



Detroit Brings Industry-Leading Safety Systems, Vocational Transmissions to New Western Star 49X

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PORTLAND, Ore. – Sept. 29, 2020 – For the first time, the vocational market can benefit from the cutting-edge technology, power and performance offered by the industry-leading Detroit Assurance suite of safety systems, the all-new Detroit DT12 Vocational Series of automated manual transmissions, and the enhanced Detroit DD15 Gen 5 featuring the Detroit Connect suite of connected vehicle services.

“Vocational applications, from loggers to extreme heavy haul, require tough and smart technologies that only Detroit can deliver,” said Samantha Parlier, vice president of market development, Vocational segment, Daimler Trucks North America. “Detroit’s new integrated powertrain and technologies bring world-class power, unprecedented safety and connectivity innovations to the vocational market, resulting in maximum uptime and productivity on any job site.”

The 49X with Detroit Assurance: Best-in-class Safety On the Road and On the Job

The 49X is not only the toughest vocational truck on the job, when spec’d with Detroit engines, the 49X comes standard with the Detroit Assurance suite of active safety systems, offering unparalleled safety features for vocational applications.

Detroit Assurance uses fused radar and high-definition camera technology to activate its state-of-the-art features including:

- Side Guard Assist (SGA): Radar technology detects moving objects and pedestrians on the passenger side of the 49X that may otherwise fall in the operator’s blind spot and alerts them with both auditory and visual warnings, providing game-changing technology for safety on the job-site and on the road.
- Active Brake Assist 5 (ABA 5): Always on, ABA 5 detects the distances to objects in its path, calculating speed, and determining if a warning or braking action is necessary. It also features full braking on stationary and moving objects, and when the signal from the radar and camera system detects a moving pedestrian crossing the truck’s path, an audible and visual warning occurs with simultaneous partial braking, followed by full braking if the driver does not react. ABA 5 is the only system available that works at speeds of 5 mph+, which makes it ideal for job sites and urban areas.
- Adaptive Cruise Control (ACC) to 0 mph and Tailgate Warning: ACC is only available with DT12-equipped 49X and automatically adjusts the truck’s cruising speed to maintain a safe following distance from other vehicles in its path, allowing it to remain in cruise control longer. If the vehicle in front stops, the 49X will also stop and hold indefinitely. If the vehicle in front moves, the 49X will automatically resume moving at a safe distance. Tailgate Warning will activate independently of the ABA 5 and ACC to ease driving in stop-and-go traffic and mitigate front and rear-end collisions.
- Lane Departure Warning, which provides an audible warning to the driver if the truck leaves its lane without signaling.

“With Detroit Assurance, the 49X is equipped with the most cutting-edge safety innovations ever seen in the vocational market,” said Parlier. “Detroit Assurance can reduce the severity of collisions when they occur and contribute to safer job sites.”

DT12 Vocational Series: Two New Models, Superior Detroit Durability

The DT12 Vocational series of automated manual transmissions boasts a globally proven transmission subjected to 35 million miles of testing specially designed for vocational customers and demanding off-road applications. The new series includes the DT12-V and the DT12-VX and has tough, durable designs and vocational-specific features such as:

- Rock-Free Mode, which allows the 49X to free itself from wheel stuck situations.
- Off-Road Mode, which enables smooth driving on extreme terrain like logging roads and rock quarries.
- Power Launch, which provides powerful takeoffs while protecting the clutch and driveline.
- Side PTO capabilities for added flexibility and larger, more robust gears.

The DT12-V has a GCWR up to 160,000 lbs and torque input up to 2,250 lb-ft. It is best for applications such as construction, government/municipal and more, while the DT12-VX has larger, more robust gears that allow for increased torque input up to 2,500 lb-ft. and GCWR limits of up to 330,000 lbs, and is ideal for extreme heavy-haul and logging applications. Both transmissions can be mated to the Detroit DD16 or the new Detroit DD15 Gen 5 engines.

The DD15 Gen 5 includes the new ThermoCoasting feature, which keeps the system at optimum temperature by preventing aftertreatment cooldown during a driving regen. ThermoCoasting engages engine brakes when necessary between 900 and 1500 RPM while the engine mimics coasting by maintaining zero torque at the flywheel to balance power delivery. The truck will not slow more than normal and operators will benefit from fewer forced regens on the jobsite.

“The DT12 Vocational series and the DD15 Gen 5 together offer exceptional power, durability and reliability,” said Michael Striker, director of component sales, Detroit. “The 49X requires the power and performance of Detroit engines.”

Enhanced Detroit Engine Options: Powering the 49X

The DD15 Gen 5 offers up to 505 hp and up to 1,750 lb-ft. of torque and is engineered for greater reliability than ever before. The DD15 Gen 5 also delivers a 60 lb. powertrain weight reduction, part of the overall weight reduction strategy of the 49X to enable greater payloads.

Key updates to the DD15 Gen 5 include:

- New power ratings for vocational applications, resulting in peak power and performance on the job site.
- Improved fuel combustion and ATS design that achieves maximum power from every piston stroke, with the added benefit of with the added benefits of using less fuel and reducing forced regenerations.”
- A new aftertreatment system that is able to do more with less space, increasing maintenance service intervals, and a single DPF, which further reduces maintenance costs and decreases forced regens.
- Rapid torque technology, which achieves high torque capabilities at lower RPMs.

Noted Striker: “The DD15 Gen 5 builds on the success of our industry-leading DD15 and includes new vocational power ratings and improvements to further contribute to its performance and durability.”

The 49X can also be spec'd with the Detroit DD16, which offers up to 600 hp and 2,050 lb-ft. of torque. The DD16 is the industry's only 16-liter engine and is ideally suited for the heaviest of vocational applications.

Also contributing to the performance and uptime of the 49X is the Detroit Connect suite of connected vehicle services, which includes Detroit Connect Virtual Technician remote diagnostic service. When an engine, aftertreatment or Detroit Assurance safety system fault occurs, information will be relayed via email or notifications through the Detroit Connect portal, providing real-time data to make informed decisions about service.

The Western Star 49X powered by Detroit is available to order this winter.

About Detroit

Detroit is a single-source trucking business solution that offers mid-range and heavy-duty diesel engines, transmissions, axles, safety systems and connected vehicle services for on-highway and vocational commercial markets. Detroit products are sold and serviced through a network of hundreds of locations in North America. For more information, or to find the nearest Detroit location, visit DemandDetroit.com. Detroit is a brand of Detroit Diesel Corporation, a subsidiary of Daimler Trucks North America.

About Daimler Trucks North America

Daimler Trucks North America, headquartered in Portland, Oregon, is the leading heavy-duty truck manufacturer in North America. Daimler Trucks North America produces and markets commercial vehicles under the Freightliner, Western Star and Thomas Built Buses nameplates. Daimler Trucks North America is a Daimler company, the world's leading commercial vehicle manufacturer.