



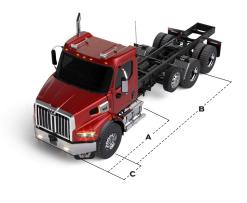
TOUGHNESS AND DEPENDABILITY HAS NEVER BEEN SO VERSATILE.

The 47X expands the X-Series toolkit, offering a fast and easy upfit solution engineered to enhance safety, versatility and maneuverability, along with providing numerous lightweight options to make it ideal for applications where weight savings are critical.

DIMENSIONS



SF	SET FORWARD AXLE	A BBC: 111.6" (110.8" WITH SF BRIDGE FORMULA BUMPER MOUNTING)
		B WB: UPTO 415"
		C BA: 30.1"



SB	SET BACK AXLE	A BBC: 111.6"
		B WB: UPTO 361"
		C BA: 46.5"

SLEEPER





36" Trench-style Low Roof Available in 36" Mid Roof





48" Mid Roof

CAB

- X-Series steel-reinforced aluminum cab with X-Series steel door
- Trench-style Low Roof with lowered center section for optimal packaging of over cab equipment
- ➤ One-piece roped-in windshield
- > Optional single or high-visibility three-piece rear window

INTERIOR TRIM LEVELS

- > X-Series Base
 - · Mordura cloth seat
 - Vinyl sleeper upholstery
 - · Standard insulation
 - · Standard LED cab lighting
 - · Black finish steering wheel switches
 - · Black finish dash gauge bezels
 - · Carbon with black trim accents
- > X-Series Premium
 - Laredo leather seats
 - · Upgraded sleeper upholstery
 - · Premium insulation
 - Premium LED cab lighting
 - · Bright finish steering wheel switches
 - · Bright finish dash gauge bezels
 - · Premium teak trim

INTERIOR COLORS

- ➤ Charcoal Black
- ➤ Timber Brown (available on Premium Package only)

HOOD

- Impact-resistant, durable, lightweight molded resin hood with sloped high-visibility design
- > ISO Tech Hood Suspension System
- > Standard with locking hood strut

GRILLE

> Radiator-mounted steel grille with stainless steel surround

HVAC

- Best-in-class HVAC with 5 face outlets, 4 floor outlets, 2 side window defrost outlets and 10 blower speeds
- Available only on sleepers, optional Idle-Free Dual HVAC that provides up to 10 hours of cooling or 34 hours of heating when parked

AIR INTAKE

Engine-mounted air intake, plus optional hood-mounted pre-cleaner deliver improved dust capacity

ENGINE

- Detroit® DD13® Gen 5, 370-525 HP, 1,250-1,850 lb-ft
- > Cummins L9, 260-380 HP, 860-1,250 lb-ft
- > Cummins X12, 350-500 HP, 1450-1700 lb-ft

TRANSMISSION

- Detroit® DT12®-V AMT
- Allison 3000 and 4000 Series Automatics
- > Eaton Fuller 10- 13- 18-speed; 8LL and 9ALL Manuals
- > Eaton Ultrashift PLUS and Endurant AMT

POWER TAKE-OFFS (PTOs)

- Intuitive and simple to use PTO control system that makes programming easy
- > FEPTO and REPTO available
- > Factory installed transmission PTO

STEER AXLE

- ➤ Detroit® single 12,000-23,000 lbs
- > Meritor single 12,000-22,000 lbs
- > Detroit® twin steer tandem 40,000 lbs

REAR DRIVE AXLE

- Detroit[®] single 23,000 lbs
- Detroit® tandem 40.000-46.000 lbs
- ➤ Dana tandem 46.000-50.000 lbs
- > Meritor single 21,000-30,000 lbs
- > Meritor tandem 40,000-58,000 lbs
- > Meritor tridem 69,000-78,000 lbs

PUSHER AND TAG AXLES

> Steer and non-steer 8,000-25,000 lbs

FRONT SUSPENSION

- > Flatleaf 14,600-23,000 lbs
- > Flatleaf (Tandem) 40,000 lbs
- > Taperleaf 12,000-20,000 lbs
- Taperleaf (Tandem) 40,000 lbs

REAR SUSPENSION

- ➢ AirLiner® single 21,000-23,000 lbs
- > AirLiner® tandem 40,000- 46,000 lbs
- ≥ AirLiner® tridem 69,000 lbs
- ➤ Chalmers tandem 40,000-70,000 lbs
- ➢ Flatleaf single 23,000-30,000 lbs
- > Hendrickson tandem 40,000-70,000 lbs
- > Neway single 26,000 lbs
- > Neway tandem 46,000-52,000 lbs
- > Neway tridem 69,000-78,000 lbs
- > TufTrac tandem 40,000-52,000 lbs

BRAKES

- WABCO® 4S/4M and 6S/6M Anti-lock Braking System (ABS) with and without traction enhancement
- ➢ Air Disc Brakes

ACTIVE SAFETY

- Detroit Assurance® suite of safety systems including: Active Brake Assist 5, Adaptive Cruise Control to 0 MPH*, Side Guard Assist, Tailgate Warning, Lane Departure Warning, Automatic Headlights/Wipers and Intelligent High Beams, Brake Hold Mode, Traffic Sign Display and Active Speed Intervention, available with Detroit® engines
- WABCO® OnGuard including collision mitigation and adaptive cruise control, optional with Cummins engines

*With DT12-V transmission.

FRAME

- Single-channel RBM @ 1.8-3.8MM inch-lbs
- > Inner C-channel reinforced RBM @ 4.4-5.5MM inch-lbs
- > 8"-30" parent rail front frame extensions options available

BUMPERS

47X offers three bumper styles in various finishes and thicknesses, as well as boxed-in bumper with an optional grille guard for logging applications. All 47X bumpers are tapered at the wheel ends for ground clearance and weight savings

- > Standard 1/8" stainless steel vocational
- > Optional 3/16" painted steel
- > Optional 1/4" plain or polished aluminum
- → Optional 5/16" bright steel severe service
- > Optional 3/8" painted steel severe service
- > Optional 1/4" painted or bright steel logger

FRONT TOW DEVICES

- There are a number of towing device options mounted directly to the front frame head for increased strength and durability, with ratings from 80,000-140,000 lbs
- Dual Removable Tow Hoops, 80,000 lbs
- > Center Tow Pin, 80,000 lbs
- → High Capacity Center Tow Pin, 140,000 lbs.

FUEL TANKS

- > Aluminum 25" cylindrical, plain or polished
- > LH 60-150 gallon (227-568 liter)
- > LH 60, 80 and 90 gallon rectangular tanks
 - · Optional raised fuel tank mounting
- > RH 60-, 70-, 80-, 100-, 120-, 150-gallon (227-, 265-, 303-, 379-, 454-, 569-liter)
- > Standard forward mounting; optional aft mounting
- > LH and RH split fuel/hydraulic tank options available
- LH and/or RH auxiliary fuel supply and return ports available

DEF TANK

- > 8-, 13- and 23-gallon (23-, 49- and 87-liter)
- > Standard forward mounting
- > Optional LH or RH aft mounting

UPFIT EFFICIENCY FEATURES

- All-new QuickFit Interface System
 - Easier to integrate truck equipment with the vehicle's electrical power and communication sources
 - Advanced multiplexed electrical system for easy Truck Equipment Manufacturer (TEM) interface, programming and power access
 - Auxiliary in-cab backwall mounted E-Vault available, which houses:
 - QuickFit Programmable Modules
 - QuickFit Programmable Interface Connector
 - TEM-specific power distribution module
 - High-current power access
- Multiple clear back-of-cab chassis configurations

- Updated standard air dryer mounting location delivers clear back-of-cab
- Standard in-cab battery mounting location with optional mounting on frame or between rails
- Up to 24 programmable multiplexed, 4 hard-wired and 2 pneumatic switches

All 47X technical details can be found in the Western Star Technical Resource Guide (TRG). For access to the TRG, log on to DTNAConnect.com



HAND BUILT IN THE USA

Cleveland, NC Portland, OR

DAIMLER | Western Star - A Daimler Group Brand

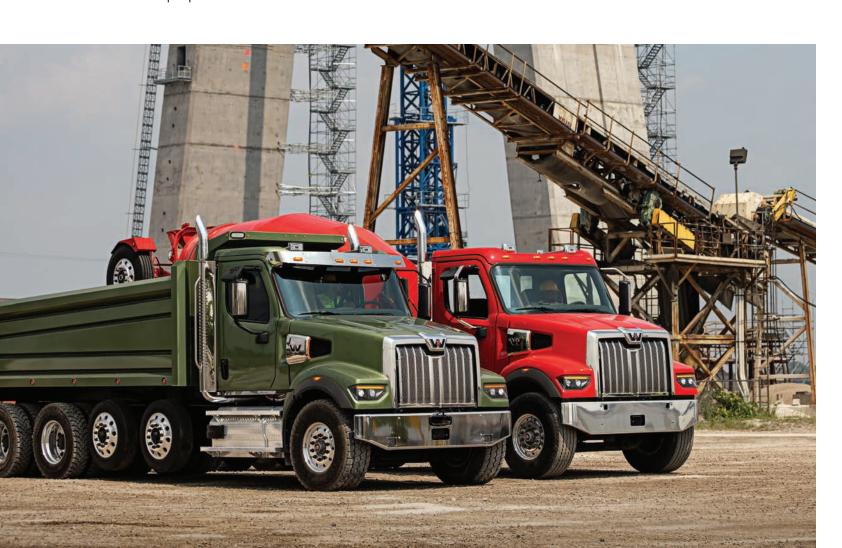
The X-Series toolkit just got more versatile

GETTING THE JOB DONE

IS NOW TWICE AS EASY.

When you need a tough truck, Western Star has always been the right choice. And with our X-Series trucks, the toughness Western Star has always been known for is taken to the next level. Both the 47X and 49X are engineered from the ground up to deliver decades of dependable performance. In fact, the 49X represented an industry-changing level of advancement for vocational trucks, delivering power, durability and technology for applications like heavy haul, logging and construction.

And with the addition of the 47X, the reach of the X-Series is extended into even more applications, with a number of new features including a shorter hood and a shorter 110.8" BBC. This shorter configuration is ideal for applications that require optimized equipment packaging to meet local overall vehicle length requirements and applications that need to adhere to bridge laws. So, no matter what job you need to do, there are two purpose-built tools to do it.







47X SPECIFICATIONS	49X SPECIFICATIONS	
ENGINE DISPLACEMENT 9L to 13L	ENGINE DISPLACEMENT 12L to 16L	
HORSEPOWER / TORQUE 260/860 to 525/1,850	HORSEPOWER / TORQUE 350/1,350 to 605/2,050	
BUMPER TO BACK OF CAB 111.6" (110.8" WITH SF BRIDGE FORMULA BUMPER MOUNTING)	BUMPER TO BACK OF CAB 121.5"	
FORWARD VISIBILITY* 21.7'	FORWARD VISIBILITY* 24.8'	
AIR FILTRATION EFFICIENCY AND DUST CAPACITY Very Good	AIR FILTRATION EFFICIENCY AND DUST CAPACITY Excellent	
AVAILABLE SLEEPER LENGTHS 36"/48"	AVAILABLE SLEEPER LENGTHS 36"/48"/60"/72"	
TURNING RADIUS (20 FOOT BODY LENGTH) 34.0'	TURNING RADIUS (20 FOOT BODY LENGTH) 35.4'	

*Driver visibility over center of hood.



Components with a long history of performance

DETROIT®

THE POWER

TO GET ANY JOB DONE.

PROFESSIONAL QUALITY WORK TRUCK POWERTRAIN COMPONENTS FROM DETROIT®

Give your X-Series truck added toughness and dependability with enhanced Detroit vocational engine options, new Detroit vocational transmissions and axles, all designed to work together seamlessly for unmatched performance on the jobsite.

- The Detroit® DD13® Gen 5 and Detroit® DD15® Gen 5, both redesigned with the best in cutting-edge diesel engine technology and engineering for increases in power, durability and productivity with vocational-specific features including new power ratings and improved aftertreatment system to decrease regens
- ➤ The Detroit® DD16®, the industry's only 16-liter engine, delivers up to 600 HP and 2,050 lb-ft for demanding applications



ROCK-FREE MODE

DETROIT® DT12® VOCATIONAL SERIES

The new DT12 Vocational Series of automated manual transmissions has been specially engineered and rigorously tested for the unique needs of vocational trucks. Legendary Detroit quality is combined with cutting-edge technology and durable new components like large, robust gearing for even greater dependability. And you'll find this rugged performance in two new models – the DT12-V and DT12-VX – that boast new vocational features including:

- Rock-Free Mode allows the 49X to free itself from wheel-stuck situations
- > Off-Road Mode enables smooth driving on extreme terrain
- Power Launch provides powerful takeoffs while protecting the clutch and driveline

ENGINES



47X / 49X
DETROIT®
DD13® GEN 5
HORSEPOWER
Up to 525 HP

TORQUE
Up to 1,850 lb-ft



47X
CUMMINS
L9
HORSEPOWER

Up to 380 HP

TORQUE
Up to 1,250 lb-ft



49X DET DD1! HOR!

DETROIT[®] DD15[®] GEN 5

HORSEPOWER
Up to 505 HP

TORQUEUp to 1,850 lb-ft



47X / 49X
CUMMINS
X12
HORSEPOWER
Up to 500 HP

HORSEPOWER
Up to 500 HP
TORQUE
Up to 1,700 lb-ft



49X
DETROIT®
DD16®
HORSEPOWER
Up to 600 HP

TORQUEUp to 2,050 lb-ft



49X
CUMMINS
X15
HORSEPOWER
Up to 605 HP

TORQUEUp to 2,050 lb-ft

TRANSMISSIONS

To spec the exact transmission you need, see your nearest Western Star dealer.



47X / 49X DT12-V

Automated Manual Vocational Transmission

TORQUE 2,250 lb-ft

GCW 160,000 lbs

REAR PTO Yes

воттом рто



49X DT12-VX

Automated Manual Extreme Vocational Transmission

TORQUE 2,500 lb-ft

GCW 330,000 lbs*

REAR PTO Yes

BOTTOM PTO



47X / 49X

EATON FULLERManual and Automated
Manual Transmissions

TORQUE 1,650-2,250 lb-ft

GCW 170,000 lbs**

REAR PTO Yes SIDE PTO



47X / 49X

ALLISON
Automatic
Transmissions

TORQUE 1,650-1,850 lb-ft

GCW 170,000 lbs**

REAR PTO Yes

> SIDE PTO Yes



The leading-edge technology of Detroit Assurance®

THE MOST ADVANCED SAFETY SYSTEMS

SIDE GUARD ASSIST

A game changer for safety in and around busy jobsites, optional Side Guard Assist detects objects in the passenger side blind spot and alerts the operator.



EVER SEEN IN THE VOCATIONAL MARKET.

Technology gets tough in the all-new X-Series, the first Western Star trucks to feature the Detroit Assurance® Suite of Safety Systems, the most advanced active safety systems ever offered to the vocational market. From remote logging sites to urban construction sites, Assurance improves safety there and back.

FEATURES OF DETROIT ASSURANCE

ACTIVE BRAKE ASSIST 5

Active Brake Assist 5 detects distance and speed of moving and stationary objects in its path and determines if warning or braking is necessary. It's the only system on the market that works down to 5 MPH, making it ideal for travel in congested urban areas. It also recognizes pedestrians who are about to cross in the truck's path, alerting the operator while partially braking, followed by full braking if the operator does not react. The market leading ABA 5 uses a fused camera and radar system, which is cutting-edge technology.



ADAPTIVE CRUISE CONTROL TO O MPH AND BRAKE HOLD MODE

Detroit Assurance enables state-of-the-art features that make an operator's workday safer and more comfortable than ever before. On the road, Adaptive Cruise Control to O MPH* helps ease driving in stop-and-go traffic as well as mitigate front and rear collisions. And on the jobsite, Brake Hold Mode keeps a truck stopped when the driver removes their foot from the brake pedal, or if their foot unintentionally slips off.

*With DT12-V or DT12-VX transmission.



> TAILGATE WARNING

> TRAFFIC SIGN DISPLAY

> ACTIVE SPEED INTERVENTION

> AUTOMATIC HEADLIGHTS/WIPERS

> INTELLIGENT HIGH-BEAMS

FORWARD- AND OPERATOR-FACING VIDEO CAPTURE







Safe by design

SAFETY

THAT IS EASY TO SEE.

INTELLIGENT LED HEADLIGHTS

Dual Stage Intelligent LED Headlights are designed to last the lifetime of the truck, with no bulbs to replace ever. Plus, they deliver best-in-class visibility and improved safety with:

- Integrated amber daytime running lights to make the truck more visible to oncoming traffic and on the jobsite
- LED output designed to fully illuminate the road and jobsite, including off to the sides of the vehicle, to reduce eye fatigue while letting operators detect objects sooner
- Dual-stage heat grid to melt away ice in minutes and, in humid environments, eliminate condensation
- High-impact polycarbonate lenses with additional hard coating protection to prevent cracking, scratching or damage to the headlight from road or jobsite debris

REAR WINDOW OPTIONS

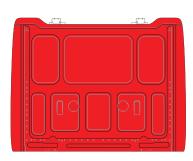
Rear visibility is also maximized on our X-Series trucks. A large single center rear window is standard with day cabs while our new optional high-visibility three-window configuration increases the rear window area by 77% over our previous models. Optional impact-resistant polycarbonate rear window configurations are available, protecting your truck from road or jobsite debris.



Standard Single Rear Window



Optional Three-Piece Rear Window

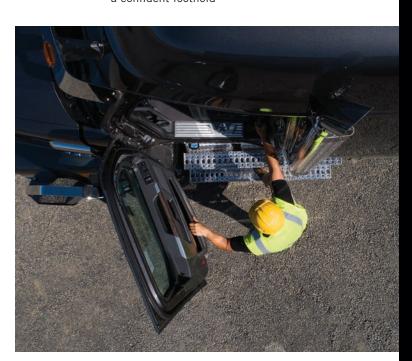


Optional Solid Wall

INGRESS AND EGRESS

Western Star designed the 47X and 49X with operator safety in mind, which includes getting in and out of the cab. Some of the features to improve ingress and egress safety include:

- Strategically located grab points and grab handles for safe and comfortable entry and exit
- Metal scuff plates that define the entry and make the cab easy to sweep out, keeping it debris-free
- > Highly-visible corrosion-resistant aluminum steps one inch larger than previous models
- Enhanced tread pattern to allow debris to pass through, giving operators a confident foothold when climbing in and out of the truck
- Improved stair step design to provide operators a confident foothold



STRONG AND STABLE.

FUNCTION THAT'S INCREDIBLY TOUGH.



THE C-BAR MIRROR SYSTEM

Visibility is critical, which is why the all-new C-Bar door-mounted mirror arms feature a reduced profile for greater forward visibility for when operators need to see around them. The door and mirror structure was tuned to avoid mirror vibration and deliver a stable image at all times, regardless of vehicle speed or road surface, while also allowing for a wide 70-degree door-open angle. Plus, this reinforced construction, combined with our breakaway feature, means these mirrors can take a hit and not get damaged. All of which means these mirrors improve safety and your bottom line.



QUICKFIT INTERFACE SYSTEM

The electrical system is the hub of any body addition. Our proprietary QuickFit Interface System makes it easier than ever before to integrate truck equipment to the vehicle's electrical power sources. It features an advanced multiplexed electrical system designed for easy Truck Equipment Manufacturer (TEM) interface, programming and access to power.

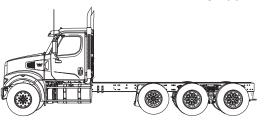
- ➤ All electronic control units are now stored in the cab in the new dash electronic vault or E-Vault for easy access
- An auxiliary in-cab backwall mounted E-Vault is also available and includes:
- QuikFit Programmable Controllers
- QuickFit Connectors
 - QuickFit Interface Connectors
 - Powertrain Interface Connector
 - Body Lighting Interface Connectors
 (also available back-of-cab or end-of-frame)
- TEM-specific power distribution module
- High-current power access
- Additional exterior lighting interface available for snow plow, beacon and utility lights
- Our all new PTO control architecture is designed to simplify complex PTO control logic programming. The sky is the limit for all your logic programming needs, as simple or complex as you want

FLEXPANEL

Proprietary FlexPanel provides TEMs the space and flexibility to easily integrate body controls, freeing up valuable space between the driver and passenger seats

MID-CHASSIS PACKAGING

The X-Series chassis was designed to make it easier than ever to mount bodies for any application.



The mid-chassis packaging includes features that deliver clear back-of-cab to ensure more efficient body integration. Key mid-chassis packaging features include:

- Forward-mounted DEF tanks in 8-, 13-, and 23-gallon capacities
- Standard in-cab battery box to optimize frame space. Between rails or frame-mounted boxes also available
- Variety of air tank mounting options available, including below battery box, inside or below frame rail, or perpendicular to the frame
- 25-inch diameter fuel tanks are available from 60 to 150 gallons and can be mounted on either side, forward or aft
- ➤ 60-, 80- and 90-gallon rectangular left-hand fuel tanks with raised mounting available for belly plow applications
- Factory-installed split hydraulic/fuel tanks available to save upfit time and maximize frame space
- Updated standard air dryer mounting location clears up frame space behind the cab

ALL 47X AND 49X TECHNICAL DETAILS CAN
BE FOUND IN THE TECHNICAL RESOURCE
GUIDE (TRG). FOR ACCESS TO THE TRG,
LOG ON TO DTNACONNECT.COM.

CHEC TOOL

Western Star's CHEC Tool is the interface to the programmable controllers found on X-Series trucks. It enables TEMs and dealers to view and modify electrical configurations, giving them the power to customize inputs and outputs and change parameters within minutes. With the power of QuickFit and CHEC, what was once considered to be complex, expensive or impossible to do can be accomplished more easily and efficiently.



Customizable factory options

BUILT FOR ONE JOB.

YOURS.

Both the 47X and 49X are purpose built, with hundreds of options to help you build exactly the truck you need.



Dual Removable Tow Hoops 80,000 lbs



Center Tow Pin 80,000 lbs



High Capacity Center Tow Pin 140,000 lbs

PTOs

The wide selection of engines and transmissions means you can spec the right combination of PTOs – FEPTO*, REPTO and transmission-mounted PTOs – which allows you to install the equipment you need on your X-Series truck.

*Available early 2022

AIR CLEANER OPTIONS

The optional pre-cleaner removes a majority of particulates out of the air before entering the primary air cleaner, extending filter life and service intervals in off-road environments. Optional snow doors are available to pull intake air from underhood when conditions may cause side air intakes to plug with snow or ice.

TOOL BOXES

Locking tool boxes are offered in 18-, 24-, and 34-inch widths. They're constructed from durable, lightweight aluminum and can be ordered with plain, polished or diamond plate finish covers.

BUMPERS

Our X-Series trucks offer three bumper styles in various finishes and thicknesses, as well as a boxed-in bumper with an optional grille guard for logging applications. A bumper mounting position specifically designed to optimize packaging to meet bridge laws, shortening BBC to 110.8", is available.

FRONT TOW DEVICES

There are a number of towing device options mounted directly to the front frame head for increased strength and durability with ratings from 80,000-140,000 lbs.



TANKS

FUEL TANKS

25" diameter, 60-150 gallons

Side, fore or aft mounted

Fuel/hydraulic combo tanks also offered

60-, 80- and 90-gallon rectangular left-hand fuel tanks with raised mounting available for belly plow applications

DEF TANKS

8-, 13-, and 23-gallons

Mounted in the most forward position, regardless of size

EXHAUST OPTIONS

Single right-hand cab-mounted vertical exhaust (standard)

Single right-hand mid-chassis-mounted horizontal exhaust

Dual cab-mounted vertical exhaust

Dual frame-mounted vertical exhaust

Back of cab, frame-mounted vertical ATS with topstack

Right-hand outboard under-step-mounted horizontal aftertreatment system with horizontal exhaust

AXLES CONFIGURATIONS

STEER AXLES

Detroit® and Meritor – 12,000-23,000 lbs Detroit® Twin Steer Tandem – 40,000 lbs

REAR DRIVE AXLES

Detroit®, Meritor and Dana

Single - 21.000-30.000 lbs

Tandem – 40,000-60,000 lbs

Tridem - 69,000-78,000 lbs

PUSHER AND TAG AXLES

Steer and Non-Steer - 8,000-25,000 lbs

REAR SUSPENSIONS

AirLiner®, TufTrac, Chalmers, Hendrickson and Neway are available

Single - 21,000-30,000 lbs

Tandem - 40,000-70,000 lbs

Tridem - 69,000-78,000 lbs