



Freightliner Trucks Reveals the Revolution Innovation Truck

Mar 22, 2012

New Concept Vehicle Showcases Advanced Technology

LOUISVILLE, Ky. – March 21, 2012 – Freightliner Trucks unveiled a forward-looking concept vehicle, the Revolution Innovation Truck. The revolutionary, full-size crossover cab was revealed today at the 2012 Mid-America Trucking Show.

Building on Freightliner's 70-year history of innovation and customer commitment, the Revolution features the latest advancements in technology while offering day cab functionality and the flexibility of a sleeper. The concept builds on Freightliner's first Innovation Truck, introduced in 2009.

"For 70 years, Freightliner Trucks has led the industry in developing the best-performing vehicles for our customers, and the Revolution concept truck builds on and continues that legacy of achievement," said David Hames, general manager, marketing and strategy for Daimler Trucks North America. "Our global engineering expertise and depth of resources will continue to result in world-class solutions that will shape future transportation and benefit our customers."

Aerodynamic Style

The fully functional Revolution includes some of the most advanced elements in efficient design for optimal performance. The truck's focus on aerodynamics has led to a striking, all-new look for day cabs, featuring a tightly packaged sloping hood, a low-mounted grille and integrated raised roof.

"We've taken what we learned with our first Innovation Truck and moved several steps forward," said Justin Yee, manager of vehicle concepts for Daimler Trucks North America. "The Revolution truly showcases the depth of our capabilities when encouraged to think outside the box and really get creative with our design solutions."

The Revolution's unique, asymmetric crossover cab design marks the first time a day cab-sized truck has included a sleek, integrated raised roof. Not only does this configuration provide a more expansive interior, but the seamless integration removes air gaps and improves airflow management between the tractor and trailer to reduce overall drag and improve fuel economy.

The truck's wrap-around windshield, strategically positioned side hood vents, dramatically sloped hood and low-mounted front grille are not only stylish, but are also designed to enhance performance.

"We've left no stone unturned on the Revolution," said Yee. "Aerodynamics has been considered in all aspects of this truck."

Additional aerodynamic features on the Revolution Innovation Truck include front vents that release air pressure coming across the front grille and a brand-new rear wheel cover concept that keeps air flowing smoothly from the chassis fairing to the trailer.

To reduce drag, a top step is hidden behind the door and the door handles have been removed from the cab. Side-view cameras transmit a wide-angle view of the road into the cab via monitors mounted inside, replacing cab-mounted mirrors, further benefiting overall aerodynamics.

Inside and Out: Designed for Tomorrow's Driver

A roomy cab is just the beginning of driver-friendly features found inside the Revolution Innovation Truck.

The crossover cab concept is a flexible new idea that serves as a workspace during the day, with a convertible jumpseat that transforms into a sleeper for rest. Abundant storage is found throughout the cab.

The interior features a large skylight in the roofcap to give the cabin a lighter, more spacious feel. Thoughtfully placed LED lighting throughout the cabin creates a functional and relaxing atmosphere, while the easy-to-read dash reduces driver distraction.

The Revolution is equipped with a conceptual Truck Operating System (TruckOS) that combines the intelligent on-board truck network with the portability, Internet connectivity, and entertainment options of a tablet device. Features include a Smart Navigation device, which combines route mapping, navigation tools and Internet searches; CB 2.0, which enables driver-to-driver chats; a Load Finder that searches online loadboards for jobs; and Truck Health, which works with the truck's diagnostic system to provide automatic maintenance alerts and then directs the driver to the closest Freightliner dealer.

"We took a close look at how drivers use their space, and what features would most impact their overall experience," said Andrew Olson, senior engineer, cab engineering for Daimler Trucks North America. "We want to help make the driver's job as safe and productive as possible."

Further adding to driver comfort and uptime, a sliding rear door opens to a large rear deck, and side steps give drivers a new way to easily access their trailer connections. The center plate on the deck lifts up to simplify access to the DEF and in-rail fuel tanks.

A smaller side baggage door in lieu of a full-sized passenger door enables drivers to load the truck from the ground level, and a panel to the truck's fuse box is easily accessible for routine maintenance requirements. All doors are controlled by a sophisticated keyless entry system.

Powering Efficient Performance

Among the noteworthy features of the Revolution concept truck is its Detroit Long Haul Tandem rear axle configuration. The new fuel efficient design de-clutches the rear axle from the driveline at highway speeds, enabling it to act as a tag axle and reduce fuel sipping friction losses. If the truck detects slip conditions, it immediately re-engages the rear axle and switches back to the standard 6x4 drive configuration.

"The Detroit Long Haul Tandem provides the best of both worlds – the safety and stability of a 6x4 combined with the fuel efficiency of a 6x2," said Yee.

To save even more energy, the side AC condenser has been relocated from the front and repositioned mid-chassis with a side air intake. Because the AC condenser does not require high levels of air flow, electric fans are employed at idle or slow speeds, allowing for more efficient fan cooling. The use of a viscous fan clutch for the radiator further ensures that the fan uses only as much energy as needed to cool the engine. A custom-built radiator and lightweight, side-mounted cooling system add to the truck's overall efficiency.

The Revolution Innovation Truck is equipped with the Detroit DD13® engine, which is ideal for regional and LTL applications. In-rail fuel tanks with a capacity of 75 gallons further help increase payload.

“The Revolution concept vehicle truly encompasses all of the best of DTNA’s design and engineering expertise,” said Hames. “We’re proud of our heritage, and we’re excited to be a driving force behind revolutionizing an industry.”

The Revolution Innovation Truck will be showcased and available for demonstrations at select industry events and customer venues throughout 2012.

For more information on the Revolution Innovation Truck, go to www.FreightlinerTrucks.com/Revolution.

Freightliner Trucks is a division of Daimler Trucks North America LLC, headquartered in Portland, Oregon, and is the leading heavy-duty truck manufacturer in North America. Daimler Trucks North America produces and markets Class 4-8 trucks and is a Daimler company, the world's leading commercial vehicle manufacturer.