



Western Star Introduces the Next Generation of Tough with All-New 49X

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PORTLAND, Ore. – Sept. 29, 2020 – Western Star today introduced the all-new 49X, its next-generation vocational truck built from the ground up to meet the needs of the most demanding applications. Underpinned by a stronger, lighter chassis and equipped with an all-new X-series cab, the 49X delivers maximum versatility in a purpose-built package. The all-new Detroit DT12 Vocational series of transmissions and industry-leading Detroit Assurance suite of safety systems offer proven innovation for best-in-class safety, improved productivity and maximum uptime.

“Our dealers, truck equipment manufacturers and, most importantly, our customers, rely on the dependability, reliability and sheer toughness of Western Star trucks,” said David Carson, senior vice president, Vocational segment, Daimler Trucks North America. “With the 49X, Western Star delivers on our promise of tough, while introducing segment-first safety features, an operator-focused experience and easier upfit solutions that will keep our customers’ businesses running smoothly.”

Purpose Built to Get on the Job Fast

“A vocational truck is a tool for a job,” noted Carson. “We’ve completely rethought the foundation of the 49X to make it easier to upfit, deliver greater durability, return greater payload and improve productivity at the job site.”

The clean-sheet design of the Western Star 49X enables total weight savings of over 350 pounds in like-for-like spec’ing versus the current Western Star 4900 and that weight savings starts with an all-new vocational frame. Single channel frame rail options are available in a variety of thicknesses and feature best-in-class RBM (Resisting Bending Moment) strength rating for single channel of up to 3.7 million inch-lbs. – yielding greater durability and weight savings. For added strength, C-channel frame reinforcements are available that reach an RBM rating of 5.4 million inch-lbs. Multiple parent rail front frame extension options are available for applications requiring front-mounted equipment, such as a plow.

Clear back-of-cab packaging for the 49X allows for easier upfit with features that include: forward mounted DEF tanks; standard in-cab battery box; multiple air tank mounting locations; air dryer mounted under hood (SBA) or under cab (SFA), optimized fuel tank sizes; a compact Detroit aftertreatment system; and functional dual vertical exhaust stacks.

Ready to tackle the toughest jobs

“Our customers depend on Western Star trucks to stand up to grueling conditions,” continued Carson. “To engineer the 49X with the durability and reliability our customers need, we went to their jobsites – the oil fields of west Texas, plowing operations in New Hampshire, and logging operations of British Columbia. We developed the 49X with the input of those customers, and then tested it where they work to ensure it’s ready for the toughest environments.”

The all-new X-series cab was designed specifically for vocational applications and provides additional vehicle weight savings while delivering long-term durability and operator comfort.

Advanced topology optimization was utilized to ensure rigidity and strength, and determine where additional material was needed in the steel-reinforced aluminum cab. Development work on the cab was the most extensive in Western Star history and included multiple cab crush tests to ensure cab integrity in case of a rollover. Full-vehicle shaker tests replicated 800,000 miles of use to test the innovative cab mount system that uses vocational cab isolators mounted outboard for optimal stability and reduced fatigue to both the operator and the cab. It is the segment's largest cab and offers 10-13 percent greater space than competitors for ample operator comfort.

All 49X models come with all-metal exterior brightwork for a premium look and long-term durability, and a standard interior with upscale appointments including metal accent. An optional premium trim package introduces richly crafted materials including woodgrain and diamond-stitched seating. In all models, a wrap-around dash puts the driver command center and B-panel in easy line of sight of the operator. On the B-panel, a flex panel can be prepped for a tablet or configured for an additional 12 switches or 10 gauges. Along with a QuickFit Dash Access designed for seamless telematics or other device integration, equipment control and device access is placed within easy reach for the operator.

The hood of the 49X is constructed of high-strength, lightweight molded composite for superior impact resistance and durability. The new hood uses an innovative and patented ISO Tech Hood Suspension system that behaves similarly to a typical coil-over shock suspension with spring and damper. The system isolates, absorbs and dissipates vibrations from the chassis when driving over uneven terrain to protect the hood from damage and cracking.

The Detroit Advantage

Under the hood, the 49X debuts the all-new and work-ready Detroit DT12 Vocational series of automated manual transmissions. Available as either the DT12-V or the DT12-VX and rated up to a GCWR of 330,000 pounds, the DT12 Vocational series was validated in over 35 million miles of testing to deliver performance and durability and can be mated to the venerable Detroit DD15 Gen 5 engine or workhorse Detroit DD16 engine, the largest and most powerful diesel engine available in the North American heavy truck market. Both engines come equipped with Detroit Connect Virtual Technician remote diagnostic services to increase uptime and productivity.

Notably, the DT12 Vocational series of transmissions include side PTO capabilities that allow for added flexibility, and unique work application modes and shift map strategies for all types of terrain. A Rock-Free Mode allows the 49X to free itself from wheel stuck situations, an Off-Road Mode enables smooth driving on extreme terrain, like logging roads and rock quarries, Power Launch which provides powerful takeoffs while protecting the clutch and driveline, and a Paver Mode which allows the truck to shift from Neutral to Drive without depressing the brake pedal when pulling away.

Best-in-class safety in the 49X is enabled thanks to the Detroit Assurance suite of safety systems, which features the most advanced collision mitigation system in the vocational market. Detroit Assurance in the 49X offers Side Guard Assist (SGA), Active Brake Assist 5 (ABA5), Tailgate Warning, Adaptive Cruise Control (ACC) to 0mph, Lane Departure Warning, Video Capture, Intelligent High-Beam and Automatic Wipers and Headlamps.

With optional 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 jobsite or on the way there.

ABA5 detects distance and speed to moving and stationary objects in the driving path of the 49X and determines if warning or automated braking is necessary. ABA5 with Detroit Assurance is the only system on the market that works down to 5 miles per hour, making it ideal for busy jobsites and in congested urban areas. It also recognizes moving pedestrians who are crossing in the truck's path, alerting and applying the brakes if the operator does not react.

Protecting the most important assets on the job site

"The real stars of every job site are the men and women working at it, which is why the Western Star 49X was engineered to deliver best-in-class safety with Detroit, easier entry and exit to reduce workplace injury, and best-in-class visibility to benefit not only the operator, but the entire crew," said Carson.

With slips, trips and falls serving as the second most common type of workplace injury, and with applications like a concrete mixer where an operator may enter and exit the truck fifty times in a shift in mind, Western Star design-engineered ergonomic ingress and egress for the 49X. Door opening angles of 70 degrees, five hand holds, and step treads widened by half an inch and constructed as a staircase help facilitate safer entry and exit from the cab. The steps start closer to the ground and use a volcano tread for confident footholds with high traction, added toe clearance, and mud, dirt and debris pass through.

The 49X's best-in-class visibility comes from a sloped hood enabled by splayed frame rails, a lowered engine position and underhood engine air filtration, a 28 percent larger single-piece roped-in windshield, and an optional three-piece rear window that is 77 percent larger versus the 4900. Optional Borofloat® glass in the front windshield and optional polycarbonate in the rear windows provide impact resistance from debris. An innovative C-bar mirror system features door-mounted mirrors that mitigate the effects of chassis and engine vibration to keep them stable and usable in off-road or paving applications where visibility by the operator to the crew at the back of the truck is critical.

The 49X also debuts a dual-stage LED headlight system featuring an internally printed heat grid and ambient air temperature sensor which can melt three millimeters of ice in less than ten minutes at 40 degrees below zero, or to burn through condensation in warm, humid environments. Combined with a 45-degree light pattern, the 49X headlight system provides smooth, uniform illumination that shines long and wide to improve visibility and safety on the road or at the job site.

“Our bottom-line intent was to deliver a truck that benefits our customers’ bottom lines,” said Carson. “We know the conditions our customers are working in, we know the challenges of their operations, and we know that productivity at the site matters most. That’s why the all-new 49X is purpose-built for durability, safety and maximum uptime – and for our customers.”

Available for order

The all-new Western Star 49X is available for ordering this winter and first deliveries begin in early 2021.

To learn more about the 49X and for the full media kit, visit daimler-trucksnorthamerica.com/49x

About Western Star

Western Star, headquartered in Portland, Ore., produces tough custom trucks for highway and vocational applications. Western Star is a subsidiary of Daimler Trucks North America. Daimler Trucks North America produces and markets Class 5-8 vehicles and is a Daimler company, the world’s leading commercial vehicle manufacturer.

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.