

# *Evolving Trailer* **Technology**

Volume • 10 / Issue • 3



## ***Walking Away from Trailer Dock Walk***

How to Reduce While Loading, Unloading

## ***Shining a Light on Translucent Roofs***

Consider Pros and Cons When Spec'ing

## ***Turning Up the Pressure***

Tire Inflation Systems Monitor, Maintain Preset Levels



***Great Dane Trailers***

# CALENDAR

## October

October 2 – 4

Truxpo  
Tradex Center  
Abbotsford, British Columbia

October 4 – 7

American Trucking Association  
Management Conference and Exhibition  
Hilton New Orleans and Ernest Morial  
Convention Center  
New Orleans, LA

October 12 – 14

International Food Distributors  
Association  
David L. Lawrence Convention Center  
Pittsburgh, PA

## November

November 6

Georgia Motor Trucking Association  
Fleet Expo  
Gwinnett Civic Center  
Duluth, GA

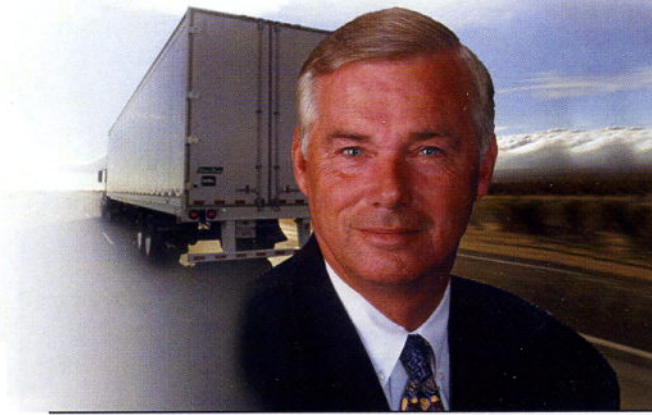
November 7 – 9

Cam Expo  
Centre de Foires de Québec  
Quebec City, Quebec

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# Quality Products, Innovative Strategies that Drive Business Forward

Dear Customer,

At Atlantic Great Dane, Inc., our primary goal is providing the quality products and innovative strategies to help drive your business forward.

From the latest trucking industry efforts to lower rising fuel costs and practical solutions to common operational concerns, you will find it in this issue of *Evolving Trailer Technology*. Whether it's learning how to prevent trailer dock walk, understanding the pros and cons of translucent roofs, or the benefits of properly inflated tires provided by the latest technological systems, Great Dane's engineering experts share their tips.

This issue also examines how some of Great Dane's customers count on our quality products. Great Dane's P-Series delivers lightweight performance without sacrificing quality for a high-tech truckload carrier. For another loyal customer, Great Dane's aluminum-steel combo flatbed goes the distance with dependability.

For our solid reputation and our extensive distribution, parts and service network, we hope you will – or continue to – entrust your business to us. We look forward to putting our expertise to work for you.

Regards,

Scott Lamb  
President  
Atlantic Great Dane, Inc.



# Industry Efforts to Lower Fuel Costs Can Pay Dividends

*Customers, Environment Stand to Benefit from Trade Group Initiatives*

**B**ased on well-established economic principles, changing the supply-demand balance is a sure route to lowering fuel costs. Taking a lead role in proposing ways to both reduce demand as well as increase the supply of fuel is American Trucking Associations (ATA), the national trade group that represents more than 37,000 members covering every type of motor carrier in the U.S.

On the supply side of the equation, ATA is urging the federal government to help bring down the price of diesel fuel: by allowing environmentally responsible exploration of oil-rich areas in the U.S., which are now off-limits; by releasing oil from the Strategic Petroleum Reserve, instead of only filling it; and by streamlining EPA's regulatory framework for reviewing and processing applications for additional refinery operations. Other efforts include working with states to combat fuel price gouging, and establishing a national diesel fuel standard.

The trucking industry is also making every effort to limit fuel consumption. ATA has called on Congress to support efforts to reduce fuel consumption by creating incentives to speed the introduction of auxiliary power units to reduce main engine idling, to require states to grant a weight exemption for APUs and to suspend the 12 percent federal excise tax on the units. Also on the ATA agenda is a requirement for speed limiters set for 68 MPH or lower on new trucks, establishing a 65 MPH national speed limit, and supporting the Environmental Protection Agency's SmartWay program, which encourages fuel savings.

ATA's initiatives are formalized in its Sustainability Program, which defines areas where the industry can lower fuel consumption and reduce its carbon footprint to help improve the environment. In addition to the items mentioned above, these include advocating for an improved highway infrastructure to reduce congestion, the use

of more productive truck combinations such as a single tractor-trailer maximum gross vehicle weight limit of 97,000 lbs and double 33-ft trailers, and support for setting technologically feasible fuel economy standards for medium- and heavy duty trucks as long as they do not compromise performance.

The trucking industry is on pace to spend \$141.5 billion on fuel in 2008, according to ATA, \$29 billion more than a year earlier. In an industry with thin profit margins and escalating fuel costs, increasing fuel efficiency and minimizing fuel consumption are major goals, which also coincide with the global need for industries to lessen their environmental impact.

Thanks to advancements in technology, the trucking industry has continuously improved upon its environmental performance. Working together, we can further ease the industry's environmental impact and reduce its consumption of fuel.



# Walking Away from Trailer Dock Walk

*How to Reduce While Loading, Unloading*

**T**railer dock walk is a series of horizontal movements away from a loading dock. It is caused by repeated entry and egress of a forklift during the loading and unloading of a trailer, which can result in a gap between trailer and dock if appropriate measures are not taken.

On trailers equipped with trailing arm air spring suspensions, the vertical drop of the trailer as the forklift enters the vehicle is translated into horizontal movement. This is due to the geometry of the suspension and its attachment to the trailer axle.

The primary way to stop trailer dock walk is to reduce or prevent the drop of the trailer as the forklift enters the vehicle. This can be accomplished in one of two ways:

- Use of a kickstand, a support leg that rotates into place and supports the trailer at ride height when the parking brakes are applied, minimizes trailer drop and generally maintains the vehicle's ride height.
- A dump valve that exhausts air from the air springs, lowering the suspension to rest on the internal bumpers of the air spring. By use of the dump valve dock height is not maintained, but vertical height changes are minimized. The dump valve can be manual (requiring operator intervention at each stop) or automatic, which means that air is exhausted from the air springs each time the trailer parking brakes are set and re-inflated when the brakes are released.

One other option to prevent dock walk is to specify an air spring suspension with an opposing arrangement of upper and lower control arms rather than a trailing arm suspension. This type of suspension may allow vertical drop or "squat", but the vertical drop generally does not translate into the type of horizontal movement referred to as dock walk.

Great Dane offers customers all of these options for reducing dock walk. 



