

HV™ SERIES



COMPARISON GUIDE





A SMARTER APPROACH

Productivity often comes down to versatility. And there’s no more versatile foundation than the HV™ HD Series. With configurations ranging from 4x2 to 8x6, BBC of 113” and set-forward or set-back front axles, plus a clean Cab-to-Axle (CA) configuration—the HV Series has what you want for virtually every possible need.

To confirm the many advantages of the HV HD Series, we put it to a series of demanding tests. These tests were conducted by independent industry experts to assure the highest level of objectivity and attention to detail. Measurements were taken from standard production vehicles and performed in precisely the same manner, by the same personnel, across all models. Vehicle specifications were matched as closely as possible to help ensure competitive consistency. How does the HV HD Series measure up in the real world? You’ll find the results over the following pages.

REAL WORLD CONFIRMATION

Introduction	Contents	2
	Feature Overview	3
	Available Specifications	4
	Competitive Set	5
Cab Design	Innovative Cab	6-7
	Visibility and Cab Glass	8-10
Cab Interior	Cab Size and Dimensions	11-12
	Driver Environment	13-14
	DriverFirst in Every Detail	15
Chassis	Chassis and Frame Equipment	16-17
	Axles and Maneuverability	18-19
	Electrical and Upfit	20-21
Inside Advantage	Diamond Logic®	22
Powertrain	International® A26	23
	Engine Specifications	24
	Transmissions and Equipment	25
	Routine Maintenance	26-27
	Maintenance Intervals	27
Support Services	Dealer Network	28
	OnCommand Connection	29
Summary		30



INTRODUCTION | A Smarter Approach to Serious Work



INTERNATIONAL® TRUCKS HAVE ALWAYS ANSWERED THE CALL FOR THE TOUGHEST JOBS AROUND.

Now there's a new breed of vocational truck that surpasses the best that International has ever delivered — the new HV™ Series. The HV Series redefines maximum productivity with either a set-forward or set-back, wide-track front axle. It includes the industry standard for operator safety, versatility and dependability in its Diamond Logic® Electrical System. It's powered by a new International® A26 engine that's built from the block up to redefine efficiency, performance and durability. And the HV Series features a driver focused new interior that includes innovative new controls along with a new class-leading HVAC system.



- ▶ **Driver controls and instrumentation** are based on the robust industry-standard SAE J1939 electrical architecture. Controls and switches are configured to be easy to find, reach and operate, even when wearing gloves.
- ▶ **Up to 30 customizable factory-installed switches** with custom labels are optimally positioned to use with integrated equipment. User-replaceable switches are available for any application.
- ▶ **Steering wheel controls** add more functions at the driver's fingertips with integrated laser-etched labeling for improved durability and visibility. Plus, all the controls within the cab are designed to be glove-friendly.
- ▶ **The innovative new shifter** is mounted on the steering column, allowing the driver to easily operate shifting and engine braking while keeping their eyes on the road and hands on the wheel.
- ▶ **The powerful, all-new HVAC system** employs advanced heating and cooling technology to deliver outstanding comfort and visibility. During testing at a frigid 0°F, the MAX defrost feature cleared 100% of the windshield in fewer than 30 minutes from start-up.
- ▶ **Cab wiring** includes all-new harnessing and an all-new in-cab power distribution module that's inside the cab and away from the elements.
- ▶ **A new single canister after-treatment system** is up to 60% smaller and 40% lighter than the system it replaces, with improved heat management to help enhance fuel economy and greater ash retention to extend the time between service intervals. The system is also simplified for quicker servicing.
- ▶ **The 3-piece hood** offers reduced repair costs associated with 1-piece hoods, as well as an optional Hood Hatch to access key maintenance points without opening the hood.
- ▶ **Single .5" frame rail** has the strength of a double rail but lighter in weight and without the chance of inter-rail corrosion, a clear advantage in weight sensitive applications.



INTRODUCTION | HV Series HD Specifications



BBC/BA

- ▶ 513 Set Forward: 113" / 29.5"
- ▶ 613 Set Back: 113" / 45.9"

GVW

- ▶ 513 Set Forward: 35,000 - 74,000 lbs.
- ▶ 613 Set Back: 35,000 - 74,000 lbs.

Axle Configurations

- ▶ 513 Set Forward: 4x2, 6x4, 6x6, 8x6
- ▶ 613 Set Back: 4x2, 6x4, 8x6

Wheelbase Options

- ▶ 513 Set Forward: 136" - 311"
- ▶ 613 Set Back: 128" - 311"

Engines

- ▶ International® A26:
 - 365 - 475 HP
 - 1,250 - 1,700 lb.-ft.

Transmissions

- ▶ Eaton® Fuller: 10, 11, 13, 15, 18-speed Manual
- ▶ Eaton® Fuller: Advantage 10-speed Fully Automated Manual
- ▶ Eaton UltraShift PLUS: 10, 11, 13, 18-speed Automated Manual
- ▶ Allison: 3000, 4000 Series (HS*, EVS, RDS) Automatic

Front Axles

- ▶ NON-DRIVING:
 - Meritor: 12,000 - 22,000 lbs.
 - Dana: 12,000 - 22,000 lbs.
- ▶ DRIVING:
 - Fabco: 21,000 lbs.

Rear Axles

- ▶ SINGLE REAR AXLES (4x2):
 - Meritor: 20,000 - 38,000 lbs.
 - Dana Spicer: 23,000 - 31,000 lbs.
- ▶ TANDEM REAR AXLES (6x4):
 - Meritor: 40,000 - 52,000 lbs.
 - Dana Spicer: 46,000 - 50,000 lbs.
- ▶ TRIDEM REAR AXLES (8x6):
 - Meritor: 53,000 lbs.

Frames

- ▶ Heat Treated Alloy Steel 120,000, 125,000 PSI
- ▶ 11.25' x .5" Super Single Rail

Front Suspension

- ▶ Spring Parabolic Taper-leaf: 12,000 - 23,000 lbs.
- ▶ Spring Multi-leaf: 14,000 - 20,000 lbs.

Single Rear Suspension

- ▶ Vari-rate Spring: 23,000 - 31,000 lbs.
- ▶ International Air (IROS): 20,000 lbs.
- ▶ Chalmers:
 - 1000 Series: 23,000 - 30,000 lbs.
- ▶ Hendrickson Air:
 - HAS: 23,000 lbs.
 - PRIMAXX EX: 23,000 lbs.
 - PAX-262: 26,000 lbs.

Tandem Rear Suspension

- ▶ Chalmers:
 - 800 Series: 40,000 - 52,000 lbs.
- ▶ Hendrickson:
 - RT: 40,000 - 52,000 lbs.
 - HAS: 40,000 - 46,000 lbs.
 - HAULMAXX: 40,000 - 50,000 lbs.**
 - PRIMAXX EX: 46,000 lbs.
- ▶ Raydan AirLink: 46,000 lbs.
- ▶ International Air (IROS): 40,000 lbs.*

Tridem Rear Suspension

- ▶ Hendrickson:
 - PRIMAXX: 69,000 lbs.

Exhaust System

- ▶ Single canister after-treatment device Frame Mounted Right Side, Under Cab or Back of Cab, Short Horizontal Tailpipe
- ▶ Single Vertical Tailpipe, Right Side Back of Cab

Fuel Tanks

- ▶ 50 - 200 Gallon Total Capacity Non-Polished and Polished Aluminum, Mounted Right Side, Left Side under Cab

Brakes

- ▶ Air Disc Brakes with Automatic Traction Control and Electronic Stability Control
- ▶ Air Drum Brakes with ABS with Optional Automatic Traction Control and Roll Stability

Electrical System

- ▶ ALTERNATORS
 - Leece-Neville 12 Volt: 160 - 325 amp
 - Delco Remy 12 Volt: 165 - 240 amp
- ▶ BATTERIES
 - JCI 12 Volt: 2100 CCA
 - Fleetright® 12 Volt: 1980 - 3800 CCA

* Application Restriction
** Set-back Axle Mixer Only



INTRODUCTION | A Competitive Set



The HV™ Series was independently tested side-by-side against the Western Star 4700, Freightliner 114SD and the Mack Granite. Although all four models have unique design elements and component availability, every measure was taken to perform an accurate head-to-head comparison of key specifications, components, and features.

Series	International® HV™ Series HD	Western Star 4700	Freightliner 114SD	Mack Granite 64BR
Model	HV 613	4700	114SD	Granite 64BR
BBC	113"	110"	114"	117"
BA	45.9"	29"	48"	51"
Engine	International A26 475 HP	Detroit DD13 470 HP	Detroit DD13 370 HP	Mack MP8 455 HP
Transmission	Allison 4500 RDS	Allison 4500 RDS	Allison 3000 RDS	Mack mDRIVE TMD13AF0-HD
Frame	120,000 PSI	120,000 PSI	120,000 PSI	120,000 PSI
Front Axle	Meritor MFS-18-133A 18K	Meritor MFA-20-133 20K	Detroit DA-F-18.0-5 18K	Mack FLX20 20K
Rear Axle	Meritor MT-40-14DFR 40K	Meritor RT-46-160 46K	Meritor RT-46-160 46K	Mack S62R 46K
Rear Suspension	Hendrickson HAS-402 40K	Hendrickson HAULMAXX 46K	Freightliner AirLiner 46K	Mack mRIDE Leaf 46K
Tire Manufacturer	Continental	Michelin	Michelin	Bridgestone
Front Tires	315/80R22.5	425/65R22.5	315/80R22.5	425/65R22.5
Front tire Tread	HSC1	XZY-3	X Works Z	M854
Rear Tires	295/75R22.5	11R24.5	11R22.5	11R22.5
Rear Tire Tread	HDR2	XDE M/S	XDN2	M710
Base Warranty	1 Year	1 Year	1 Year	1 Year

* Shown with optional sun visor



In many ways, the International® HV™ Series was designed from the inside out based on our DriverFirst™ philosophy. After all, the care, comfort and safety of your drivers is what matters most. To ensure they hit the mark, International engineers used feedback from drivers and body companies during the planning and design process. This collaboration is the reason behind many of the new driver-centric features like controls and switches that can be easily operated while wearing gloves. Or the available pedestal mounted mirrors designed to reduce head-turn movement and increase visibility.

THE HV SERIES STARTS WITH A DURABLE CAB, BUILT FOR THE WORK SITE

- A high-strength, low-alloy (HSLA) reinforced, cold-rolled steel cab delivers superior corrosion resistance as well as world-class fit and finish
- One piece of steel surrounds entire door opening providing superior structural integrity

SMART FEATURES DESIGNED INTO THE NEW HV SERIES CAB:

- An all-new interior offers an improved ergonomic design, including better elbow room, hip room and leg room
- New door, side glass and mirror designs improve lateral visibility and workplace safety
- All-new dash designed for the driver with more space for additional rocker switches
- Easy-access column-mounted stalk shifter integrated with engine braking helps keep hands on the wheel


NEW OPTIONAL PEDESTAL CAB MIRROR

- Reduced wind noise
- Optimized positioning to reduce driver neck strain
- Mirrors have been moved forward to improve driver's field of view
- Improved mirror servcability with fewer mounting bolts, improved glass replacement and a base-mounted wiring connector



CAB DESIGN | Innovative Cab | key numbers

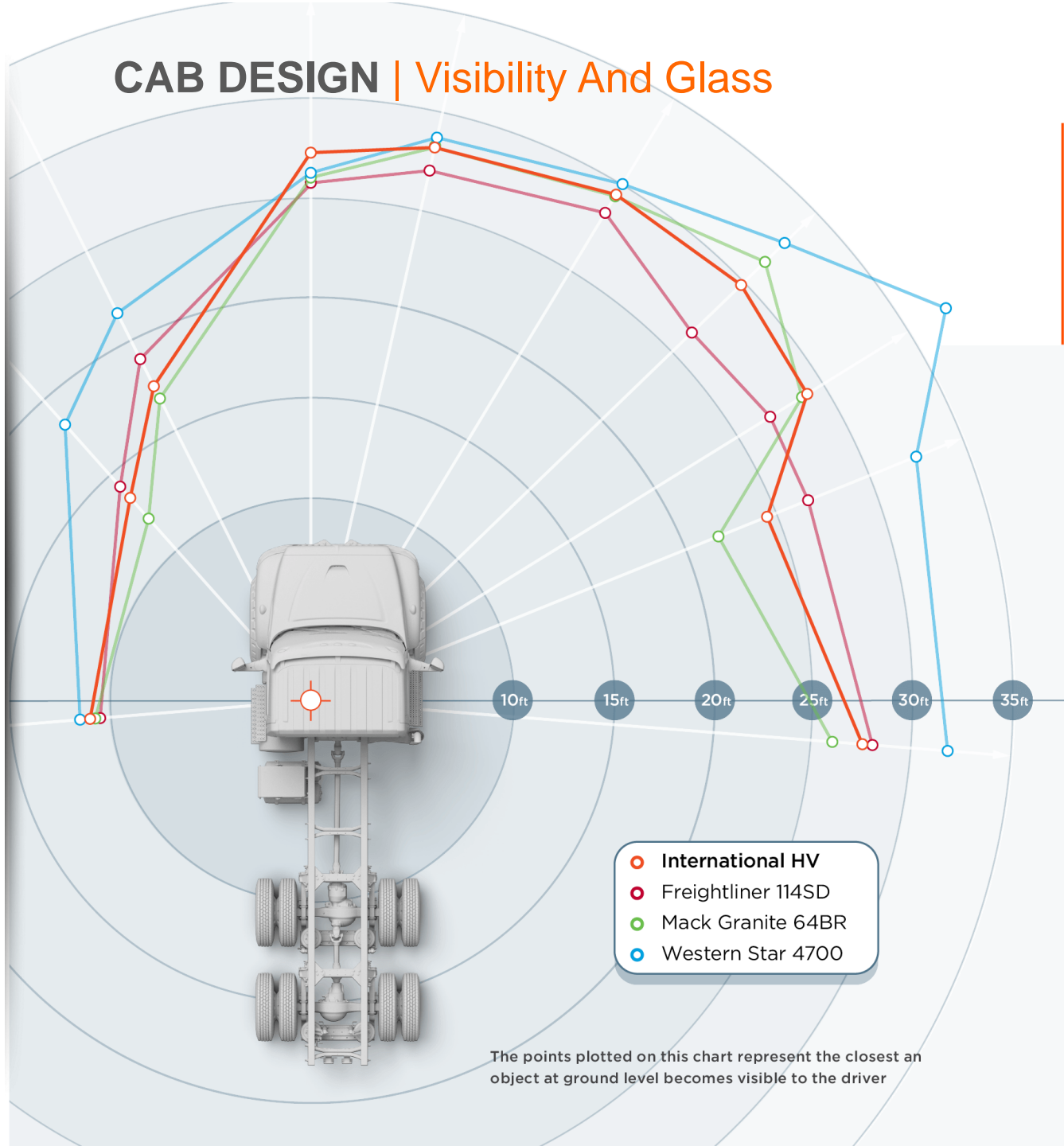


CAB DESIGN innovative cab					
	Series	International® HV™ Series HD	Western Star 4700	Freightliner 114SD	Mack Granite 64BR
BBC	113"	110"	114", 140", 162"	117"	
Windshield Slope	63°	75°	66°	69°	
Cab Construction	Welded High Strength Steel Cab		Welded Steel	Aluminum	Welded Steel
Available Cabs	Day Cab Extended Cab Crew Cab		Day Cab	Day Cab Extended Cab Crew Cab	Day Cab
Door Construction	Steel		Steel	Steel	Steel
Cab Suspension Standard Optional	Air Ride None		Air Ride None	Air Ride None	Air Ride None
Widest Door Opening Angle	65°		54°	66°	81°
Hood Design	3-piece Composite		1-piece Composite	1-piece Composite	3-piece Composite
Hood Tilt Effort	72 lbs.		101 lbs.	63 lbs.	30 lbs.
Hood Operation Dampening	Dampened Open and Closing		Dampened Closing	Dampened Closing	Dampened Opening
Hood Hatch	Available		Available	Available	Available

Key Advantages — The HV Series 3-piece hood offers reduced repair costs associated with 1-piece designs. The HV Series hood requires 72 lbs. of pull force to open compared to Western Star 4700's 101 lbs. The HV's door opens wider than the Western Star 4700 making cab entry and exit safer for the driver. An all new interior offers an improved ergonomic design, including better elbow room, hip room and leg room. The Western Star 4700 and the Mack Granite are not available with extended cabs

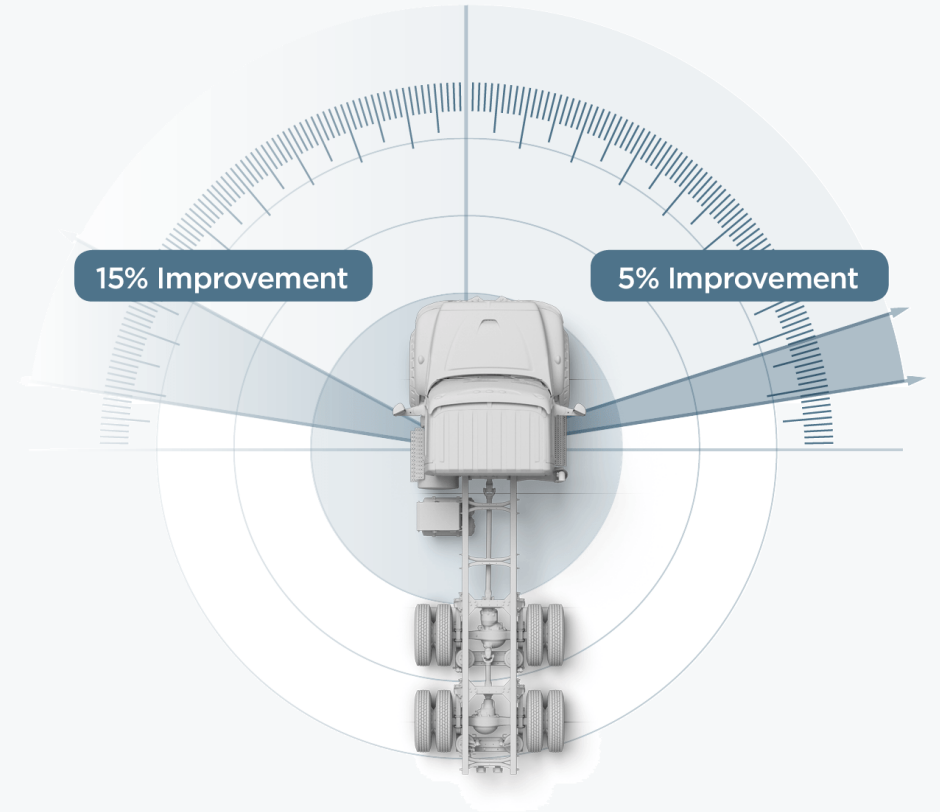


CAB DESIGN | Visibility And Glass



The safety of drivers and occupants is a top priority on every International® truck, and the HV™ Series is no exception. Safety often comes down to seeing potential hazards and successfully avoiding them.

That's why the HV Series has been engineered to provide a clear field of view. The HV Series was designed with a large swept-back windshield, optimized mirror placement and redesigned 1-piece side windows.



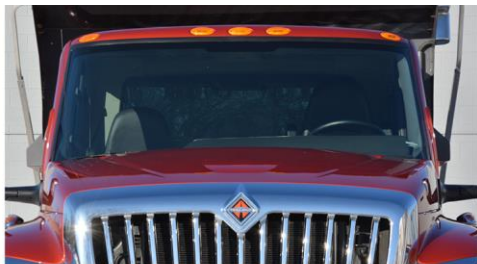
The shaded areas represent how indirect visibility has been optimized by reshaping the doors and side windows, and repositioning the cab mirrors so drivers turn their heads 15% less on the driver side and 5% less on the passenger side. This increased visibility reduces driver stress and neck strain to enhance productivity.



CAB DESIGN | Visibility and Cab Glass | key numbers



CAB DESIGN visibility and cab glass



Series

International® HV™ Series HD

Western Star 4700

Freightliner 114SD

Mack Granite 64BR

Visibility

Driver's Side Rear	132"	135"	130"	129"
Driver's Side Forward	162"	209"	172"	149"
Forward Straight Ahead	324"	321"	313"	317"
Forward Over Center	335"	341"	331"	334"
Forward at Hood Corner	356"	360"	340"	354"
Passenger Side Forward	293"	450"	307"	268"
Passenger Side Rear	333"	392"	337"	307"
Windshield Design	1-piece	2-piece	1-piece	2-piece
Windshield Rake Angle	63°	75°	66°	69°
Windshield Area (sq. in.)	1,909	1,616	2,197	1,790
Wiper Coverage (sq. in.)	1,193	938	1,427	888
Wiper Efficiency (%)	62%	58%	65%	50%
Side Glass (sq. in.)	1,144	1,114	1,144	882
Rear Cab Glass (sq. in.)	749	566	657	842
Total Cab Glass (sq. in.)	3,802	3,374	3,998	3,621

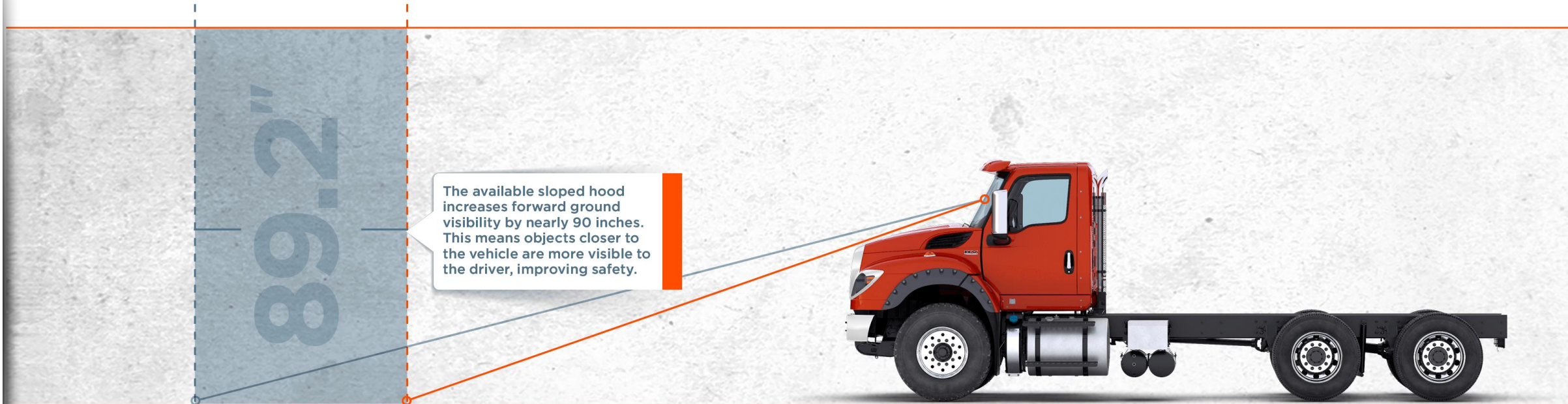
Key Advantages — The HV Series with its wide, panoramic windshield and sloped hood maintains clear visibility advantages across most competitors. The straight ahead visibility on the HV Series is better than the Western Star 4700 at most points. The Enhanced door-mounted mirrors positioned to see more while turning your head less to reduce fatigue. The HV Series also has greater total Glass area than all of the competitors. The HV's windshield area and wiper coverage surpasses the Western Star 4700 and the Mack Granite



CAB DESIGN | Visibility And Glass



Cab Design



The available sloped hood increases forward ground visibility by nearly 90 inches. This means objects closer to the vehicle are more visible to the driver, improving safety.

KEY HV SERIES DESIGN ELEMENTS FOR SUPERIOR VISIBILITY

- Doors and side glass have been optimized with a lower visibility horizon, dropping the driver's line of sight to improve lateral visibility
- Vent window seam has been removed and a larger drop down has been added to reduce blind spots
- Cab mirrors have been redesigned and moved forward to improve visibility. The forward placement also allows drivers to turn their head less, reducing neck strain and improving eyes-on-the-road
- Available hood mirrors have also been repositioned and moved forward to increase driver's field of view



CAB INTERIOR |



A SMARTER APPROACH

The new HV™ Series redefines the standard for uptime and productivity. Redesigned from the inside out, the interior was crafted with driver and body company feedback to ensure the most comfortable and productive environment possible.

The HV™ Series features a roomier interior with a best-in-class new HVAC system to keep both driver and crew focused, comfortable and productive for long hours on the job.

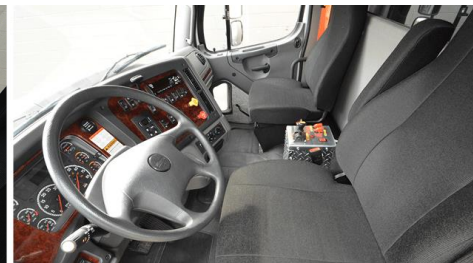
Controls and switches are configured to be easy to find, reach and operate, even when wearing gloves. HV™ Series features an all-new HVAC system designed for reliability including a high-performance MAX defrost feature.



CAB INTERIOR | Cab Size and Dimensions | key numbers



CAB INTERIOR cab size and dimensions



Series	International® HV™ Series HD	Western Star 4700	Freightliner 114SD	Mack Granite 64BR
WIDTH				
A-pillar to A-pillar at Dash	69.25"	72"	70"	68.75"
B-pillar to B-pillar at Dash	72"	72"	72"	66"
Cab Width at Shoulder Level	78"	78.75"	76.75"	74.75"
Cab Width at Hip Level	72.5"	74.5"	71.75"	65.5"
Centerline of Seat to Door at Hips	14.00"	14.5"	14.50"	12.5"
DEPTH				
A-pillar to Back of Cab at Dash	44.5"	43.75"	45"	42.5"
A-pillar to Back of Cab at Roof	36.5"	39.5"	40.75"	39"
Fuel Pedal Centerline to Back of Cab	46.75"	43.25"	45.75"	48"
HEIGHT				
Floor to Roof at Dash Edge	52"	53.75"	51.75"	51.5"
Floor to Roof at Seat Edge	56.5"	57.25"	56.25"	57.5"
Floor to Roof at B-pillar	56.75"	56.75"	50.5"	58"
Total Volume (cu. ft.)*	93.75	94.25	91.75	93.50
DOOR OPENING				
Width	35.5"	34"	33.25"	31"
Height	52"	51"	52.50"	50.5"

*Volume is calculated from the above as well as additional data not included in this table

Key Advantages — The HV Series total cab volume surpasses the Freightliner 114SD. The HV Series also has more hip and shoulder room than the Freightliner 114SD and the Mack Granite, which makes the cab more spacious for drivers wearing bulky work clothes. HV Series Cab depth exceeds the Western Star 4700 and the Freightliner 114SD. The HV Series large 35.5" door opening is greater than all the competitors, providing safe and easy cab entry and exit for the driver.



INTERIOR | Driver Environment



A comfortable crew is a productive crew. That's why International engineers worked closely with drivers and body companies in crafting the interior of the HV™ Series. Clay mock-ups were reviewed and revisions were made until all parties were satisfied. The final result is a true collaboration of those who know best when it comes to being successful in the field.



- Controls and switches are configured to be easy to find, reach and operate, even when wearing gloves.
- New interior offers an improved ergonomic design, including better elbow room, hip room and leg room.
- The HV™ Series dash has an available premium gauge cluster designed with driver input that is customizable with virtual gauges.
- Easy-access column-mounted shifter integrated with engine braking helps keep hands on the wheel.
- A new, large flat surface area on the passenger dash-top allows items to rest while parked or serve as a convenient flat writing surface.
- An available flat instrument panel includes a center-mounted vent to keep the middle passenger cool while providing space for extra legroom or a large floor-mounted body control module.



INDUSTRY-LEADING HVAC SYSTEM

Completely redesigned HVAC system employs advanced automotive heating and cooling technology for outstanding performance and vastly improved reliability.

- Tests have shown new brushless motor lasts 3-times longer than system used in WorkStar® trucks
- Incorporates best-in-class MAX Defrost performance for unsurpassed windshield clearing time - clears 100% of the windshield in less than 30 minutes



ONE OF THE QUIETEST CABS ON THE ROAD

Wind noise simulation was used extensively during development to guide design and achieve noise reduction objectives

Optimized design attributes include:

- Improved door sealing and floor insulation
- Pedestal mirrors, hood shape and hood-to-door geometry reduces wind noise
- Door redesign removed vent window seam



CAB INTERIOR | Driver Environment | key numbers



CAB INTERIOR driver environment



Series	International® HV™ Series HD		Western Star 4700		Freightliner 114SD		Mack Granite 64BR	
Seat Travel	7"		8.5"		7"		7.5"	
Horizontal	5.5"		5.25"		4.5"		5.5"	
Vertical								
Belly Room	18.25"		19.75"		20.25"		16.75"	
Leg Room	30.5"		29"		26.5"		28"	
Steering Column Tilt Range	23°		29°		26°		24°	
Head Room								
Minimum	35.75"		34.75"		30.75"		37.5"	
Maximum	41.25"		40"		35.25"		43"	
Sound Levels (db)*	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior
Idle	68.6	84.8	59.9	81.2	60.3	80.1	59	82.6
750 RPM	69.7	86.2	62.4	87.3	65.7	83.7	59.4	81.8
1500 RPM	70.2	90.1	68.2	93.4	71.6	91	65.5	90.8
Governed	75.8	96.6	70.2	94.1	74.9	96.8	69.9	95.5

* Average of high and low readings recorded over a 10-second duration.

Key Advantages — Steering column adjustability is critical in ensuring a driver a relaxed, comfortable seating position. The HV Series leg room surpasses all the competitors, offering more leg comfort for drivers. Maximum Headroom on the HV Series is better than the Western Star 4700, and surpasses the Freightliner 114SD by 6". A redesigned HVAC system provides outstanding performance and reliability. The HV Series offers more belly room than the Mack Granite.



INTERIOR | DriverFirst™ in Every Detail



DRIVERFIRST – DESIGNED FOR THOSE BEHIND THE WHEEL

Uptime doesn't just mean fully-operational. It means giving your drivers the tools they need to be more productive. The gauges, for example, received numerous tests and refinements to optimize their readability, usability and positioning—even the colors were changed to ensure that key information and alerts are precisely where they need to be and can be seen without confusion or distraction. This allows drivers to intuitively select the information they prefer in a variety of situations. The color, illumination, legibility and even the type font and size of gauges is designed to deliver optimal viewing in varying light conditions, maximizing alertness and minimizing eye fatigue.



The available premium gauge cluster provides a wealth of information for the driver, including:

- Real-time fuel economy
- Axle load*
- Custom gauge settings*
- Safety indicators*
- Digital speedometer



The innovative new stalk shifter is mounted on the steering column, allowing you to easily reach and smoothly operate shifting and engine braking while keeping your eyes on the road and your hands on the wheel.

* When added with optional feature code for required sensors.





CHASSIS |



Chassis



For those vocations where uptime is of utmost importance, The HV™ Series is the go-to solution. Every HV™ Series starts with a Huck® Bolted 120,000 or 125,000 psi frame and crossmember system to deliver maximum vocational durability as well as a number of frame rail options. Plus, air tank installations can be mounted between the frame rails, freeing up space for other equipment. The HV Series also offers integral front frame extensions for superior strength and reliability.

STANDARD HUCK® BOLT FRAME FASTENERS

- Highly resistant to vibration
- Huck® Bolt fasteners provide superior clamping force over time and do not require re-torquing

1/2" SINGLE RAIL 125,000 PSI FRAME

- Optional with a single 1/2" frame rail which has the strength of a double rail but lighter in weight and without the chance of inter-rail corrosion
- A clear advantage in weight sensitive applications

UPFITTING THE CHASSIS

- The HV™ Series is also available with a clean Cab-to-Axle (CA) configuration to minimize costly post-production modifications.
- Customized frame ladder and component locations to meet body packaging requirements
- Major frame components can be attached with a combination of fasteners offering body upfitters the flexibility to easily make changes to the chassis required for their application

INTERNATIONAL TRUCK SPECIALTY CENTERS

- Modifications covered under manufacturer's warranty
- Process supervised by International engineers to ensure factory production-level quality
- Expertise to identify and resolve problems quickly



SINGLE CANISTER AFTER-TREATMENT DEVICE

- Single canister system is up to 80 lbs. lighter than the system it replaces
- Single canister system is 60% smaller than the previous system
- Superior heat management to help improve fuel efficiency
- Greater ash retention for longer service intervals



CHASSIS | Chassis and Frame Equipment | key numbers



CHASSIS chassis and frame equipment



Series	International® HV™ Series HD	Western Star 4700	Freightliner 114SD	Mack Granite 64BR
Frame Ratings Yield (PSI) SM (in3) RBM (in.-lbs.)	120,000, 125,000 16.98 – 26.83 1,701,600 – 3,350,000	120,000 12.33 – 26.6 1,479,600 – 3,204,000	120,000 15.07 – 26.3 1,808,400 – 3,204,000	120,000 17.7 – 26.3 2,120,000 – 3,160,000
Available Reinforcements Full Partial Reinforcement RBM (in.-lbs)	.312" Outer C-Channel Mixer Transition Plate 3,580,800	.25" Inner C-Channel Not Available 3,217,200 – 4,409,800	.25", .344" Inner C-Channel Partial Inner at Front Suspension 3,217,200 – 4,337,400	.20", .32" Outer C-Channel Partial Inner Stops at Quarter Fender 3,230,000 – 5,688,000
Front of Frame Extensions Integral Bolt-on	20", 27" 20"	12", 24" Not Available	12", 24" Not Available	20" 6", 27"
Clean CA Option	Available	Available	Available	Available
Towing/Recovery Front Rear	Loops, Shackle, Pin, Hooks Loops, Hooks	Pin, Hooks Pintle Hitch, Hooks	Pin, Hooks Pintle Hitch, Hooks	Hooks, Loops, Pins Hooks
Fuel Tanks Type Total Capacity Depth of Cross Section	D-Style / Cylindrical Aluminum: 50 – 200 Gallons D-Style: 16", 19" Cylindrical: 26"	Rectangular / Cylindrical Aluminum: 50 – 250 Gallons Rectangular: 18.5" Cylindrical: 23", 25"	Rectangular / Cylindrical Aluminum: 28 – 300 Gallons Rectangular: 18.7", 22.6" Cylindrical: 23", 25"	D-Style / Cylindrical Steel / Aluminum: 50 – 232 Gallons D-Style: 22", 26" Cylindrical: 22"
Exhaust ATD Configurations Mounting Location	Horizontal / Vertical RH Under Cab / RH Back of Cab	Horizontal RH Under Cab / RH Back of Cab	Horizontal / Vertical RH Under Cab / LH / RH Back of Cab	Horizontal / Vertical RH Under Cab / LH / RH Back of Cab
Exhaust Stack Configurations	Vertical: Single Horizontal: Single	Vertical: Single Horizontal: Single	Vertical: Single Horizontal: Single	Vertical: Single / Dual Horizontal: Single
DEF Tank Sizes	9.5 Gallons	6, 13 Gallons	6, 13, 23 Gallon	6.6, 8.7, 11.8 Gallon

Key Advantages — New single canister ATD system is up to 80 lbs. lighter and 60% smaller than other systems, reducing weight and providing additional room on the chassis for accessories. HV Series offers a clean CA configuration as well as a 125,000 PSI single frame rail not offered on any competitor, it has the strength of a double rail but lighter for weight sensitive applications. Major frame components can be attached with a combination of fasteners offering body upfitters the flexibility to easily make changes to the chassis required for their application.



CHASSIS | Axles and Maneuverability

SAFETY FIRST, LAST AND ALWAYS

With an inside wheel cut of up to 50 degrees, the HV™ Series can easily navigate tight city streets or construction sites, saving driver time, reducing work-site collisions and boosting productivity.

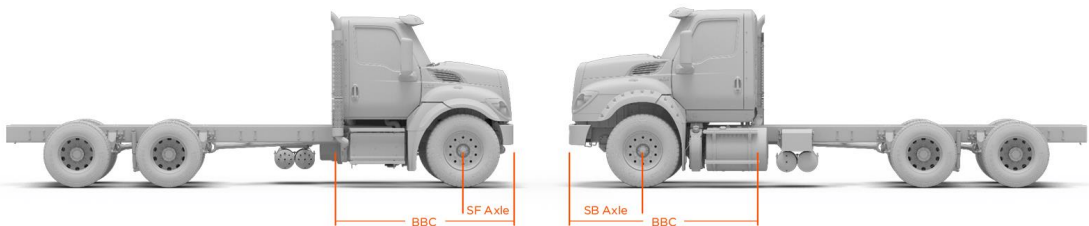
- The HV™ Series offers a wide range of axles and suspensions to fulfill the needs of applications ranging from delivery vans to heavy duty dump applications
- Optimized steering geometry allows both wheels to produce nearly identical wheel turn angles for superior performance regardless of the turning direction

SUPERIOR RIDE AND HANDLING

- The HV Series has been designed and engineered to provide the industry's best ride and handling with less wander and an automotive-like on-center feel

WIDE-TRACK FRONT AXLES

- Wide-track front axles are designed to provide improved turn angles and improved maneuverability
- Available Fabco front drive axles of 21,000 lbs., for even more capabilities
- New 20,000 lb. off-set bowl front drive axle allows for a lower ride height than a traditional center bowl.



Configuration	Model	Axles
Set-Forward Axle	HV513	4X2
		6X4
		6X6
		8X6

Configuration	Model	Axles
Set-Back Axle	HV613	4X2
		6X4
		8X6





CHASSIS | Axles and Maneuverability | key numbers



CHASSIS axles and maneuverability



Series	International® HV™ Series HD		Western Star 4700		Freightliner 114SD		Mack Granite 64BR	
Axle Configurations Set-Forward Set-Back	29.5" 45.9"		29.2" 46.7"		30" 48"		29" 51"	
Front Axles Non-Driving Driving	Dana Spicer, Meritor 12,000 – 22,000 lbs.* Fabco (HV513 Only) 21,000 lbs.		Meritor, Detroit 12,000 – 29,400 lbs.* Meritor (Set Back Only) 16,000 lbs.		Meritor, Detroit 10,000 – 40,000 lbs.* Marmon – Harrington (Set Back Only) 23,000 lbs.		Mack 12,000 – 23,000 lbs. Marmon – Harrington (Set Back Only) 23,000 lbs.	
Front Suspension Spring Type Capacities	Taper-leaf / Multi-leaf 12,000 – 23,000 lbs.		Taper-leaf / Flat-leaf 12,000 – 29,200 lbs.*		Taper-leaf / Flat-leaf 12,000 – 23,000 lbs.		Taper-leaf / Multi-leaf 12,000 – 23,000 lbs.	
Inside Wheel Cut	LH 40°	RH 40°	LH 34°	RH 35°	LH 50°	RH 37°	LH 35°	RH 32°
Calculated Turning Radius (236" WB, LH)	36.1'		41.3'		30.5'		40.2'	
Rear Axles Single Tandem Tridem	Dana Spicer, Meritor 20,000 – 38,000 lbs. 40,000 – 52,000 lbs. 53,000 lbs.		Dana Spicer, Meritor, Detroit 21,000 – 30,000 lbs. 40,000 – 52,000 lbs. 69,000 lbs.		Dana Spicer, Meritor, Detroit 21,000 – 38,000 lbs. 40,000 – 58,000 lbs. 69,000 lbs.		Dana Spicer, Meritor, Mack 23,000 – 30,000 lbs. 38,000 – 65,000 lbs. 45,000 – 69,000 lbs.	
Rear Suspensions Single: Spring Air	International®: Vari-rate Spring International: Ride Optimized Air (IROS) Chalmers: 1023, 1030 Hendrickson: HAS Air		Freightliner: Flat-leaf, Reyco: 79 KB Freightliner: AirLiner Chalmers: 1023, 1030, 1040 Hendrickson: PRIMAXX EX		Freightliner: Flat-leaf Freightliner: AirLiner Chalmers: 1030, 1040 Hendrickson: PRIMAXX EX, FIREMAXX EX		Mack: Multi-leaf	
Tandem: Spring Walking Beam Air	International: 4-Spring Multi-leaf Hendrickson: RT, HAULMAXX Chalmers: 854, 860, 872 International: Ride Optimized Air (IROS) Hendrickson: HAS, PRIMAXX EX Raydan: AirLink		Freightliner: TufTrac Hendrickson: RT, RTE, RS, HN, HAULMAXX Chalmers: 854, 860, 872 Freightliner: AirLiner Hendrickson: PRIMAXX EX		Freightliner: TufTrac Hendrickson: RT, RTE, RS, HN, HAULMAXX Chalmers: 854, 860 Freightliner: AirLiner Hendrickson: PRIMAXX EX, FIREMAXX EX		Mack: Camelback, Multi-leaf Mack: Walking Beam Hendrickson: HAULMAXX, HM, RS Chalmers: 854, 860 Mack: AL-402	
Tridem: Air Capacities	Hendrickson: PAX-690 69,000 lbs.		Freightliner: AirLiner 21,000 – 69,000 lbs.		Freightliner: AirLiner 21,000 – 69,000 lbs.		Hendrickson: PAX-690 23,000 – 69,000 lbs.	

*Twin Steer

Key Advantages — The HV Series provides inside wheel turn angles at 40 degrees or over for both wheels which with a 236" wheelbase produces a turning radius of just over 36' beating the Western Star 4700 and the Mack Granite (the Freightliner 114SD had some interference issues with the wheels and chassis). HV Series has a new 20,000 lb. off-set bowl front drive axle allows for a lower ride height than a traditional center bowl

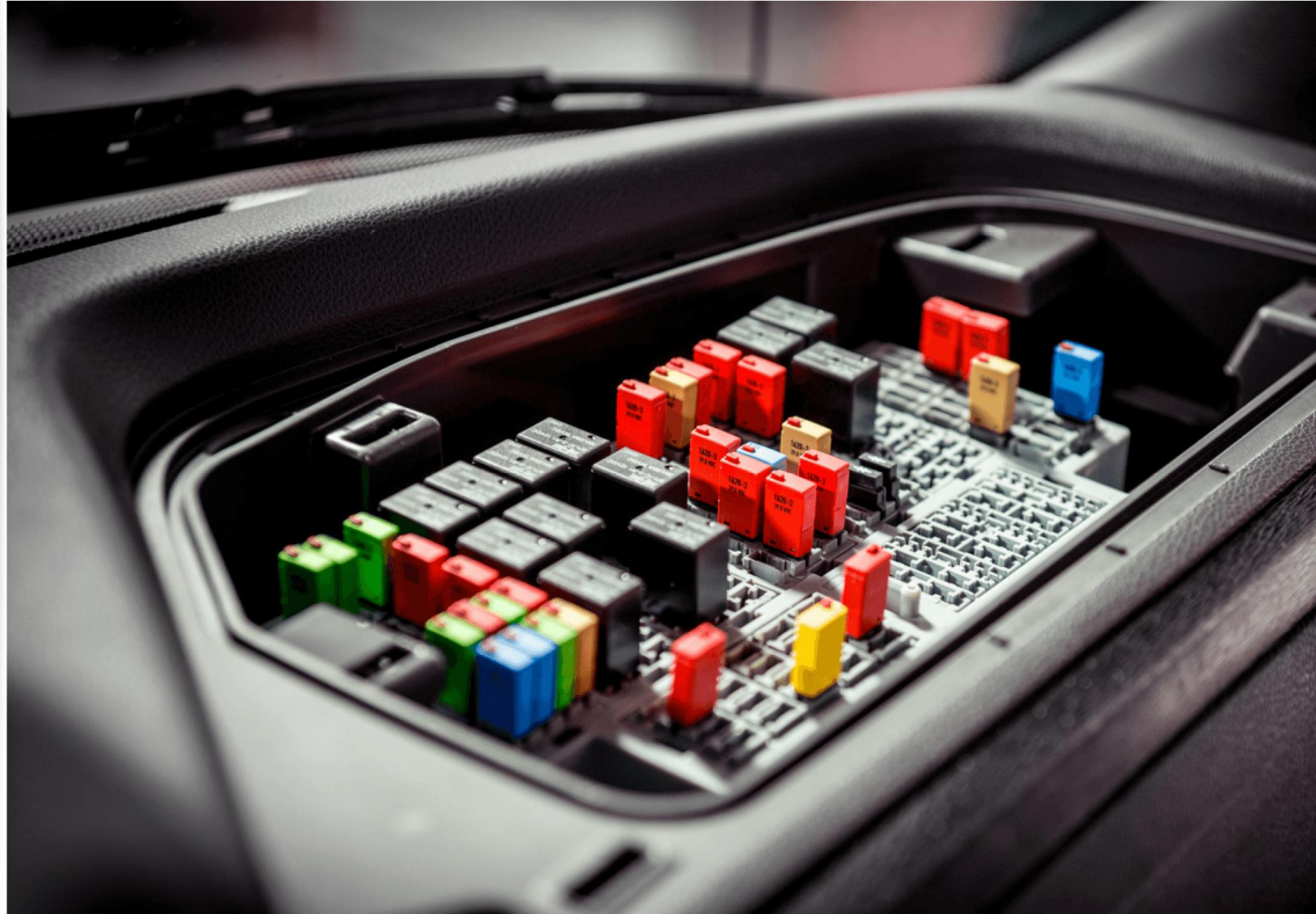


CHASSIS | Electrical and Upfit



FIT TO BE UPFITTED

The HV™ Series electrical system features all-new harnessing and a new power distribution module that's located inside the cab and away from the elements for outstanding reliability. Industry standard J1939 system architecture also ensures routine maintenance will remain predictable and diagnostics will be efficient.



NEW ELECTRICAL SYSTEM

- The HV Series electrical system features all-new harnessing
- A new power distribution module that's located inside the cab and away from the elements for outstanding reliability
- Available logic such as headlights on with wipers

FACTORY INSTALLED UPFITTER SWITCHES

- Up to 30 fully customizable, user-replaceable switches are available for any application
- Warning lights can be any of seven colors
- Common switch pack for wiring simplicity
- Any switch can be relocated by the customer without wiring changes

NEW, REDESIGNED ELECTRICAL PANEL

- The HV Series electrical panel is located inside the cab, under the passenger side dash and is easily accessed without tools.
- The electrical panel housing features a specially designed recessed perimeter which protects the electrical network by routing spills away from the circuit panel.

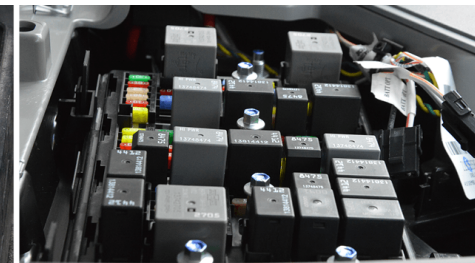




CHASSIS | Electrical and Lighting | key numbers



CHASSIS electrical and lighting



Series	International® HV™ Series HD	Western Star 4700	Freightliner 114SD	Mack Granite 64BR
Panel Locations Access	In cab, Passenger Side Dash-top No Tools Required	In cab, Passenger Side Dash Tools Required	Under hood, Driver Side No Tools Required	In cab, Top of Dash Tools Required
Batteries Amperage	3 or 4 Batteries 1,980 – 3,800 CCA	3 or 4 Batteries 2,190 – 4,400 CCA	2, 3 or 4 Batteries 2,100 – 4,400 CCA	3 Batteries 1,900 – 3,000 CCA
Battery Box Material Cover	Steel, Aluminum, Plastic, Aluminum (Polished/Unpolished), Fiberglass, Stainless Steel	Steel Plastic, Aluminum	Steel, Plastic Plastic, Aluminum (Polished/Unpolished), Diamond Plate (Polished/Unpolished)	Steel Aluminum
Battery Box Location	LH / RH Under Cab, LH / RH Back of Cab, Inside Cab	LH / RH Under Cab, LH Back of Cab, Inside Cab	LH / RH Under Cab, LH / RH Back of Cab, Between Rails Back of Cab, Inside of Cab	LH / RH Back of Cab, LH Stacked, 42" Back of Cab
Alternators Amperage	Delco-Remy, Leece-Neville 160 – 325 amp	Delco-Remy 160 – 300 amp	Delco-Remy, Leece-Neville 160 – 300 amp	Delco-Remy, Leece-Neville 130 – 240 amp
Jump Start Provision	Inside Battery Box, Remote Outside Battery Box	Frame Mounted Next to Starter	Frame Mounted Next to Starter, LH Back of Cab	Outside Battery Box
Circuit Protection Standard Optional	Solid-State and Fuses Manual Reset Circuit Breakers	Solid-State and Fuses Automatic Reset Circuit Breakers	Solid-State and Fuses Not Available	Solid-State and Fuses Not Available
Upfitter Auxiliary Switches	Up to 30 Switches	Up to 10 Switches	Up to 10 Switches	Up to 10 Switches
Body Builder Wiring Access	Back of Cab, End of Frame	Back of Cab, End of Frame	Back of Cab, End of Frame	Back of Cab, End of Frame

Key Advantages — The HV Series is designed with an easily accessible circuit panel accessed without tools and protected from the weather inside the cab. HV Series offers optional circuit breakers not available on the 114SD or the Granite. HV Series offers up to 30 Factory-installed switches with custom labels that are optimally positioned to use with integrated equipment, making upfitting simple and quick. A new power distribution module that's located inside the cab and away from the elements for outstanding reliability.

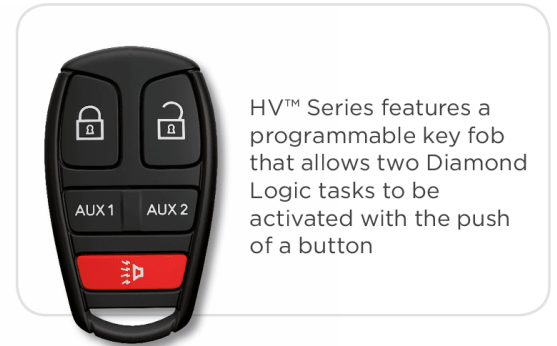


ADVANCING THE SCIENCE OF PRODUCTIVITY.

The HV Series includes the latest International® Truck Diamond Logic® electrical system, widely considered the most advanced in the industry. Diamond Logic® streamlines chassis and body equipment integration and allows you or your driver to program automated tasks. This means more consistent performance and increased equipment protection and crew safety. It's easy to spec, simplifies integration, and includes on-board diagnostics that self-monitor all vehicle components to reduce downtime. You even have the ability to write custom logic for your application through Diamond Logic® Builder.

SAFETY AND PRECISION SYSTEMS FOR ANY APPLICATION

Whether you're looking for an efficient, cost-effective solution for your municipality, a Truck Equipment Manufacturer (TEM) looking for a rock solid foundation to build on, or a construction company wanting the toughest in the business, the HV Series combined with the Diamond Logic System will get the job done with safety and precision others simply can't match.



HV™ Series features a programmable key fob that allows two Diamond Logic tasks to be activated with the push of a button



- 1 Body Controller**
 - ▶ New microprocessor is 6 times faster
 - ▶ 30 more input and output pins
 - ▶ Three more J1939 data links for a total of five
 - ▶ Internal clock for programming timed features like auto-start
- 2 Switch Packs**
 - ▶ All switches are controlled via 6 wires
 - ▶ Blinking backlights provide equipment status
 - ▶ Switches can be moved without moving wiring
 - ▶ Up to seven colors of lights can be used
- 3 PTO Power Take Off**
 - ▶ Engagement and disengagement based on chassis and body conditions (engine speed, road speed, outrigger deployed before boom can raise, park brake set, transmission in neutral, etc.)
 - ▶ All data links can be used as an interlock
 - ▶ Engine speed can be controlled (in most cases) while using the PTO with no additional wiring needed
- 4 Remote Power Modules**
 - ▶ All 12-volt outputs are automatically fused (auto resettable) with solid state technology
- 5 Outriggers**
 - ▶ Diamond Logic can control deployment and sense when they are not properly stowed (preventing transmission from shifting out of neutral). In this case an indicator light will illuminate in the switch packs
- 6 Diff-lock**
 - ▶ Diamond Logic can control when the axle differential locks and unlocks depending on road speed, protecting the driveline from damage due to excessive speeds in a locked position
- 7 Work Light**
 - ▶ Diamond Logic can automatically turn on or off the light based on chassis functions (for example: rear-facing light could be programed to turn on any time the transmission is in reverse, adding additional lighting)
 - ▶ Automatically shut off the light based on a timer (1-min to several hours) preventing dead batteries
- 8 Boom Hydraulics**
 - ▶ Diamond Logic can prevent the transmission from shifting into drive and can illuminate an indicator light until the boom is stowed correctly
- 9 Pre-Trip Light Inspections**
 - ▶ Driver can press a button and all the exterior lights will blink in sequence, allowing daily DOT light inspection with just one person
- 10 Solenoid Air Packs**
 - ▶ Air can be turned on with a switch in the dash or controlled based on chassis and/or body functions (for example: tailgate air lock in dump applications can be programmed to not unlock unless the truck is driving below a certain speed)



DESIGNED FOR UPTIME, ENGINEERED FOR EFFICIENCY.

Designed exclusively for International® Trucks, the big bore A26 is engineered with proven components that deliver optimal uptime and fuel efficiency in a lightweight design. The A26 produces up to 475 HP and 1750 lb.-ft. of torque, yet is 600-700 lbs. lighter than traditional big-bore engines. It features North America's first Class 7-8 Compacted Graphite Iron (CGI) crankcase design for greater strength, plus an all-new cylinder head and other refinements for up to a 5% fuel economy improvement over the engine it replaces. Engine braking power is increased by up to 67% for confident braking performance, particularly at low to mid RPM's and at higher altitudes.

KEY FEATURES

UPTIME

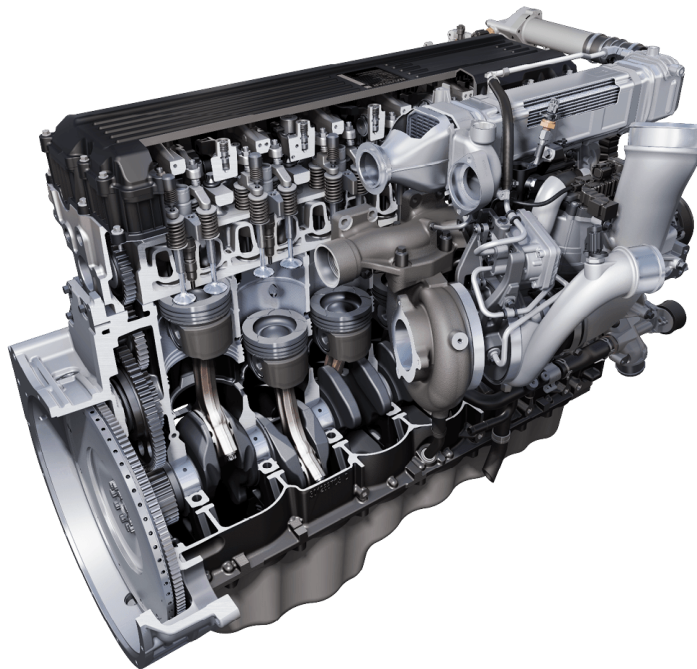
- Larger piston pin, connecting rod and bushing deliver optimal load distribution for greater durability
- Assembled camshaft features tool grade steel lobes for unsurpassed durability
- Foamed wiring harnesses provide ease of service and chafe protection

FUEL EFFICIENCY

- Variable Geometry Turbocharger efficiently delivers boost air pressure across a wide range of engine speeds, loads and altitudes
- 2500 bar High Pressure Common Rail (HPCR) fuel system produces maximum fuel injection pressure to reduce emissions and fuel consumption
- Lower engine speeds with down speed ratings reduce friction and parasitic losses
- Class-leading lightweight design includes compacted graphite iron crankcase, shot peened aluminum flywheel housing, composite valve covers, and a hollow camshaft to reduce weight while maximizing payload capacity

DRIVER APPEAL

- Variable Geometry Turbocharger boosts engine braking power by up to 67% for excellent braking performance, particularly at low to mid RPM's and at higher altitudes
- High-flow hand primer pump is relocated to allow quick and easy access
- Sculpted crankcase and oil pan reduce noise
- HPCR fuel system delivers multiple injection events for smooth and extremely quiet operation



International® A26 Ratings for HV™ Series

Horsepower [BHP @ RPM]	365 - 475 @ 1700
Torque [LB-FT @ RPM]	1250 - 1750 @ 1000
Gov. Speed [RPM]	1800

INDUSTRY-BEST B10 DESIGN LIFE.

The A26 is the first engine in the industry to meet rigorous B10 design life standards for an unsurpassed 1,200,000 miles.

The B10 designation requires that 90% of engines meet a mileage standard – typically 1,000,000 miles -- before the cylinder head or oil pan is removed for a major repair. Most competitors use B50 standards that require only 50% of engines go 1,000,000 miles before a major repair.

Only the A26 meets the B10 standard for 1,200,000 miles. If your trucks are averaging 100,000 miles each year, that's the equivalent of running 2 more years before your first major overhaul – real savings that impact your business.



ACHIEVING B10 DESIGN LIFE STANDARDS.

The B10 designation is the mileage at which 10% of engines are expected to require a rebuild. Most competitors use a B50 designation where 50% of their engines are expected to require a rebuild, at 1,000,000 miles.

International B10 standards require 90% of all engines to endure 1.2 million miles before a rebuild is required.

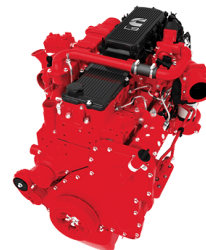
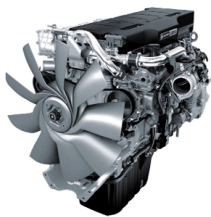




POWERTRAIN | Engine Specifications | key numbers



POWERTRAIN engine specifications



Manufacturer	International	Detroit		Cummins		Cummins/Westport	Mack	
Truck Model	HV Series	4700/114SD	114SD	4700	114SD	114SD	Granite 64BR	
Engine	A26	DD13	DD8	L9		L9N	MP7	MP8
Displacement	12.4L	12.8L	7.7L	8.9L		8.9L	10.8L	12.8L
Engine Block	Compacted Graphite Iron	Ribbed Cast Iron	Ribbed Cast Iron	Gray Iron		Gray Iron	Gray Iron	
Fuel System	Direct Injection 2500 bar HPCR	Amplified Common Rail	Advanced Common Rail	XPI Common Rail		N/A	Advanced Common Rail	
Cam	SOHC	DOHC	DOHC	SOHC		SOHC	SOHC	
Turbocharger	Variable Geometry	Asymmetric	Fixed Geometry Single/Dual-Stage	Variable Geometry (VGT)		Wastegate Actuated	Variable Geometry (VGT)	
Horsepower	365 - 475	350 - 505	260 - 375*	260-380	260-450*	250-320	325-425	415-505
Torque	1350 - 1700	1250 - 1850	660 - 1050	720 - 1250	720 - 1250	730-1000	1225-1560	1460-1860
Dry Weight	2,299 lbs.	2,487 lbs.	1,437 lbs.	1,695 lbs.		1,625 lbs.	2,207 lbs.	2,597 lbs.
Life (B50/B10)	1,200,000 (B10)	1,000,000 (B50)	400,000 (B10)	Unknown		Unknown	1,000,000 (B50)	
Warranty	2 Years, Unlimited Miles	2 Years, Unlimited Miles	3 Years, 250,000 Miles	2 Years, Unlimited Miles		2 Years, 250,000 Miles	2 Years, 250,000 Miles	

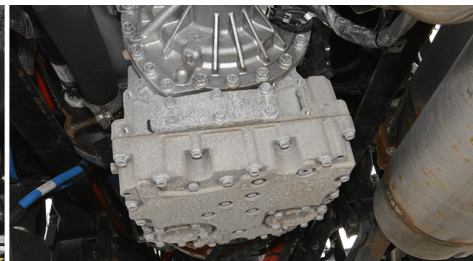
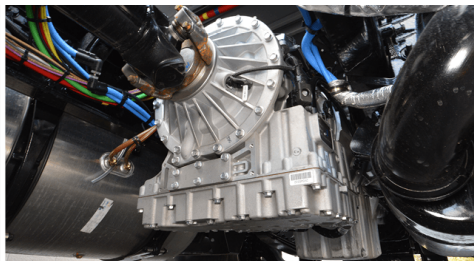
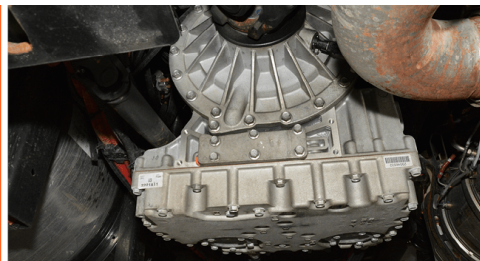
* 375 - 450 ratings limited to fire/emergency applications



POWERTRAIN | Transmissions and Equipment | key numbers



POWERTRAIN transmissions and equipment



Series	International® HV™ Series HD	Western Star 4700	Freightliner 114SD	Mack Granite 64BR
Manual Transmissions	Eaton Fuller®: 10, 11, 13, 15, 18-speed	Eaton Fuller®: 10, 11, 13, 15, 18-speed	Eaton Fuller®: 10, 11, 13, 15, 18-speed	Eaton Fuller®: 9, 10, 11, 13, 15, 18-speed Mack MAXITORQUE®: 9, 10, 13, 18-speed
Automated Transmissions	Eaton Fuller Advantage™: 10-speed Eaton Fuller UltraShiftPLUS®: 10, 11, 13, 18-speed	Eaton Fuller Advantage™: 10-speed Eaton Fuller UltraSiftPLUS®: 8, 9, 13, 18-speed (VCS, VMS, MHP, MXP, VXP)	Eaton Fuller Advantage™: 10-speed Eaton Fuller UltraSiftPLUS®: 8, 9, 13, 18-speed (VCS, VMS, MHP, MXP, VXP)	Mack mDRIVE HD: 12, 13, 14-speed
Automatic Transmissions	Allison: 3000, 4000 Series (HS, EVS, RDS)	Allison: 3000, 4000 Series (EVS, RDS)	Allison: 3000, 4000 Series (EVS, RDS)	Allison: 3000, 4000 Series (EVS, RDS)
Shifter Options Type Location Functionality	Multi-function Steering Column Transmission Mode, Gearing and available Engine Brake Engagement	Push Button / Shift Lever Dash Mounted / Dash Mounted Transmission Actuating	Push Button / T-Handle Dash Mounted / Dash Mounted Transmission Actuating	Push Button Dash Mounted Transmission Actuating
PTO Size and Location	Eaton Fuller®: FR / FRO / RTO / RTLO Manual: 6, 8-Bolt, LH / RH Side / Rear / LH Bottom Mount Advantage™: 6, 8-Bolt, LH Bottom / RH Side / Rear Mount UltraShiftPLUS™: 6, 8 Bolt, RH Side / Bottom / RH Rear Mount* Allison: 3000 / 4000: 6-Bolt, LH / RH Side / Top Mount	Eaton Fuller®: FO / FR / FRW / FRO / RT / RTO / RTLO Manual: 6, 8-Bolt, LH / RH Side / Rear / LH Bottom Mount Advantage™: 6, 8-Bolt, LH Bottom / RH Side / Rear Mount UltraShiftPLUS™: 6, 8 Bolt, RH Side / Bottom / RH Rear Mount* Allison: 3000 / 4000: 6-Bolt, LH / RH Side / Top Mount	Eaton Fuller®: FR / FRM / FRO / RT / RTO / RTLO Manual: 6, 8-Bolt, LH / RH Side / Rear / LH Bottom Mount Advantage™: 6, 8-Bolt, LH Bottom / RH Side / Rear Mount UltraShiftPLUS™: 6, 8 Bolt, RH Side / Bottom / RH Rear Mount* Allison: 3000 / 4000: 6-Bolt, LH / RH Side / Top Mount	Eaton Fuller®: FRO / RT / RTO / RTLO Manual: 6, 8-Bolt, LH / RH Side / Rear / LH Bottom Mount Mack: MAXITORQUE: 6, 8-Bolt, LH / RH Side mDRIVE HD: 4-Bolt Rear Mount Allison: 3000 / 4000: 6-Bolt, LH / RH Side / Top Mount
* 10 and 11-speeds only				
Clutches	Eaton Fuller: Solo Advantage®, Easy-Pedal Advantage®, UltraShiftPLUS ECA-1850	Eaton Fuller: Advantage, Solo Advantage®, UltraShiftPLUS ECA-1850	Eaton Fuller: Solo Advantage®, UltraShiftPLUS ECA-1850	Eaton Fuller: Solo Advantage®, Easy-Pedal, Manual Meritor / Sachs: Twin Extended

Key Advantages — The HV Series innovative shifter is mounted on the steering column, allowing you to easily reach and smoothly operate shifting and engine braking while keeping your eyes on the road and your hands on the wheel. HV Series offers both manual and Automated Eaton Advantage transmissions, the manual version is not available on the competitors.



Routine maintenance needs to be simple in order for it to remain part of the routine. The HV™ Series has been designed with a number of features intended to streamline daily pre-trip inspections and maintenance.

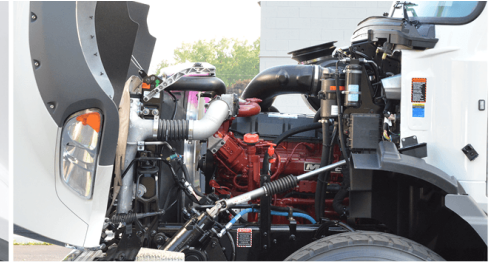
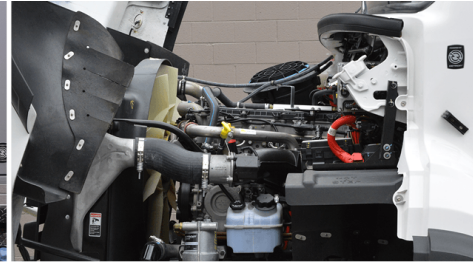
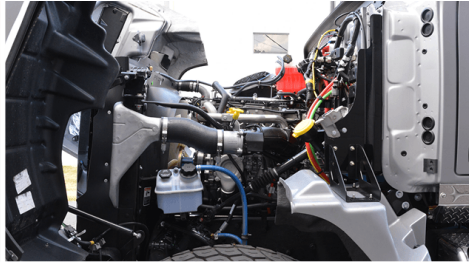
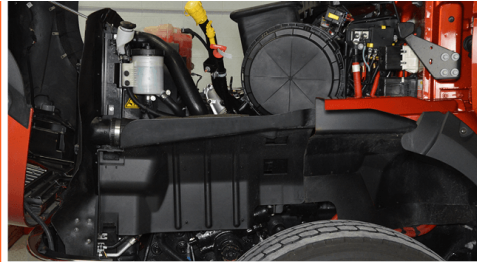
- ▶ Routine service points are clearly identified and easily accessed from the driver's side of the vehicle
- ▶ Commonly serviced fluid reservoirs are translucent so levels can be confirmed at a glance
- ▶ The hood features a torsion bar assist and pull force to open for easy engine access
- ▶ The hood also features gas struts to dampen opening and closing and prevent the hood from being blown closed or inadvertently closed during maintenance
- ▶ The HV Series offers an optional hood hatch to access key maintenance points without opening the hood



POWERTRAIN | Routine Maintenance | key numbers



POWERTRAIN routine maintenance³



Series	International® HV™ Series HD	Western Star 4700		Freightliner 114SD		Mack Granite 64BR	
Driver Side Maintenance Points	Oil check, Oil fill, Power Steering fluid, Washer fluid, Air cleaner, Filterminder	Oil Check, Oil fill, Power Steering fluid, Washer fluid, Filterminder		Oil Check, Oil fill, Power Steering fluid, Transmission fluid, Filterminder		Oil Check, Oil fill, Power Steering fluid	
Passenger Side Maintenance Points	Coolant reservoir	Coolant reservoir, Air cleaner, Transmission fluid		Transmission Fluid, Air cleaner, Filterminder		Coolant reservoir, Air cleaner, Washer fluid	
Translucent Containers (levels-at-a-glance)	Coolant reservoir, Washer fluid, Power Steering reservoir	Coolant reservoir, Washer fluid, Power Steering reservoir		Coolant reservoir, Washer fluid, Power Steering reservoir		Coolant reservoir, Washer fluid	
ISO Identification	Oil check, Coolant reservoir, Washer fluid	Oil fill, Coolant reservoir, Washer fluid		Oil fill, Coolant reservoir, Washer fluid		Washer fluid	
Tethered Caps	Oil fill, Washer fluid	Oil fill, Washer fluid		Oil fill		Oil fill, Coolant reservoir, Washer fluid	
Fluid Filter Mounts	All top load	All top load		All top load		All bottom load	
Hood Pull Force to Open	72 lbs.	101 lbs.		63.2 lbs.		29.4 lbs.	
Hood Latch Design	Fender-back rubber straps	Fender-back rubber straps		Fender-back rubber straps		Fender-back rubber straps	
Hood Tilt Range	78°	66°		71°		76°	
	International	Detroit		Cummins		Mack	
	A26	DD13	DD8	L9	L9N	MP7	MP8
Oil and Filter (miles)	20,000	35,000 – 55,000 ¹	45,000 – 60,000 ¹	15,000	15,000	25,000 – 45,000 ¹	25,000 – 45,000 ¹
Fuel Filter (miles)	Every oil change or 1,300 hours	Every Oil Change	Every Oil Change	Every Oil Change	30,000	Every Oil Change	Every Oil Change
Coolant Filter (miles)	Every fourth oil change or 12 months	Not Available	Not Available	15,000	15,000	150,000	150,000
Valve Lash (miles)	120,000, 300,000 ¹	100,000 ² – 500,000	90,000 – 120,000 ¹	150,000	1,000 hours ² /60,000 miles	150,000 ² / 300,000	150,000 ² / 300,000
DPF Cleaning (miles)	350,000 – 600,000 ¹	500,000 – 550,000 ¹	150,000	200,000	Not Applicable	250,000 / 400,000 ¹	250,000 / 400,000 ¹
DEF Pump Filter (miles)	300,000	3 years or 500,000	3 years or 500,000	200,000	Not Applicable	150,000	150,000

¹ Depending on duty cycle² Initial Adjustment³ Where specified by manufacturer. Please refer to engine maintenance manuals for latest intervals

Key Advantages — The HV Series features a new under-hood Power Distribution Module which simplifies electrical routing for a clean, well-organized system and streamlined troubleshooting. The HV Series hood features a torsion bar-assist and requires less effort to open than the Western Star 4700. The HV Series offers an optional hood hatch to access key maintenance points without opening the hood. HV Series has more crucial maintenance points on the driver side for easy access, than all the competitors. The HV Series has a 78° hood opening that is better than all the competitors and makes engine access easy and painless.



SUPPORT | Dealer Network



Navistar Capital is an industry leader in commercial vehicle financing with over 40 years of experience. We provide customized leases and secured loans with flexible structuring for International® heavy and medium duty commercial vehicles. Contact your local International® Truck dealer for more information.



For more than 40 years, Fleetrite® Parts have provided quality parts for all truck and bus makes sold exclusively at your International® Truck dealer. Every part is Navistar quality approved and is covered under a 1-year parts and labor warranty. Parts you can trust and affordability you can bank on.

WE HAVE YOUR BACK SO YOU CAN KEEP MOVING FORWARD

Your International® dealer is one of the best in the business and part of the industry's broadest, most capable parts and service network.



DIAMOND EDGE® CERTIFIED INTERNATIONAL® TRUCK DEALERS

This select network of International® dealer service departments has passed rigorous parts and service certification guidelines to provide you with faster turnarounds, immediate parts availability and a higher level of servicing expertise. Their ongoing pledge is to maximize your uptime and deliver a best-in-class customer experience.

YES, WE'RE

OPEN

Saturday

488

Locations

Sunday

47

Locations

724

DEALER LOCATIONS

7,600+ **7,600+**
TECHNICIANS SERVICE BAYS





OnCommand[®] Connection

CONNECT YOUR ENTIRE FLEET THROUGH A SINGLE PORTAL.

If your fleet includes more than one truck make and model, chances are you're using more than one remote diagnostic system to help monitor and manage the health of your vehicles. That's the genius of OnCommand[®] Connection. It's the first and only all-makes diagnostic system that enhances your uptime by efficiently and accurately monitoring all the trucks in your fleet in real time.

ONCOMMAND CONNECTION HELPS YOU:

- Monitor and manage the hundreds of fault codes in all your trucks
- Connect your fleet with service centers and manufacturers
- Comply with safety standards by taking action on critical faults
- Make informed choices to manage your fleet for maximum productivity

ONCOMMAND CONNECTION HAS THE CAPABILITIES TO:

- Diagnose your entire fleet wherever it may be
- Get action plans for more than 18,000 engine and vehicle faults
- Prioritize needed repairs while avoiding unnecessary service visits

ALL THE TOOLS YOU NEED AT YOUR FINGERTIPS

OnCommand Connection is designed to keep your vehicles moving and your profits rising through powerful features such as **interactive mapping, engineer-designed action plans and access to your online portal** through your preferred interface – computer, tablet, smartphone or email.



Reduce en route events by proactively scheduling maintenance and repairs



Map tools that plot truck locations, nearest dealers, hotels and local towing providers



Generate real-time comprehensive vehicle health reports



Understand fault codes quickly and easily with descriptions in plain English



Gain more insight with fault code action plans that provide severity information and recommended solutions



SUMMARY |



Summary



CAB

- New interior offers an improved ergonomic design, including better elbow room, hip room and leg room.
- New cab door design eliminates vent window seam and lowers the glass improving driver's visibility
- Improved door sealing and floor insulation for a quieter cab
- New pedestal cab mirrors reduce wind noise, reduce drag and improve driver's visibility
- Improved cab mirror serviceability with fewer mounting bolts, wiring connector located at the base and improved glass replacement

CAB INTERIOR

- All-new dash improves ergonomics and storage while providing an automotive-level fit and finish
- Standard premium gauge cluster offers a class-leading driver interface with virtual gauges, improved connectivity and state-of-the art graphics
- All-new HVAC has been completely redesigned for improved reliability and provides max Defrost feature for best-in-class defrost performance
- New, stronger doors open wider and include redesigned side glass for improved line of sight
- Up to 30 fully customizable, user-replaceable switches are available for any application

CHASSIS

- Improved harnessing and industry standard J1939 architecture for improved reliability and maximum uptime
- In-cab power distribution module is protected from the elements
- Single canister After-Treatment Device is 80 lbs. lighter and 60% smaller than the system it replaces
- 12.5", 125,000 psi frame is one of the industry's toughest single rail frames and provides up to 3.5 million RBM with less weight and no risk of inter-rail corrosion possible with double frames, a clear advantage in weight sensitive applications

POWERTRAIN

- The International® A26 provides efficient and reliable power in a light weight 12.4L platform
- New steering column-mounted stalk shifter integrates transmission functionality and available engine braking
- Wide range of manual, automated and automatic transmissions to fulfill needs across town and throughout the region

UPFITTING

- Latest International® Truck Diamond Logic® electrical system, widely considered the most advanced in the industry
- Ability to write custom logic for your application through Diamond Logic Builder.

SUPPORT SERVICES

- Service before failure and with OnCommand® Connection which efficiently monitors all the vehicles in your fleet regardless of make or model
- International Truck Specialty Centers; The upfit Process is supervised by International engineers to ensure factory production-level quality and expertise to identify and resolve problems quickly
- With 720 dealer locations, the industry's broadest and most capable support network is never far away

This document was prepared by an independent third party and is intended for the exclusive use of International Truck and its dealers. The information and conclusions contained within are believed to be correct at time of publication, but do not necessarily apply to similar vehicles with different specifications or with production dates after this analysis was conducted. Vehicles with different specifications or later dates of manufacture could yield different results. Vehicle specifications are subject to change without notice. © 2018 Navistar, Inc. All rights reserved. All marks are trademarks of their respective owners