



HV™ SERIES



**Note:** The information and conclusions contained herein 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 the production of this publication. Vehicles with different specifications or later dates of production may yield different results. Vehicle specifications are subject to change without notice. TAD17023 01/2022 ©2022 NAVISTAR Inc. All rights reserved. All marks are trademarks of their respective owners.



INTERNATIONAL® HV SERIES.





# A SMARTER APPROACH TO SERIOUS WORK.

## INTRODUCING THE NEW INTERNATIONAL® HV™ SERIES.

There's a new breed of vocational truck that redefines the standard for uptime and productivity. Introducing the new International HV Series. Redesigned from the inside out, the interior was crafted with driver and body company feedback to ensure the most comfortable and productive environment possible, while the exterior continues the powerful styling of the WorkStar. The HV Series also features the intelligence of the industry-leading Diamond Logic® electrical system for the automation of tasks and interlocks to help protect both equipment and crew. Power options include the International® A26™, an engine designed with uptime in its DNA.

The HV Series is the go-to truck for those who know that it's not just about getting the job done, it's about getting the job done right.



  
UPTIME

|

  
DRIVERFIRST™

|

  
INTEGRATION

OVER  
**700**  
INTERNATIONAL®  
DEALER LOCATIONS

OVER  
**400**  
LOVE'S LOCATIONS  
 

=

OVER  
**1,100**  
TOTAL SERVICE  
LOCATIONS

Our partnership with Love's and Speedco adds 400+ additional locations for quick, conveniently-located access to light mechanical and select warranty work.

PARTS YOU NEED, WHERE AND WHEN YOU NEED THEM





OWNERSHIP SUPPORT

A26  
COMMAND CENTER







We understand making money means keeping your vehicles on the road. **That's why uptime is so important to us.** Dependable equipment spec'd for your needs or requirements is just the beginning. We also focus on fuel economy, preventive maintenance, optimized service intervals and more to make sure the low cost of ownership of our vehicles helps keep you in the black.



## DIAMOND EDGE<sup>®</sup> CERTIFIED DEALERS



A select network of International dealers with service facilities that have passed rigorous certification guidelines to provide you with faster turnarounds, immediate parts availability and a higher level of servicing expertise







# EVERY MODEL YOU NEED. IN THE CONFIGURATION YOU WANT.



## TAKE YOUR PERFORMANCE TO THE NEXT LEVEL

We offer additional tools powered by OnCommand® Connection designed to give your business and operations that extra edge.

OTA Programming	Ensure peak performance with remote engine software calibration updates any time, anywhere
Fleet Health Monitoring*	Reduce breakdowns with weekly reports on vehicles at highest risk of roadside failure
Advanced Preventive Maintenance*	Optimize PM spending with data-driven, customized interval recommendations for your trucks

\* Separate subscription required

## TRANSPARENT SERVICE COMMUNICATIONS WITH YOUR DEALER

Knowing when your vehicle's service and repair events will be complete is critical to keeping your business up and running. International® 360 makes the entire process faster and easier to manage.\*

- Updates via text and email keep you informed on the status of vehicles in service, including estimated time of completion
- Integrates telematics, dealer parts inventory, and other vital information into one easy-to-use tool
- Centralizes vehicle health data, service history, and more

\* Separate subscription required







# INNOVATION THAT DRIVES UPTIME



## CRITICAL VEHICLE HEALTH DATA AT YOUR FINGERTIPS

OnCommand® Connection Advanced Remote Diagnostics transforms raw vehicle data into actionable insights to help you stay in front of potential vehicle issues and keep your MV at peak performance.

### Features include:

- Reports and alerts on vehicle health issues that include severity ratings, likely needed parts and service, and recommended actions
- Comprehensive vehicle health reports that include performance data, fault history, and more
- Up-to-date GPS location with customizable geofencing reports that can help ensure vehicles are where they need to be
- Insights delivered how you need it – via our online portal, your email inbox, a mobile app\*, and more.

\*coming soon

## EASY ACCESS TO THE SOLUTIONS YOU NEED

Businesses of all sizes are finding that commercial truck software providers can make their jobs easier. Our factory-installed telematics device can be used to access compliance, routing, and other solutions without the cost and complexity of additional hardware. Simply call the provider of your choice and subscribe. It's as easy as that.

- One high quality source of vehicle data
- No prewiring, extra hardware, or aftermarket installation costs

### Available Today



### Coming Soon



Productivity often comes down to versatility. And there's no more versatile foundation than the HV™ Series. With configurations ranging from 4x2 to 8x6, BBCs of either 107" or 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.







# ENGINEERED FOR UPTIME. BATTLE-TESTED TOO.

FOR THOSE VOCATIONS WHERE UPTIME IS OF  
UTMOST IMPORTANCE, THE INTERNATIONAL®  
HV™ SERIES IS THE GO-TO SOLUTION. FROM THE  
WORKSITE TO THE BATTLEFIELD, THE HV SERIES WAS  
BUILT WITH RELIABILITY, PRODUCTIVITY, EFFICIENCY  
AND PERFORMANCE AS ITS PRIMARY MISSION.

HV SERIES FEATURES:

- ▶ Double-sided galvanized steel cab with superior fit and finish and corrosion resistance
- ▶ Huck® Bolt chassis fasteners provide superior clamping force and will not come loose even in extreme environments
- ▶ Single 1/2" frame rail has the strength of a double rail but lighter in weight and without the chance of inter-rail corrosion
- ▶ Standard breakaway mirrors minimize cab and door damage
- ▶ Integral 20" and 27" frame extensions (not bolt-on) for superior strength and reliability
- ▶ Available stainless-steel oil pan for reduced corrosion in highly corrosive applications



## HV™ SERIES SPECIFICATIONS.

GVW

- ▶ 4x2: 27,500 - 53,000 lbs.
- ▶ 4x4: 27,500 - 51,000 lbs.
- ▶ 6x4: 44,000 - 74,000 lbs.
- ▶ 6x6: 44,000 - 66,000 lbs.
- ▶ 8x6: 75,000 lbs.

Models/BBC/BA

- ▶ HV507: 107.4" BBC, 32.3" BA
- ▶ HV513: 113" BBC, 29.5" BA, SFA
- ▶ HV607: 107.4" BBC, 40.1" BA
- ▶ HV613: 113" BBC / 45.9" BA
- ▶ HV507 Bridge: 107" BBC / 29" BA

Wheelbase Options

- ▶ 128" - 311"

Axle Configurations

- ▶ 4x2
- ▶ 4x4 (HV507)
- ▶ 6x4
- ▶ 6x6 (HV507, HV513)
- ▶ 8x6 Tridem (HV513, HV613)

Front Axle

- ▶ Dana Spicer
  - Non-Driving: 10,000 - 22,000 lbs.
- ▶ Meritor
  - Non-Driving: 10,000 - 22,000 lbs.
  - Driving: 10,000 - 18,000 lbs. (HV507, HV513)
- ▶ Fabco
  - Driving: 8,000 - 21,000 lbs. (HV507, HV513)

Rear Axle

- ▶ SINGLE REAR AXLE (4x2)
  - Meritor
    - Single Reduction: 17,000 - 30,000 lbs.
    - Double Reduction: 26,000 - 38,000\* lbs.
    - Two-Speed: 21,000 - 23,000 lbs.
  - Dana Spicer
    - Single Reduction: 17,500 - 31,000 lbs.
    - Two-Speed: 19,000 - 23,000\* lbs.
- ▶ TANDEM REAR AXLE (6x4)
  - Meritor:
    - Single Reduction: 34,000 - 52,000 lbs.
  - Dana Spicer:
    - Single Reduction: 46,000 - 50,000 lbs.
- ▶ TRIDEM REAR AXLE (8x6)
  - Meritor:
    - Single Reduction: 53,000 lbs.

Front Suspension

- ▶ •Spring Multileaf: 14,000 - 20,000 lbs.
- ▶ Parabolic Taperleaf: 8,000 - 23,000 lbs.

Rear Suspension

- ▶ Chalmers: 23,000 - 52,000 lbs.
- ▶ Hendrickson
  - RT: 34,000 - 52,000 lbs.
  - HAS: 23,000\* - 46,000 lbs.
  - HMX: 40,000 - 50,000 lbs.
  - PRIMAX: 20,000 - 46,000 lbs., 69,000 lbs. (Tridem Tandem)
- ▶ Link: 46,000 lbs.
- ▶ International: 20,000 - 40,000\* lbs.

Frames

- ▶ Heat Treated Alloy Steel 120,000 PSI
- ▶ 11.25" x .5" Thick Super Single Rail, 3.35M RBM

Electrical System

- ▶ ALTERNATORS
  - Leece-Neville: 12 Volt, 160 - 325 Amp
  - Delco Remy: 12 Volt, 165 - 240 Amp
- ▶ BATTERY SYSTEMS
  - JCI: 12 Volt 1400 - 2100 CCA
  - Fleetrite®: 12 Volt 1320 - 3800 CCA

Exhaust System

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

Brakes

- ▶ Air Disc Brakes with ABS, Optional Traction Control, Optional Electronic Stability Program with Traction Control
- ▶ Optional Drum Brakes

Power Steering

- ▶ Single Power
- ▶ Dual Power on Front Axle 16,000 lbs. and Above

Engines

- ▶ International® A26™: Up to 515 hp, 1850 lb. - ft. of torque (HV513, HV613)
- ▶ Cummins® B6.7: Up to 360 hp, 800 lb. - ft. of Torque\*\* (HV507, HV607)
- ▶ Cummins® L9: Up to 450 hp, 1250 lb. - ft. of Torque\*\* (HV507, HV607)

Transmissions

- ▶ Eaton Manual: 6, 8LL (10), 9ALL (11), 13, 15, and 18-speed
- ▶ Eaton Automated Manual: 8LL (10), 9ALL (11), 13, and 18-speed UltraShiftPLUS®, and 10-speed Eaton Fuller Advantage™
- ▶ Allison Automatic: EVS, RDS, HS Series

Fuel Tanks

- ▶ 40 - 200 Gallons, Single or Dual, Non-Polished or Polished Aluminum, Mounted Right or Left Side Under Cab

Tires

- ▶ Continental, Michelin, Goodyear, Bridgestone

Specifications apply to HV Series as a whole. Individual model specification restrictions apply. Please see model spec cards for model-specific specifications.

\* Application restriction

\*\* Higher ratings available for fire and rescue applications







DESIGNED FOR DRIVERS IN THE TOUGHEST APPLICATIONS — YOURS.



HV507 REGULAR CAB



HV507 EXTENDED CAB



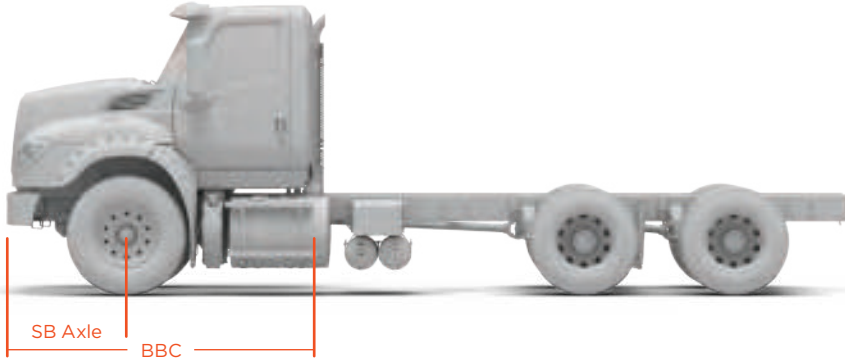
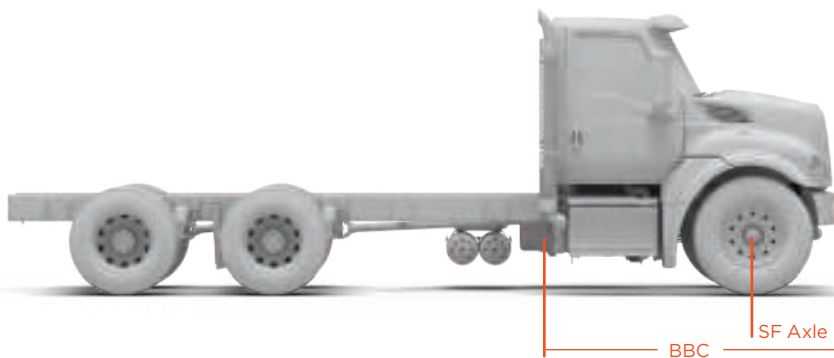
HV507 CREW CAB

HV507 =

Model Nomenclature Key

Model Designation	Axle Configuration	BBC in inches	
HV	5 = Set-Forward	07	13
	6 = Set-Back	07	13

= HV with set-forward axle and a 107" BBC



Configuration	Model	Axles
Set-Forward Axle	HV507	4X2
		4X4
		6X4
	HV513	6X6
		4X2
		6X4

Configuration	Model	Axles
Set-Back Axle	HV607	4X2
		6X4
		4X2
	HV613	6X4
		8X6
		6X6



The battle-tested Navistar Defense Mine Resistant Ambush Protected (MRAP) vehicle is based on the HV™ Series



The new 12.4L International® A26™ (HV513, HV613) is purpose-built to deliver uptime, fuel efficiency and quiet operation.



Huck® Bolt chassis fasteners provide superior clamping force, do not require re-torquing and are highly vibration resistant.

When it's time for service, the HV Series is all about quick turnaround time within the service bay or at any of the nearly 700 dealer locations across the U.S. and Canada.

- ▶ In-cab electrical panel is conveniently located under spill-resistant dash panel
- ▶ 3-piece hood for lower cost replacement during crash repair
- ▶ Routine service points are clearly labeled and easily accessed under the hood
- ▶ Commonly serviced fluid reservoirs are translucent for quick inspection and many of the caps are tethered to prevent dropped and/or lost caps—saving time and frustration
- ▶ Batteries can be located in the cab for easier servicing in harsh weather and to free up rail space for mounting other components







Cummins® B6.7 (200-360\* HP)

Every aspect of the B6.7 has been engineered for reliability, durability and fuel efficiency to deliver the lowest cost of ownership with maximum uptime. Add industry-leading service from International® and Cummins, plus a two-year, unlimited mileage engine warranty, and it's easy to see why the B6.7 is the best-selling engine in the medium-duty truck market



Specifications	Cummins B6.7	Cummins L9
Engine Type:	Diesel, 4-Cycle	Diesel, 4-Cycle
Configuration:	Inline 6-Cylinder	Inline 6-Cylinder
Displacement:	409 cu. in. (6.7L)	543 cu. in. (8.9L)
Bore and Stroke:	4.21 X 4.88 in	4.49 X 5.69 in
Aspiration:	Variable Geometry Turbocharger	Variable Geometry Turbocharger
Combustion System:	Direct Injection	Direct Injection
Engine Lubrication:	15L	15L
Total Engine Weight (Dry):	1,150 lbs.	1,695 lbs

Cummins® L9 (260-450\* HP)

The Cummins L9 has established a solid reputation as a dependable engine for medium duty applications. Its XPI Fuel System features multiple injection events per cycle for smoother, quieter operation. This, combined with its proprietary Variable Geometry Turbocharger (VGT), means the L9 has the highest power density of any engine in its class. In addition, replaceable wet liners help make the L9 easier and less expensive to rebuild, plus heavy-duty roller followers, bypass oil filtration and targeted piston cooling all contribute to longer service life.



\* Higher ratings limited to Fire and Rescue applications





A CHOICE OF  
PROVEN PERFORMERS.



## DRIVERFIRST: DESIGNED FOR THOSE BEHIND THE WHEEL.

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.

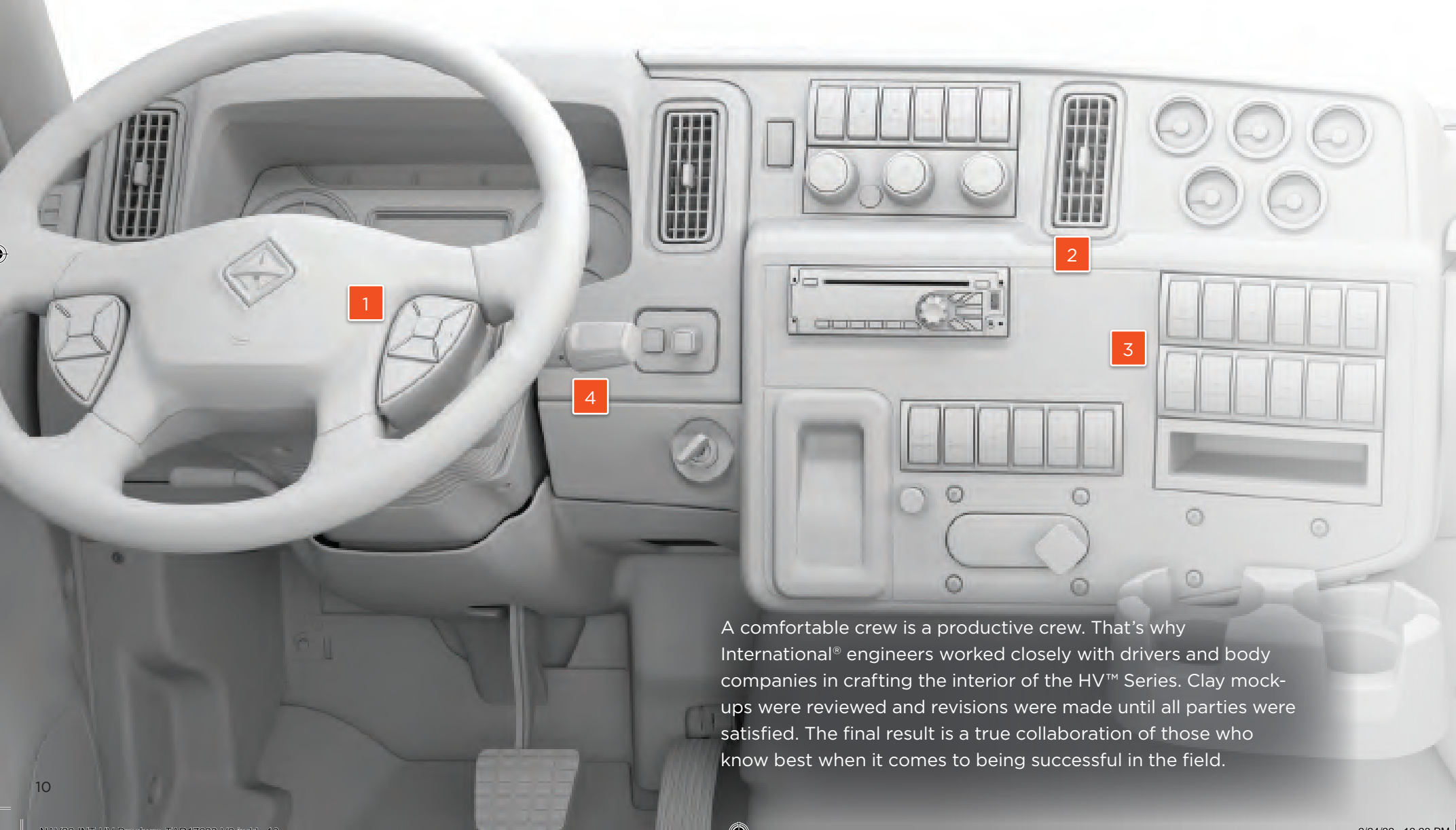
Of course, nothing contributes more to comfort than space, and the HV Series has one of the largest cabs in its class. It's these enhancements and much more that make the HV Series a true driver's truck.







# TAKE A HANDS-ON APPROACH TO SUCCESS.



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.

## UPTIME

### EVERY COMPONENT IS ENGINEERED TO MAXIMIZE UPTIME:

Strong piston pins, connecting rods and bushings optimize load distribution for enhanced durability.

The Variable Geometry Turbocharger (VGT) features a titanium compressor wheel that delivers superior fatigue life over aluminum designs, with a simplified single stage design to reduce complexity and enhance reliability.

The piston cooling jets increase oil pressure to improve lubrication and engine durability. Exposing less oil to hot pistons also reduces oil oxidation to improve oil drain intervals.

Oil change service interval has been increased to 70,000 miles\*.

Aluminum castings, stainless steel tubes, composite valve covers, and optional stainless steel oil pans provide long lasting corrosion protection.

All high temperature fasteners include a permanent coating to prevent seizing, including fasteners for the exhaust manifolds, heat shields, and turbocharger.

## WEIGHT SAVINGS

### AT 2,314 LBS., THE A26 IS THE LIGHTEST ENGINE IN ITS CLASS:

The A26 weighs 600-700 lbs. less than 15L big-bore engines.

The Compacted Graphite Iron (CGI) crankcase has greater strength and fatigue resistance than traditional gray iron for thinner walls, reduced weight and maximized payload.

Valve covers are built of a durable, lightweight composite instead of aluminum.

The shot peened aluminum flywheel housing delivers high strength with impressive weight savings over traditional iron flywheel housings.

The simple, single stage design of the turbocharger eliminates several major components, reducing weight and complexity.

## NOISE REDUCTION

### THE A26 IS PACKED WITH NOISE-REDUCING FEATURES:

The uniquely sculpted crankcase significantly dampens vibration.

The High Pressure Common Rail fuel system delivers multiple injection events for smooth, quiet operation.

The oil pan and crankcase are isolated through a specially designed rubber gasket that absorbs vibration before it can get amplified through the oil pan.

Sophisticated calibration and programming are specifically designed to reduce engine noise.

The 6-blade fan features fewer blades for quieter operation.\*\*

## FUEL EFFICIENCY

### ENGINEERED TO DELIVER UP TO 4% GREATER FUEL ECONOMY\*\*\*:

Maximized fuel injection pressure from the 2500 bar (36,300 psi) High Pressure Common Rail (HPCR) fuel system reduces both fuel consumption and emissions.

The efficient design of the cylinder head coolant passages help reduce parasitic loss to the water pump.

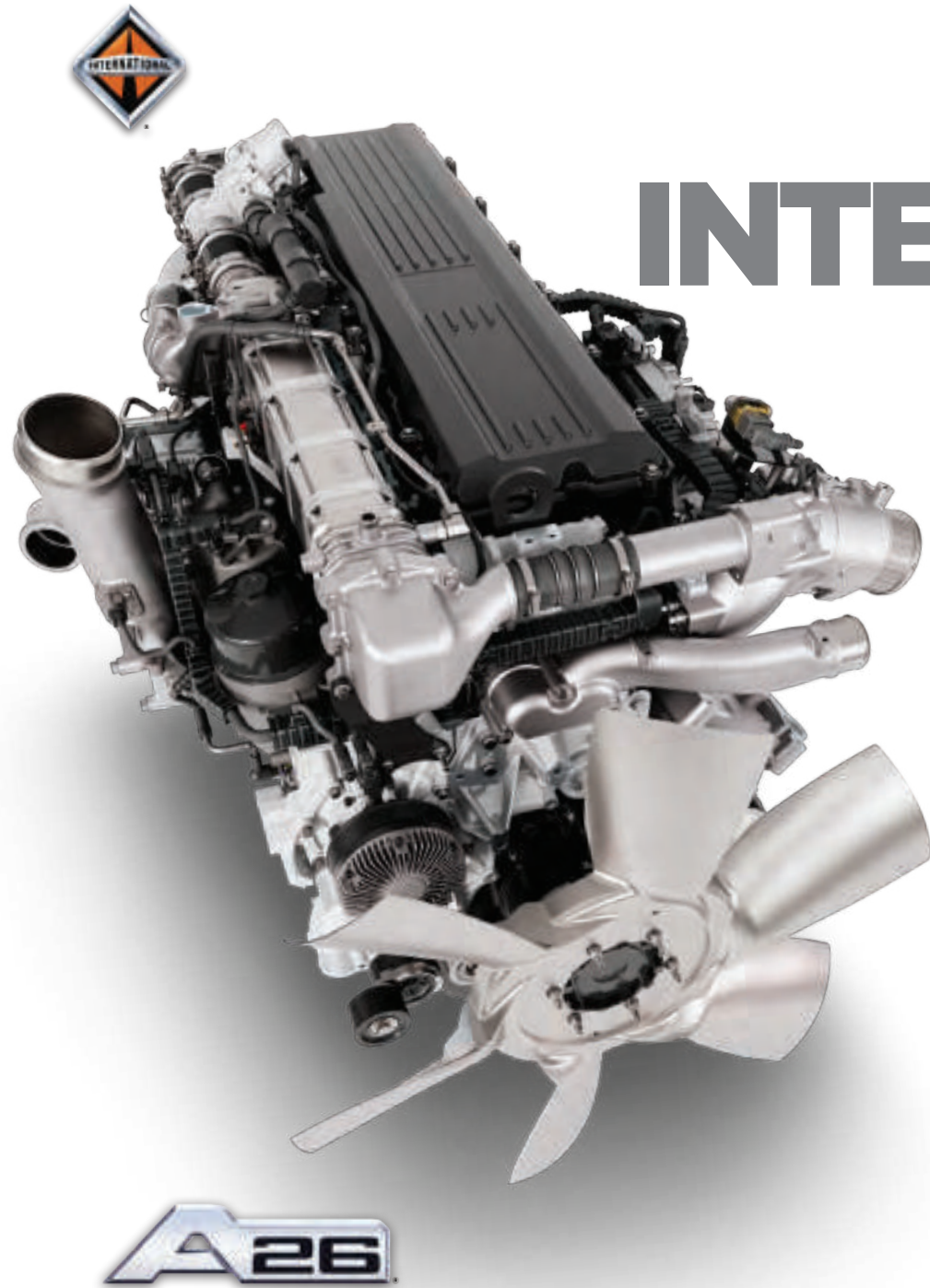
A simplified air management system combined with the Variable Geometry Turbocharger delivers optimal fuel economy and performance.

An oil cooler thermostat bypass allows oil to bypass the oil cooler in colder weather to improve fuel economy.

\* with oil sampling and International approval  
\*\* 6 blade fan is for LT and RH Series applications only  
\*\*\* Over previous A26 Engine







# INTERNATIONAL<sup>®</sup> A26<sup>™</sup>

## A POWERFUL AND EFFICIENT WORKHORSE READY TO TAKE ON ANY AND ALL JOBS.

The A26 produces up to 515 HP and 1850 lb.-ft. of torque, but its big-bore performance only begins to tell the full story of this engine. The modern simplicity of the A26 design does more than shed weight — every component has been carefully engineered to deliver uncompromising uptime and fuel efficiency, **reduced weight and quieter operation.**

Engine Type	Diesel, 4-Cycle
Configuration	Inline 6-Cylinder
Displacement	12.4 L (758 cu. in.)
Bore & Stroke	4.96 in. & 6.54 in. (126 mm & 166 mm)
Compression Ratio	20.5:1
Aspiration	Single Stage Variable Geometry Turbocharger, Intercooler & Aftercooler
Combustion System	Direct Injection
Engine Lubrication	42 Quarts (40 L)
Total Engine Weight (Dry)	2,314 lbs (1043 kg)
Valves	4 Valves Per Cylinder, Single Overhead Camshaft
B10 Design Life	1,200,000 mi (1,931,000 km)

### Cab Features

	Classic	Diamond
Cab Trim Panels	Easy to Clean Soft Touch Vinyl	
Door Trim		Available with Black Cherry Accents - Padded Gray or Black Cherry Soft Touch Panels
Trim Inserts	Neutral	Woodgrain - Optional Black Cherry Door Toppers
Instrument Panel	Black	Black
Gauge Cluster	8-gauge, 3.5" Display with Odometer and Trip	Optional: Premium 8-Gauge, 5" Color Display with Virtual Gauges and Integrated Telemetry
Accent Color	Neutral	Neutral: Optional: Black Cherry
Sun Visors	Two	
Lighting	LED	
Window Controls	Manual or Power	Power
Lock Controls	Manual or Power	Power
Cup / Bottle Holders	Four	
Overhead Console	Molded Plastic with Retainer Nets and CB Radio Housing	
USB Accessory Port	Up to 3	



**1** The all-new steering wheel adds 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



**2** An available flat instrument panel with center-mounted vent keeps the middle passenger cool while providing space for extra legroom or a large floor-mounted body control module



**3** Factory-installed switches with custom labels are optimally positioned within the HV<sup>™</sup> Series for use with integrated equipment

- ▶ Up to 30 customizable, user-replaceable switches are available for any application
- ▶ Large, easy-to-read backlit text
- ▶ Warning lights can be any of seven colors
- ▶ One common switch pack for wiring simplicity
- ▶ Any switch can be relocated by the customer without wiring changes
- ▶ Blank "windows" available for custom labeling by the customer

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







## COMMAND CENTRAL.

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.



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.



## OUTSTANDING MANEUVERABILITY

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.



## INDUSTRY-LEADING HVAC

The 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 under 30 minutes from start-up — quicker than any competitor measured.







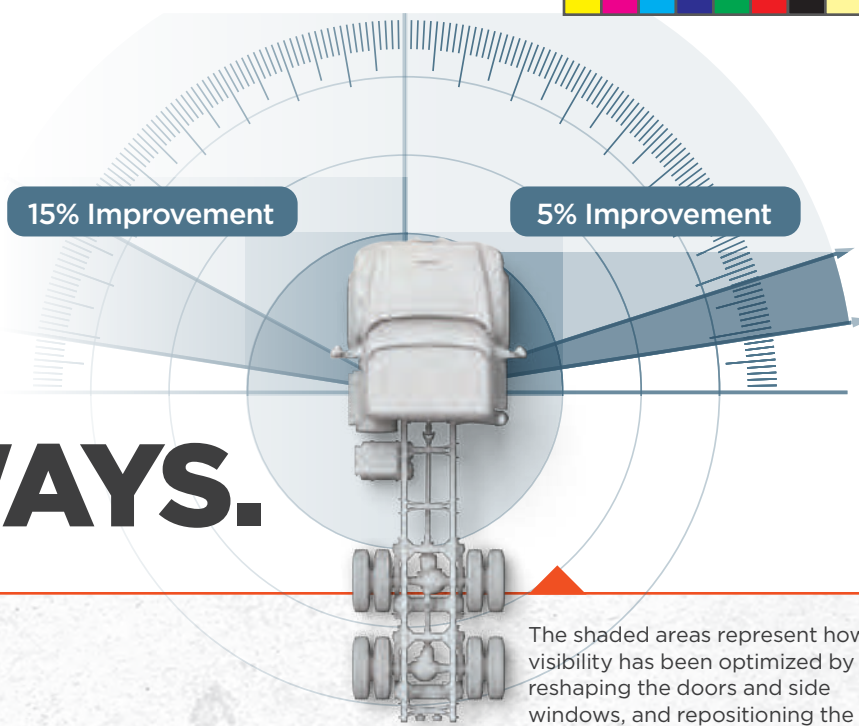
# SAFETY FIRST, LAST AND ALWAYS.

Traditional Hood

Sloped Hood

89.2"

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.



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

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 with an excellent turning radius.

An optional heated windshield keeps ice and snow from collecting on the wipers, keeping them ready to go. The available air disc brakes provide shorter stops with longer lining and rotor life for less maintenance. Plus, the available electronic stability control system helps drivers maintain control during heavy braking and slick roads.



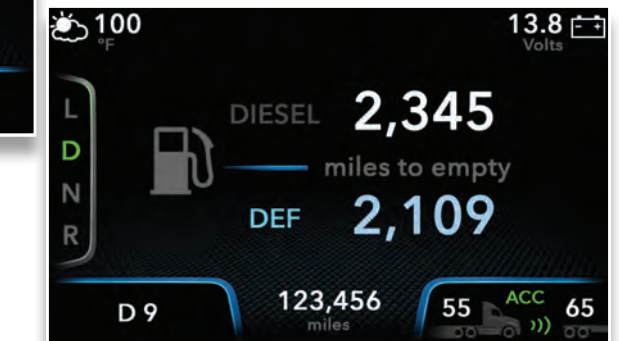
## BENDIX® WINGMAN® ADVANCED

Available on select HV Series, the Bendix Wingman Advanced combines adaptive cruise control collision mitigation and stability technologies to help drivers potentially avoid a collision or reduce its severity by providing alerts and, if necessary, automatically applying the brakes.



A customizable digital display in the premium gauge cluster provides a wealth of information for the driver, including:

- ▶ Axle load\*
- ▶ Custom gauge settings\*
- ▶ Safety indicators\*
- ▶ Digital speedometer
- ▶ Tire pressure\*
- ▶ Additional virtual gauge options



Intuitive controls allow you to easily navigate between digital screens.

- Back Button** - navigate to previous page/sub category and then to main home screen
- Navigation Button** - navigate up and down to move within categories, navigate left or right to access the main menu and to move from one category to another
- OK/Reset Button** - select a highlighted category or hold for 3 seconds to reset the item

\* When added with optional feature code for required sensors.

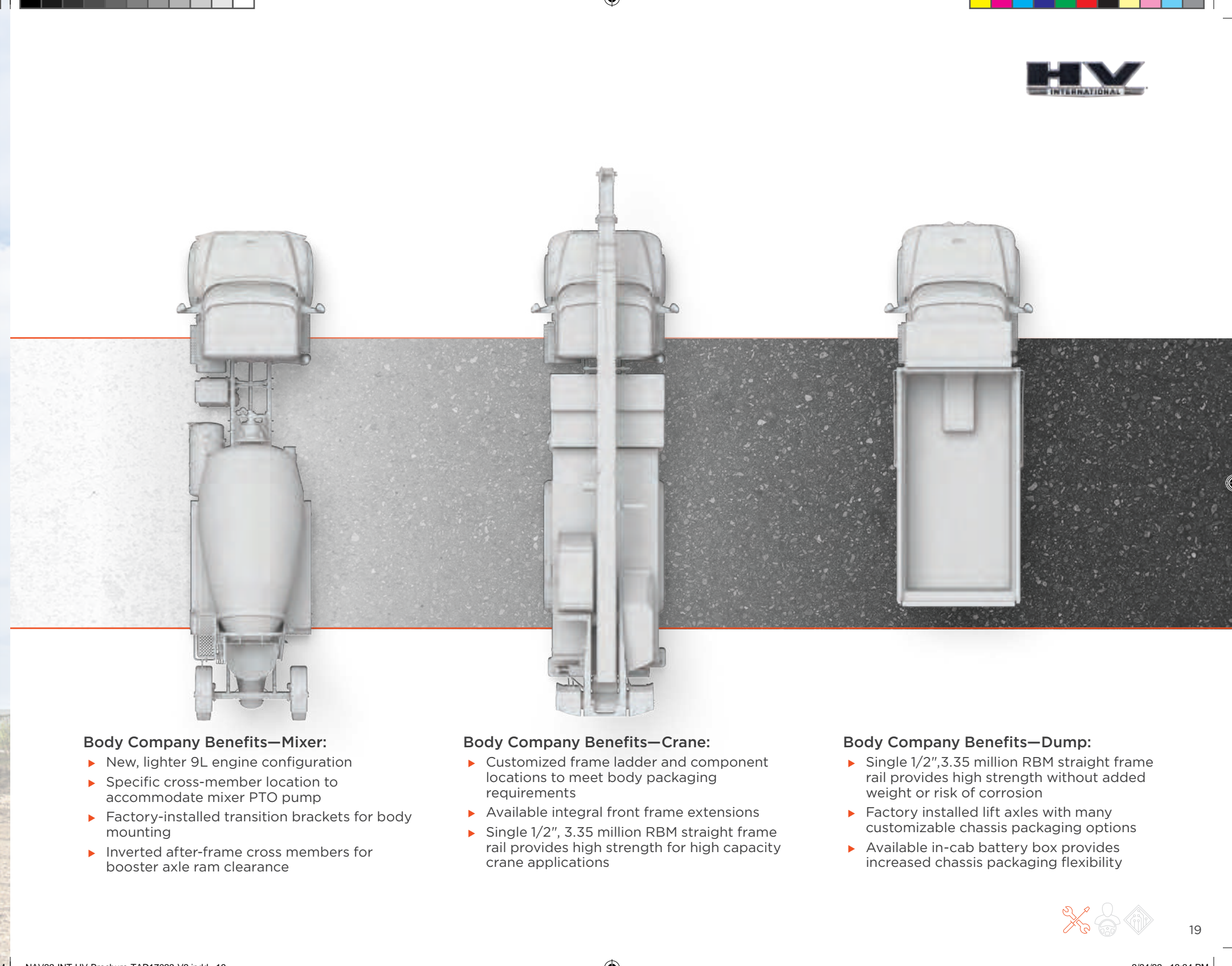






# DIAMOND LOGIC<sup>®</sup>.

## ADVANCING THE SCIENCE OF PRODUCTIVITY.



### Body Company Benefits—Mixer:

- ▶ New, lighter 9L engine configuration
- ▶ Specific cross-member location to accommodate mixer PTO pump
- ▶ Factory-installed transition brackets for body mounting
- ▶ Inverted after-frame cross members for booster axle ram clearance

### Body Company Benefits—Crane:

- ▶ Customized frame ladder and component locations to meet body packaging requirements
- ▶ Available integral front frame extensions
- ▶ Single 1/2", 3.35 million RBM straight frame rail provides high strength for high capacity crane applications

### Body Company Benefits—Dump:

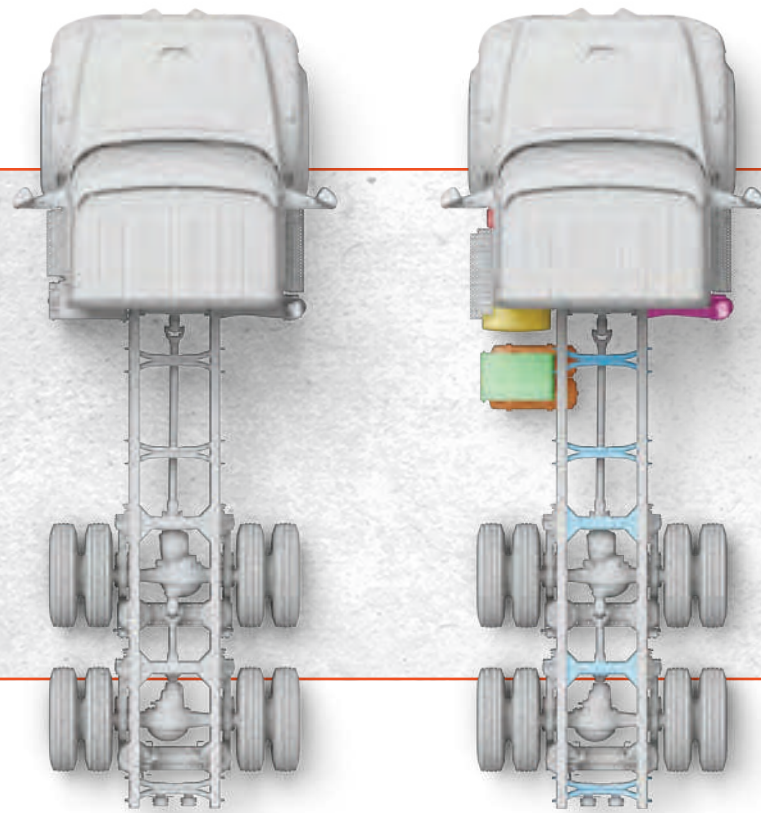
- ▶ Single 1/2", 3.35 million RBM straight frame rail provides high strength without added weight or risk of corrosion
- ▶ Factory installed lift axles with many customizable chassis packaging options
- ▶ Available in-cab battery box provides increased chassis packaging flexibility







# FIT TO BE UPFITTED.

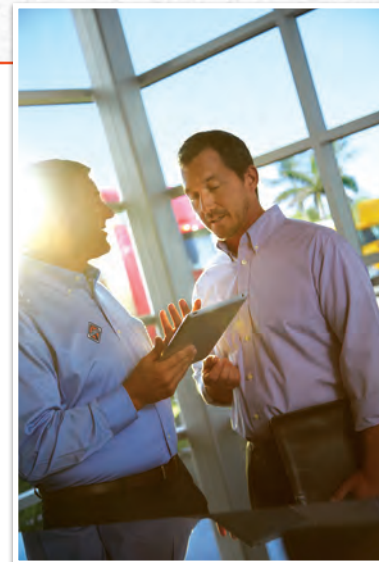


The International® HV™ Series provides the ideal foundation for an almost unlimited number of applications. This is the result of our extensive experience working directly with customers as well as our unsurpassed engineering capabilities. Ordering the specific foundation needed for your application upfront substantially reduces time and expense upfitting the vehicle post-production.

Every HV Series starts with a Huck® Bolted frame and cross member 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 is also available with a clean Cab-to-Axle (CA) configuration to minimize costly post-production modifications. In addition, a new 20,000 lb. off-set bowl front drive axle allows for a lower ride height than a traditional center bowl.

## International Truck Specialty Centers provide quick, efficient and cost-effective customization:

- ▶ Modifications covered under manufacturer's warranty
- ▶ Process supervised by International engineers to ensure factory production-level quality
- ▶ Expertise to identify and resolve problems quickly
- ▶ Optimized delivery cycle times and comprehensive factory support



The International® truck Diamond Logic® electrical system is considered the most advanced in the industry—and for good reason. Diamond Logic streamlines chassis and body equipment integration and allows customers 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.

### 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
- ▶ Can sense when they are not properly stowed (not letting transmission come out of neutral) and will illuminate an indicator light 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 programmed 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



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

### 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)







# WHATEVER YOUR APPLICATION, DIAMOND LOGIC<sup>®</sup> IS PROGRAMMED TO SUCCEED.

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



## UTILITY

- ▶ Utility Indicator Lights
  - Factory-installed indicator lights and audible alarms for Boom Out of Stow and Outriggers Down warning.
- ▶ Protect Equipment Through Interlocks
  - Require outriggers be deployed and the park brake set before allowing boom to rise



## DUMP

- ▶ Dump Bed and Gate Open Indicators
  - Hydraulic system monitoring performed through custom programming
- ▶ Lights On With Wipers
  - Lights automatically turn on when wipers are activated to meet the legal requirement of many states



## MIXER

- ▶ Programmable PTO Accommodations
  - Remote body switches can be custom-programmed to control concrete chutes and water valves
- ▶ Pre-Trip Light Inspection
  - Automated vehicle light check



## CRANE

- ▶ Protect Equipment Through Interlocks
  - Require outriggers be deployed and the park brake set before allowing boom to rise
- ▶ Park Brake Alarm
  - Alerts driver of park brake not set using city horn



# WAYS TO USE DIAMOND LOGIC<sup>®</sup>

**1** Order from nearly 200 preprogrammed tasks

**2** Work with International<sup>®</sup> to create custom tasks

**3** International can train and certify your technicians on Diamond Logic Builder software to independently program new tasks



### DIAMOND LOGIC BUILDER

HV<sup>™</sup> Series customers have the ability to write custom logic so Diamond Logic can be easily expanded, configured and updated in the field to meet specific application requirements.

