so hand carts are loaded inside the trailer, wheeled down the ramp and into the customer’s freezer or refrigerator.

“These custom specifications are one of the ways that Great Dane meets our needs,” Basso continues. “With Great Dane, we can make trailer purchases with the confidence that the product will be delivered on time and as specified, with excellent fit and finish and no deviation in quality regardless of the manufacturing location. Everyone associated with this company seems to fully understand the urgency of our business: Dealing with perishable products in time sensitive delivery situations.”

Basso’s compliments also extend to the entire staff at Northeast Great Dane. “The dealership’s personnel are all very responsive,” he says. “They are constantly in contact with Bob McKay, our fleet manager, about new design and product ideas, and, if any specs are changed, they work with Great Dane’s engineering staff to make sure they are handled to our satisfaction. Additionally, their parts are competitively priced and readily available, and repairs are always performed in an expedient manner with excellent workmanship.

“Our reputation is only as good as our last delivery,” Basso concludes. “We constantly strive to provide service that is second-to-none and Great Dane has been a large part of our ability to achieve that goal. Most carriers refer to companies

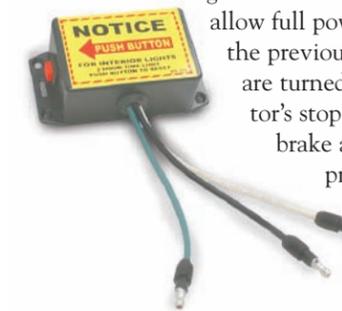
they purchase trailers from as vendors. Our relationship with Great Dane is much more than that. Great Dane is a valued business partner and is a direct part of the success of our operation.”

### Grote Timer Switch



A new interior lighting standard on all Great Dane product lines, the Grote Timer Switch replaces the previous push-pull switch design. The nose mounted timer switch eliminates the need for a separate pressure switch/relay, reducing the number of components on the front wall and the likelihood of damage.

The Grote timer switch retains the indicator light used previously to indicate when any switch is used to turn on the interior lights. As with the previous standard, the interior lights are off when the trailer is in motion to allow full power to the ABS system. Unlike the previous system, however, the lights are turned off electrically from the tractor’s stop lamp circuit upon the first brake application, rather than by air pressure when the parking brake is released.



# Where the Rubber Meets the Road Part 2

*Bridgestone Firestone North American Tire, LLC Explains Vulcanization Process*

**R**ubber, in its natural state, is not very useful. As it comes from the tree, it is a liquid called latex. Exposed to alcohol or salt water or smoke, latex coagulates and in that form can be compressed into things like pencil erasers, but it doesn't have much use otherwise.

Uncured rubber consists of long, stringy molecules of carbon and hydrogen; mixed together it's a lot like cooked spaghetti. When hot it won't hold a shape, is sticky, has no strength and has little ability to "bounce back." When cold, uncured rubber becomes a congealed glob that can hold its shape but is brittle if squeezed or stretched.

What makes rubber so effective for modern trailer tires is "vulcanization," a process named for the Roman blacksmith god, Vulcan. The process, which involves heat, together with some very interesting chemistry, is what makes rubber the incredibly useful engineered material used in tires.

Discovered in 1839, vulcanization was the result of an accident. Charles Goodyear, who had mixed sulfur with rubber, dropped some of the mixture on a hot stove. When he scraped it off, he discovered that the rubber no longer melted with heat, nor did it get brittle with cold. In other words, it stayed "rubbery." Now, instead of being like a plate of spaghetti, it became something more like fishing nets, strong and interconnected.

How much sulfur and heat to use to vulcanize rubber depends on the properties desired. In general, the more sulfur the stiffer the rubber. As for heat, moderation is the key. Without the chemical reactions the heat of vulcanization causes, there would be no way to make a useful tire.

At the same time, too much heat can actually break down the chemical bonds that hold the rubber and sulfur together. The result is a material like uncured rubber – only worse because it's almost impossible to repair those broken links, causing an overheated tire to literally come apart.

On the road, heat is generated from the mechanical flexing of the tire and too much heat can result from tires that are underinflated, overloaded or both. Temperatures inside tires, especially near belt edges, can easily exceed 250 degrees if a tire is underinflated, enough to cause the cured rubber to "revert" or "devulcanize." At that point, treads and belts can detach from the body of the tire with disastrous results.

Incidentally, the first recorded commercial use of rubber was in 1770, when small cubes were sold in London for erasing, or "rubbing" away pencil marks. The name "rubber" has lasted to this day, but without vulcanization the use of uncured rubber would scarcely have progressed beyond pencil erasers. With it, today's trailer tires are the result of an advanced technique that helps ensure efficiency, productivity, and safety and long tire life. 

**BRIDGESTONE**



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*shield your green* FROM GETTING BLACK AND BLUE



*A key component of Great Dane's  
Total Protection Package*

Protect your investment from corrosion with Great Dane's exclusive **CorroGuard** with Technology by GatorHyde. This extremely durable undercoating creates an impact-resistant barrier that helps melt away the snowball effect of equipment deterioration and increased maintenance costs caused by untreated chips to paint on a trailer's undercarriage. By withstanding even today's more powerful de-icing chemicals, road debris, climate fluctuations, and ice and snow, **CorroGuard** equals the most comprehensive corrosion fighting solution available.



**Great Dane**

For more about how to *shield your green*, visit [www.greatdanetrailers.com/corroguard](http://www.greatdanetrailers.com/corroguard)

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