

DURAStar
POWERED BY MAXXFORCE™

COMPETITIVE
COMPARISON GUIDE:
MEDIUM DUTY

- ▶ International® DuraStar®
- ▶ Freightliner
- ▶ Hino
- ▶ Kenworth



A NAVISTAR COMPANY



A REAL-WORLD TEST

We've always believed we put everything into DuraStar that our customers need and want in terms of driver satisfaction, performance, safety, handling, component options, durability, emissions strategies and cost of ownership.

But the only real way of knowing how good we are was to put DuraStar to a real-world test — against its real-life competitors. A test conducted by a disinterested third party of trucking professionals.

The tests were conducted with the highest level of objectivity. Meticulous attention was paid to detail. Measurements were taken from “actual built” vehicles. Specifications, as closely as possible, matched each manufacturer’s equipment availability and compatibility parameters. And most importantly, in order to maintain absolute consistency, measurements were performed in precisely the same manner across all models.

Today, on paper ... and in the real world ... we at International know how DuraStar stacks up. Here's your opportunity to find out for yourself.

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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. All marks are trademarks of their respective owners.

AVAILABLE SPECIFICATIONS

Versatility is DuraStar's calling card ... offering a broad range of specifications designed for any medium duty application you can name.

- ▶ Repairing downed power lines
- ▶ Picking up the trash
- ▶ Towing vehicles
- ▶ Racing to a fire
- ▶ Rushing to the scene of an accident ... and more

Powertrains

- ▶ Offering a range of engine and transmission, DuraStar can easily be spec'd to a customer's exact needs

Engines

- ▶ Featuring 9% to 13% better fuel economy over previous engines, MaxxForce® — from 215 HP to 330 HP — is the proven choice for DuraStar.

Axles

- ▶ Front driving and non-driving axles from 8k - 14k
- ▶ Rear axles from 12.2k - 46k
- ▶ Single and tandem - 4x2, 4x4, 6x4 configurations

Frames

- ▶ 50k - 120k PSI frame rails provide impressive payload capacities
- ▶ Backed by an industry leading standard 7-year frame-rail warranty

DuraStar Hybrid

65% reduction in hydrocarbon emissions, 58% reduction in carbon monoxide and 41% reduction in nitrogen oxide emissions make it the cleanest truck in the industry.

- ▶ Up to 60% improvement in fuel economy compared to traditional diesel engines
- ▶ Reduced noise pollution with optional Electric Power Take-Off (EPTO) which keeps the engine off during stationary work

National Fire Protection Association (NFPA) Compliance

DuraStar offers an array of factory-installed equipment designed to meet stringent NFPA standards. Much of this equipment would be very difficult and cost-prohibitive to replicate in an unequipped competitive chassis.

Some of this equipment includes:

- ▶ Parking brake interlocks when transmission is shifted to park during shaft pumping

NFPA Continued

- ▶ NFPA secondary braking device interlock to prevent rear wheel lock-up in adverse road conditions
- ▶ Nearly 40 factory exhaust configurations to accommodate special equipment
- ▶ NFPA minimum 37" seat-to-ceiling for each belted seating position
- ▶ All DuraStar cabs meet Dynamic Loading Heavy Trucks, SAEJ2422 Cab Roof Strength Evaluation and NFPA Quasi-Static Loading Heavy Trucks standards

Models 4300, 4400

BBC 107"

BA 40"

Frames 50,000 – 120,000 PSI

Axle Configurations 4X2, 4X4, 6X4

Cab Configurations Day cab
Extended cab
Crew cab

Engines MaxxForce® 7 up to 300 hp/660 lbs.-ft.
MaxxForce® DT up to 300 hp/860 lbs.-ft.
MaxxForce® 9 up to 330 hp/950 lbs.-ft.

Transmissions Eaton Fuller: 5, 6, 10 speed manual
Eaton: UltraShift 5, 6 speed automated mechanical
Allison: 1000, 2000 Series (HS, EVS, RDS, MH) automatic
3000 Series (HS, EVS, RDS TRV) automatic

Front Axles Meritor: 8,000 – 14,000 lbs.
International: 9,000 – 14,000 lbs.
Dana Spicer: 8,000 – 14,000 lbs.
Fabco Front Driving: 8,000 – 10,000 lbs.

Rear Axles SINGLE REAR AXLES (4x2)
Meritor: 13,500 – 30,000 lbs.
Dana Spicer: 12,200 – 30,000 lbs.

TANDEM REAR AXLES (6x4)
Meritor: 34,000 – 46,000 lbs.
Dana Spicer: 34,000 – 46,000 lbs.

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

Tires Continental, Michelin, Goodyear



COMPETITIVE SET

Model:	DuraStar	Freightliner M2 106	Hino 268	Kenworth T270
Model Year:	2011	2011	2010*	2011
BBC:	107"	106"	108"	109"
Engine:	MaxxForce 7 220 HP	Cummins ISB 220 HP	Hino J08E-TV 220 HP	Paccar PX6 240 HP
Transmission:	Allison 2100RDS	Allison 2100RDS	Allison 2500RDS	Allison 2500RDS
Wheelbase:	272"	252"	271"	272"
Frame:	50,000 PSI	120,000 PSI	80,000 PSI	120,000 PSI
Front Axle:	D800-F 8K	AF-8 8K	MFS10 10K	E-1002i 10K
Rear Axle:	17060S 17.5K	ARS-19 19K	RS19-145 19K	P22060S 22K
Suspension:	18.5K V-Rate	18K AirLiner	21K Spring	23K Air
GVWR:	25,500 lbs.	26,000 lbs.	25,950 lbs.	26,000 lbs.
Tire Manufacturer:	Continental	Continental	Bridgestone	Bridgestone
Tire Size:	11R22.5	11R22.5	11R22.5	11R22.5
Front Tire Tread:	HSC	HSL2	M725	M711
Rear Tire Tread:	HDL2	HDL	R250	R250F
Base Warranty:	2 Years	2 Years	2 Years	1 Year

* EPA10, 2011 model year vehicle not available at time of publication.
2011 model year data considered for all specifications.

In real-world testing, DuraStar was compared cab-to-cab, axle-to-axle, powertrain-to-powertrain, measurement-to-measurement against three leading market competitors: the Freightliner Business Class M2 106, the Hino 268 and the Kenworth T270.

Everything you essentially need to know about them ... weight ratings, engines, transmissions, axles, suspensions, tires and warranties ... is in the comparisons.

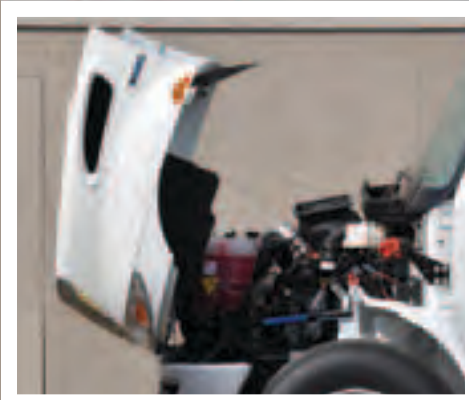
To guarantee an apples-to-apples comparison — the specifications match as closely as possible each manufacturer's equipment availability and compatibility parameters.



CAB DESIGN

Cab Construction

- ▶ High strength, low alloy (HSLA) reinforced, cold rolled steel cab
- ▶ HSLA reinforcements at A-Pillars, cab mount, dash and under body
- ▶ Solid feeling, stable-riding 82" wide cab
- ▶ International cabs, extended cabs and crew cabs pass the more rigorous SAE J2422 cab roof strength test versus the standard European ECE 29 roof strength requirement, which only tests for a uniform vertical load applied to the roof. SAE J2422 also tests for angled side loads which is a National Fire Protection Association (NFPA) requirement*.



Entry/Egress

- ▶ 62° door swing and 38.5" wide door opening make it one of the easiest cabs in the industry to access
- ▶ Large, consistently spaced cab steps with offset stair-step design for safe entry
- ▶ Available ergonomic dash center panel

Hood and Windshield Design

- ▶ Very well balanced hood, with torsion bar requires less than 16 lbs. of effort to raise — far less than any of our competitors
- ▶ Integrated plenum design channels engine-intake air through ducts removing particulate matter and moisture as it flows, providing cleaner, dryer air to air cleaner
- ▶ Large, curved, swept-back windshield helps deflect road debris and provides excellent visibility



CAB AND DOORS



Freightliner
M2 106



Hino
238-338



Kenworth
T270/370



With world class fit and finish the DuraStar cab is comfortable and durable — comprised of

- ▶ **High Strength Low Alloy (HSLA)** double-sided galvanized steel and standard cold rolled steel
- ▶ HSLA in critical cab areas: A-pillars, cab mounts, dash and underbody — for greater durability
- ▶ **“E-Coating”** — welded cab assembly receives a phosphate bath that etches the material for enhanced adhesion of the coating...then dipped into an electrostatically applied primer (E-coat)
- ▶ Base coat/clear coat paint process provides outstanding resistance to corrosion and fading, and is backed by a 12-month unlimited warranty

Cab Durability

A one-piece door frame and panels are major factors in cab durability, structure and sealing.

- ▶ One piece of steel surrounds entire door opening providing superior structural integrity

Door Design

Well balanced doors that open to 62° include integrated door check feature.

- ▶ Door handles are positioned low to the ground and are large enough to accommodate gloved hands
- ▶ E-Coated internal door construction components are designed to be operated in wet conditions

	BBC	107"	106"	108"	109"
Cab Construction	High strength, Low Alloy Reinforced, Cold-Rolled welded steel	Aluminum, with steel-reinforced firewall	Welded steel	Riveted aluminum and composite materials	
Cabs	Regular, 26" extended and 44" crew cabs	Regular, 26" extended and 48" crew cabs	Regular and 30" extended cabs only	Regular, 26" extended and 52.5" crew cabs	
Lo-Pro Chassis	Available	Not available	Available	Not available	
Cab Suspension	4-Point rubber mount, optional air	4-Point rubber mount, optional air	4-Point rubber mount, no air	3-Point rubber mount, no air	
Door Hinge Available	Internal door hinge design	Internal door hinge design	Internal door hinge design	Exterior piano-type door hinge design	
Door Width	36.75"	33.25"	34"	34"	
Largest Opening	38.5"	43.5"	41.5"	38.5"	
Clearance Space with Door at Full-open	30"	32.25"	29.25"	27.75"	
Door Swing	62°	69°	66°	74°	

Note: Additional options available with more expensive 106V model

Note: Required GVWR determines model which limits component availability
Only available with White, Red or Black cab paint

Note: Passenger door opened wide enough on our vehicle to hit mirror assembly

HOOD



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Freightliner
M2 106



Hino
238-338



Kenworth
T270/370



Hood Construction	3-piece high strength composite hood
Tilt Assist	Integral torsion bar
Hood Mechanics	Dual cable stays and springs
Hood Hatch	Available
Air Intake	Integrated, multiple duct plenum Inside/outside intake (snow valve) available
Hood Tilt Effort	15.7 lbs.

Hood Construction	Single-piece fiberglass hood
Tilt Assist	No torsion bar; dual gas struts
Hood Mechanics	Dual cable stays, no springs
Hood Hatch	Not available (106V only)
Air Intake	Plenum Inside/outside intake available
Hood Tilt Effort	25.9 lbs

Hood Construction	Single-piece composite hood
Tilt Assist	No torsion bar; single gas strut
Hood Mechanics	Dual cable stays, no springs
Hood Hatch	Not available
Air Intake	Plenum Inside/outside not available
Hood Tilt Effort	47.2 lbs

Hood Construction	4-piece Metton
Tilt Assist	Integral torsion bar assist
Hood Mechanics	Dual cable stays, no springs
Hood Hatch	Not available
Air Intake	Plenum Inside/outside not available
Hood Tilt Effort	73.4 lbs

The three-piece design of the DuraStar high-strength composite material hood is simpler and less expensive to repair than a single-piece design.

Integrated Plenum Design

- ▶ Intake air is channeled through a 180° duct and is directed across hood through another 90° duct into the air cleaner
- ▶ Effectively removes particles and moisture from the ambient atmosphere — providing cleaner, dryer air to the air cleaner
- ▶ Requires less reinforcing, resulting in a lighter and easier to manage hood

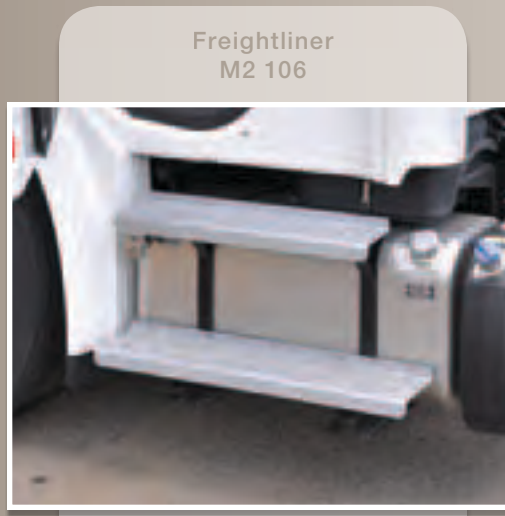
Well-Balanced, Lighter-Feeling Hood

- ▶ Opens easier than any measured competitor
- ▶ Features an integral torsion bar, dual cables and rebound springs for a light-weight feel and trouble-free design
- ▶ Offers an optional hood hatch on the driver's side providing access to most routine maintenance checks without opening the hood — something none of the competitors offer

Hood tilt methodology

The same, average sized person (5'10") performed 7 hood pull trials with a digital meter for each of the 4 vehicles. We discarded the high and low measurements and averaged the remaining 5 to determine our result. This result represents the greatest effort until the point momentum takes over.

STEPS AND GRAB HANDLES



Cab entry and egress is one of the most important features related to driver safety, satisfaction and productivity. DuraStar's slip-resistant cab steps and grab handles have been designed for the proper 3-point cab entry necessary to avoid job-related injuries and excessive downtime.

DuraStar Cab Steps

- ▶ A large surface area consistently spaced for predictable cab entry
- ▶ An off-set, stair-step design provides a stable platform for bulky work boots
- ▶ Natural spacing to help minimize driver fatigue

Grab Handles

Are well positioned, ergonomically designed and are available in different configurations:

- ▶ A-Pillar
- ▶ B-Pillar
- ▶ Interior or exterior, LH or RH side
- ▶ Best-in-class for driver safety

Step Depth	A	1st step: 6" 2nd step: 7.5"
Step Off-Set		1st – 2nd step: 4" 2nd step – cab: 8.5"
Step Spacing	B	Ground to 1st step: 17" 1st step – 2nd step: 13.5" 2nd step to cab sill: 10.75"
Spacing Consistency		1st – 2nd step: 3.5" 2nd step – cab: 2.75"
Average Spacing Consistency*		3.125"
Exterior Grab Handles		LH & RH at B-Pillar Chrome with anti-slip rubber insert or black aluminum
Interior Grab Handles		LH: B-Pillar RH: A- and B-Pillar

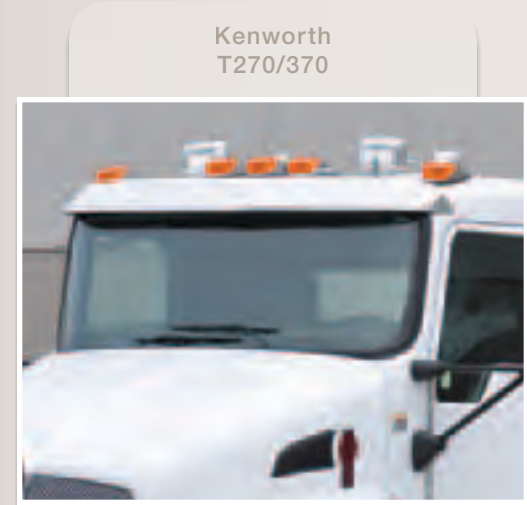
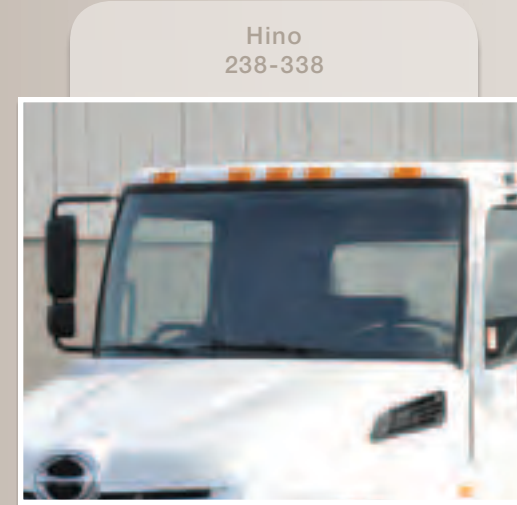
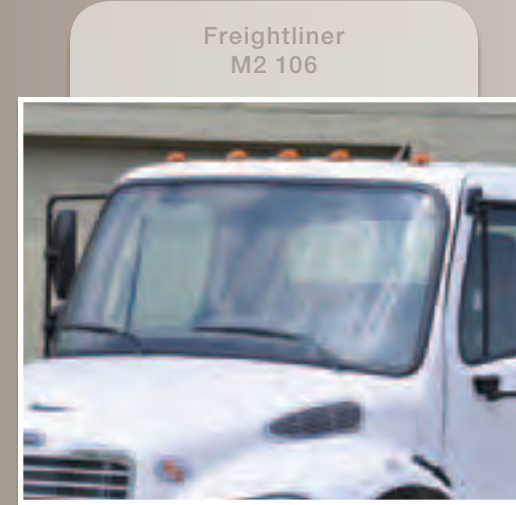
* Step spacing consistency can be described as the degree of spacing difference between each step and the adjacent step. Consistent step spacing is necessary for a safe, predictable cab entry and exit.

Step Depth		1st step: 8" 2nd step: 6.25"
Step Off-Set		1st – 2nd step: 3.75" 2nd step – cab: 5.75"
Step Spacing		Ground to 1st step: 15.5" 1st step – 2nd step: 14.25" 2nd step to cab sill: 10.5"
Spacing Consistency		1st – 2nd step: 1.25" 2nd step – cab: 3.75"
Average Spacing Consistency*		2.5"
Exterior Grab Handles		LH & RH at B-Pillar Chrome or with single rubber insert
Interior Grab Handles		LH: B-Pillar RH: A- and B-Pillar (optional)

Step Depth		1st step: 8.5" 2nd step: 8.5"
Step Off-Set		1st – 2nd step: 5.5" 2nd step – cab: 6.5"
Step Spacing		Ground to 1st step: 19" 1st step – 2nd step: 14" 2nd step to cab sill: 11"
Spacing Consistency		1st – 2nd step: 5" 2nd step – cab: 3"
Average Spacing Consistency*		4"
Exterior Grab Handles		Not Available
Interior Grab Handles		LH: A- and B-Pillar RH: A- and B-Pillar

Step Depth		1st step: 6" 2nd step: 7"
Step Off-Set		1st – 2nd step: 6.75" 2nd step – cab: 8"
Step Spacing		Ground to 1st step: 19.25" 1st step – 2nd step: 17.75" 2nd step to cab sill: 9"
Spacing Consistency		1st – 2nd step: 1.5" 2nd step – cab: 8.75"
Average Spacing Consistency*		5.125"
Exterior Grab Handles		LH & RH at B-Pillar
Interior Grab Handles		LH: A-Pillar RH: A-Pillar only

CAB GLASS



Large, Swept-Back Windshield

- ▶ Improves fuel economy
- ▶ Provides outstanding visibility and reduces the risk of damage from road debris
- ▶ Standard bonded design is less prone to leaks than a roped-in design
- ▶ Maximum rake increases visibility and improves aerodynamics

A-Pillars

- ▶ Minimize snow-packing
- ▶ Improve forward and peripheral visibility
- ▶ Reduce road noise while providing a dry and comfortable driver environment

Heated Windshield

- ▶ Not offered by these competitors
- ▶ Windshield is heated at the base to help reduce snow and ice packing in the cowl tray

Standard Functional Vent Window

- ▶ Improves ventilation without operating the HVAC
- ▶ Directs fresh air into the cab exactly where needed

Windshield Design

Total Glass Area **A**
Total Viewable Windshield Area

Windshield Rake Angle

Wiper Coverage **B**

Vent Window

Heated Windshield

Bonded

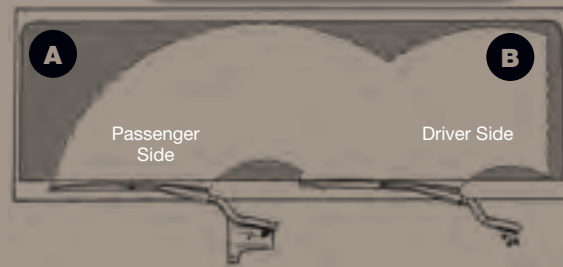
3,981 sq. in.
2,003 sq. in.

64°

1,268 sq. in., 63%

Standard, operating

Available



Freightliner
M2 106

Standard, bonded
Optional, roped-in
3,998 sq. in.
2,197 sq. in.

65°

1,427 sq. in., 65%

Standard, non-operating
Optional, operating
vent window

Not available

Note: Wing window is present,
but it is non-functional

Hino
238-338

Roped-in
4,007 sq. in.
1,985 sq. in.

75°

1,504 sq. in., 76%

No vent window

Not available

Note: Hino uses two different-
sized wipers; 25.5", 22"
Very flat windshield design

Kenworth
T270/370

Roped-in
3,234 sq. in.
1,298 sq. in.

70°

817 sq. in., 63%

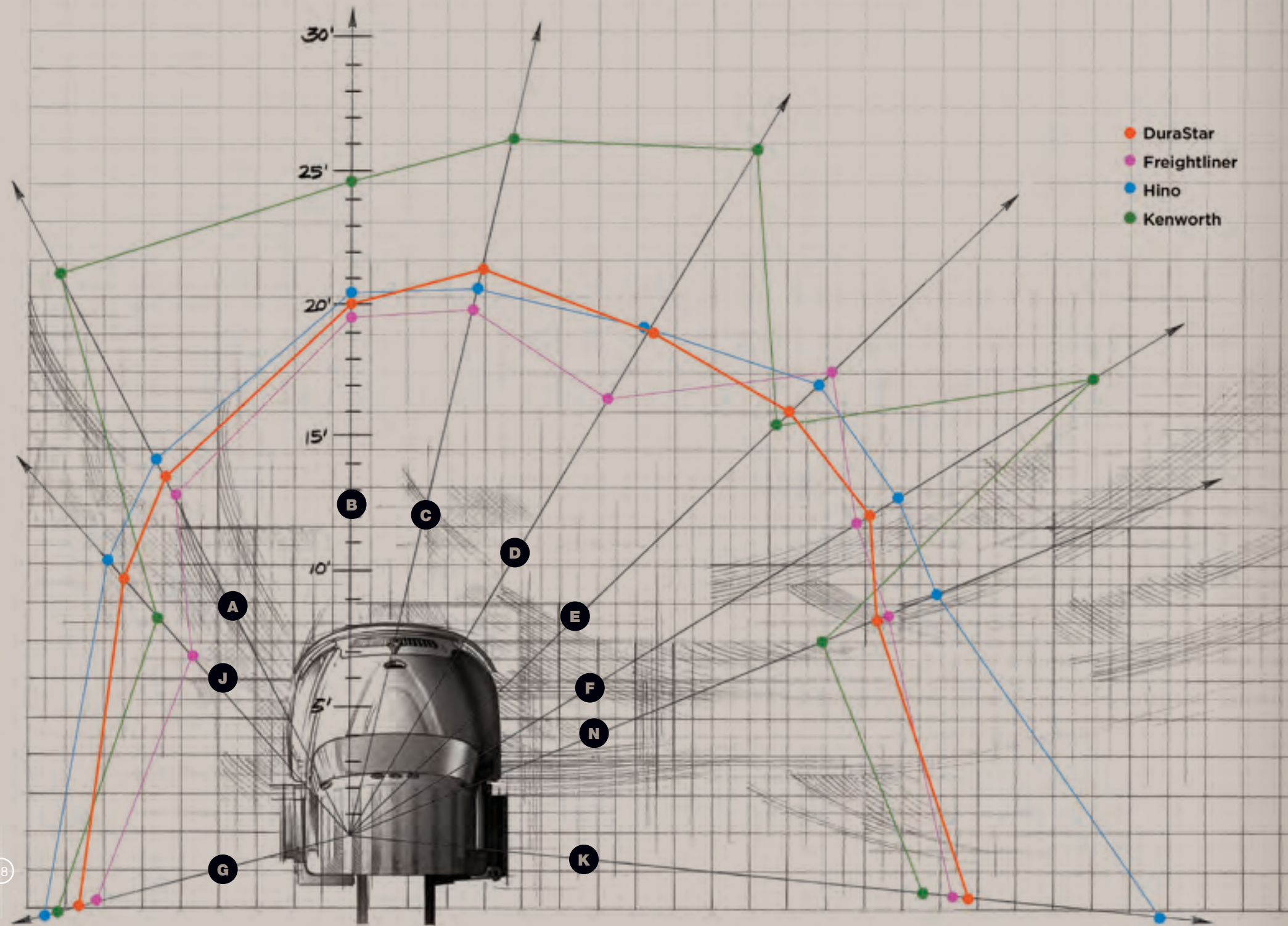
No vent window

Not available

Glass area methodology

Glass and wiper area was determined by placing a transparent overlay over the glass, outlining only the **viewable** area (total glass, less blacked-out, border areas, etc.) and transposing against scaled engineering graph paper.

VISIBILITY



Visibility is vital to driver comfort and safety. Poor sight lines — especially in congested areas — add stress and strain while reducing productivity. DuraStar provides consistent forward visibility that is competitive in all areas.

Many things affect visibility:

- ▶ Hood shape and length
- ▶ Windshield design
- ▶ Positioning of pillars, wipers, mirrors and hood ornaments
- ▶ Height and design of the fenders and door glass

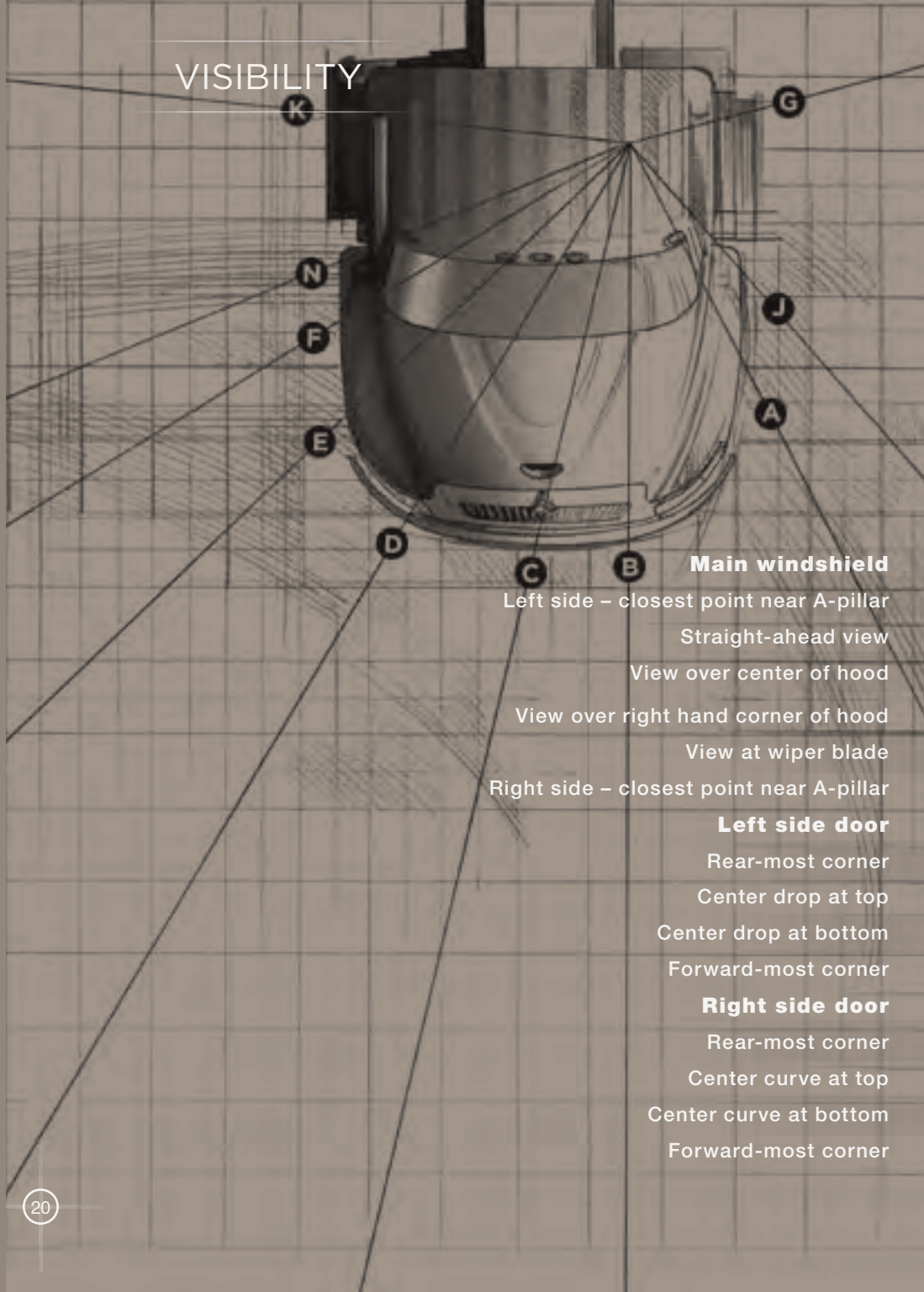
Visibility Methodology

As in all our measurement methods, our visibility ranging process remained absolutely consistent across all three vehicles.

Our standard reference position of 49" in the vertical plane and 28" in the horizontal plane, centered against the driver's seat back, represents a natural, comfortable seating position for an average sized (5'10") person.

The ranging pivots about our reference position and projects at regular intervals, as represented by the noted variables. The point at which the projection becomes visible at ground level represents the closest that spot becomes visible to the driver, as seated in our reference position.

VISIBILITY



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Measurement	Letter	Value
Main windshield		
Left side – closest point near A-pillar	A	185"
Straight-ahead view	B	240"
View over center of hood	C	261"
View over right hand corner of hood	D	268"
View at wiper blade	E	271"
Right side – closest point near A-pillar	F	277"
Left side door		
Rear-most corner	G	126"
Center drop at top	H	140"
Center drop at bottom	I	140"
Forward-most corner	J	153"
Right side door		
Rear-most corner	K	280"
Center curve at top	L	276"
Center curve at bottom	M	249"
Forward-most corner	N	256"

Freightliner M2 106



176"
232"
244"
255"
297"
273"
120"
n/a
n/a
107"
279"
n/a
n/a
258"

Hino 238-338



192"
242"
252"
268"
292"
292"
139"
n/a
n/a
162"
363"
n/a
n/a
284"

Kenworth T270/370



285"
301"
320"
359"
269"
362"
133"
155"
147"
132"
258"
266"
220"
231"

CAB INTERIOR

Quality Ride

- ▶ Four-point rubber cab mounts isolate the cab from road noise and vibration
- ▶ Premium cab insulation and tight, automotive-grade cab seam tolerances reduce noise vibration and harshness generated by severe temperatures and road noise

Comfort and Productivity

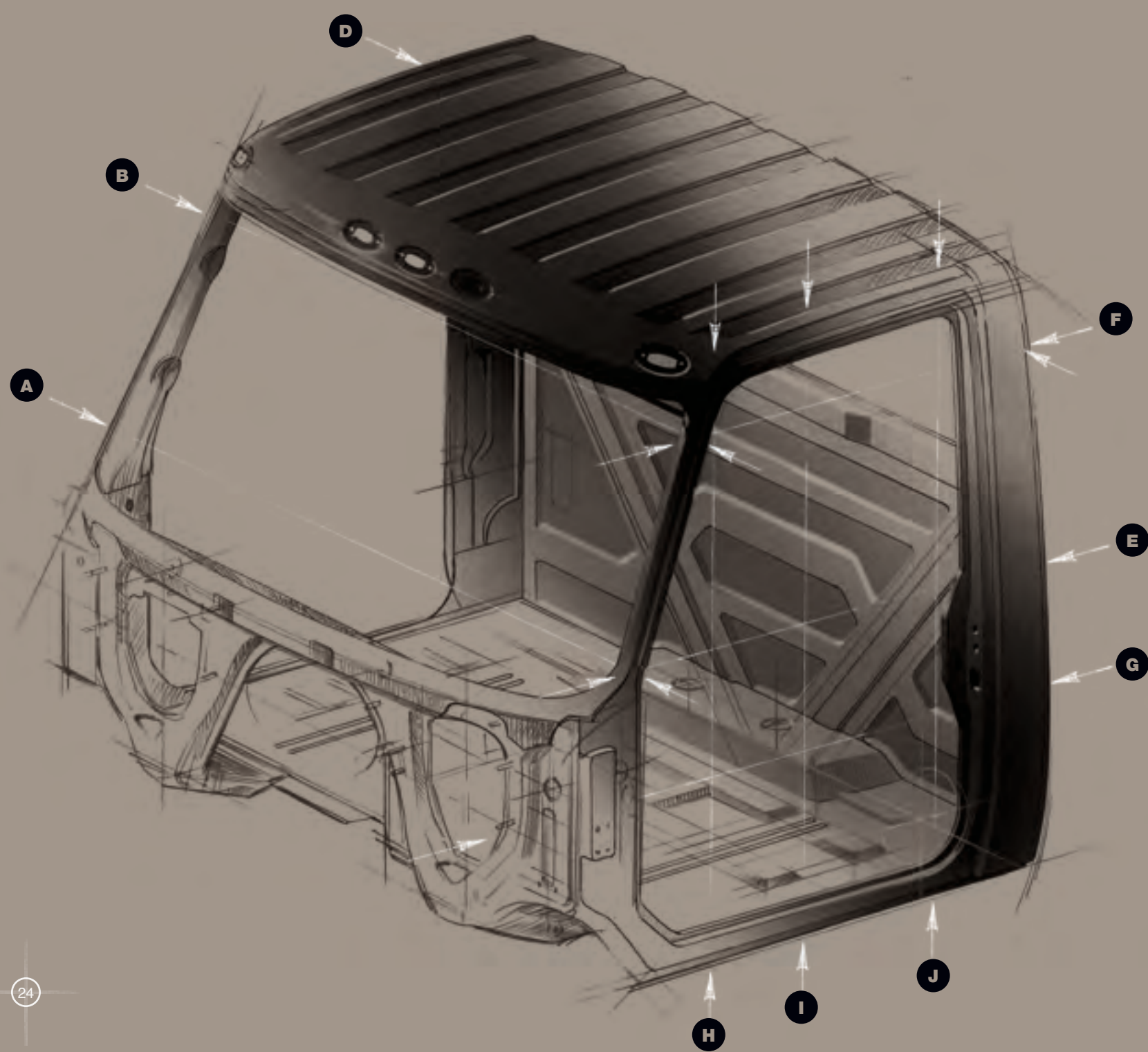
- ▶ The 82" cab is wide enough to be comfortable on the inside ... and small enough to keep it maneuverable on the job
- ▶ High-output HVAC systems and available state-of-the-art filtration systems help keep occupants productive in extreme environments
- ▶ Standard overhead console, dual cup holders, fully trimmed cab, driver's door pocket, the list goes on...
- ▶ Optional ergonomic center panel

Easy Upfitting

- ▶ Center dash panels are able to accommodate banks of auxiliary switches for a more seamless integration of aftermarket controls
- ▶ Flat cab floor allows for routine installation of body control equipment



CAB SIZE



The DuraStar Advantage

In medium duty applications, you need a cab that is large enough to pack a punch, but small enough to be quick on its feet.

- ▶ DuraStar is both
- ▶ The cab is spacious, yet comfortably trim ... with an overall exterior width of only 82"
- ▶ A roomy, comfortable cab — with plenty of space for body equipment controls

Interior

- ▶ Interior width at the side glass is nearly 3" wider than the M2, and nearly 12" wider than the T270
- ▶ Cab depth, where it matters most — center line fuel pedal to back wall — is the best, nearly 6" deeper than the T270
- ▶ Cab height is better than the M2 and the T270

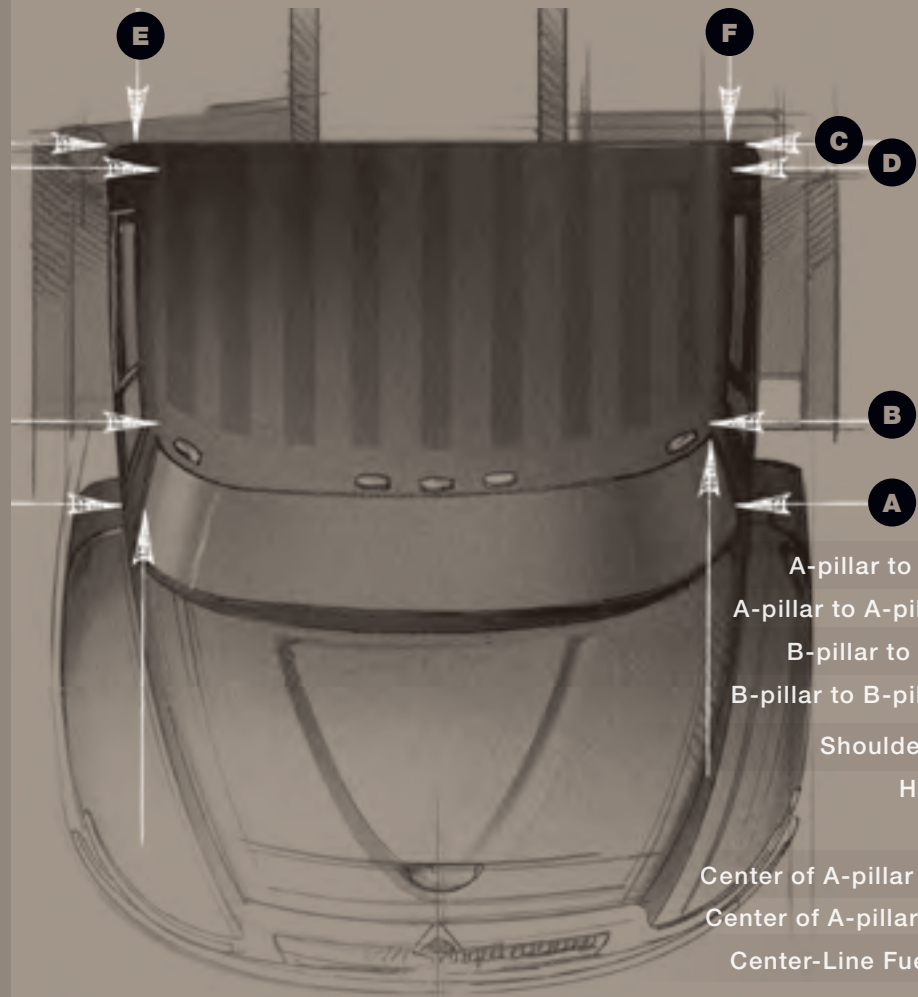
DuraStar's Flat Floor

- ▶ Supports trouble-free installation of upfitter equipment and body control systems
- ▶ The M2 cab floor rises between and dramatically under the seats obstructing access and preventing installation of safety equipment

Cab Measurement Methodology

All vehicle measurements were obtained by the same personnel, in the same manner, at the same interior reference points — using (wherever possible) a digital range meter. Measurements were rounded off to the nearest .25".

CAB SIZE



Width

A-pillar to A-pillar @ Dash	A	69.25"
A-pillar to A-pillar @ Headliner	B	65.75"
B-pillar to B-pillar @ Dash	C	72.00"
B-pillar to B-pillar @ Headliner	D	68.50"
Shoulder Level @ Glass		79.25"
Hip Level @ Door		71.00"

Depth

Center of A-pillar to BOC @ Dash	E	43.00"
Center of A-pillar to BOC @ Roof	F	36.25"
Center-Line Fuel Pedal to BOC	G	46.50"

Height

Floor To Ceiling @ Edge Of Dash	H	52.25"
Floor To Ceiling @ Front Of Seat	I	56.50"
Floor to Ceiling @ B-pillar	J	56.00"
Cab Volume (cu. ft.)		91.80

DURAStar
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Freightliner
M2 106



Hino
238-338

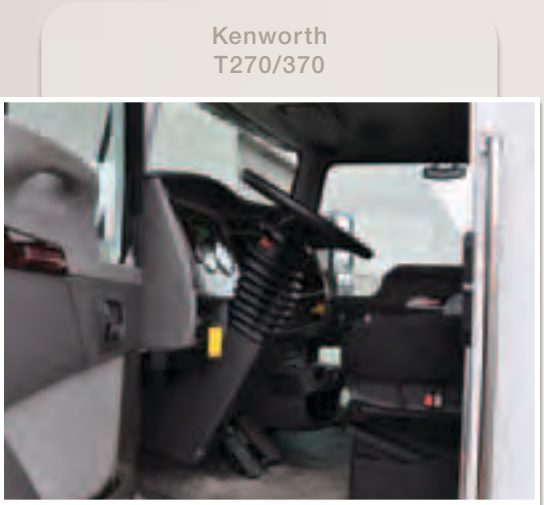
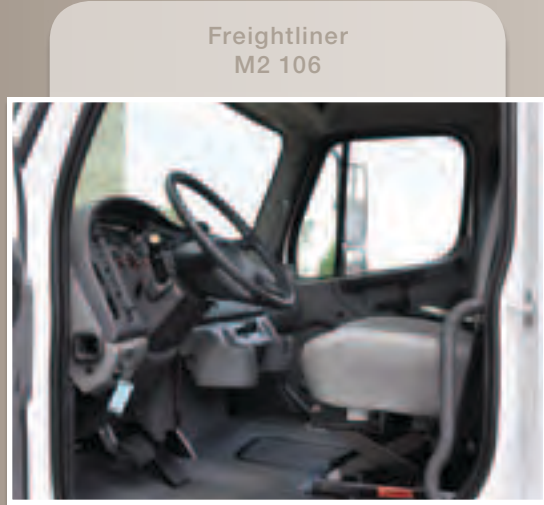


Kenworth
T270/370



	73.50"	70.00"	57.00"
	65.25"	67.25"	56.75"
	72.00"	73.00"	65.00"
	67.00"	72.00"	65.25"
	76.75"	78.75"	67.75"
	71.75"	74.00"	62.75"
	45.25"	45.50"	46.25"
	39.50"	42.00"	44.75"
	46.00"	45.00"	40.75"
	51.50"	54.00"	51.50"
	56.00"	60.00"	55.75"
	49.50"	60.00"	56.00"
	91.70	104.66	84.41

DRIVER ENVIRONMENT



Head Room - Seat low	A	39.50"
Head Room - Seat high		34.00"
Leg Room - Smallest	B	20.70"
Leg Room - Largest		29.40"
Average Leg Room*		25.03"
Maximum Belly Room	C	17.00"
HVAC vents at dash at windshield		6 2
Interior Noise Levels @ 750 RPM		60.4-67.0 db
@ 1500 RPM		66.8-75.1 db
Exterior Noise Levels** @ 750 RPM		72.6-75.4 db

* Seat centered horizontally and vertically
 ** 6 feet forward of grille

Freightliner M2 106

Head Room - Seat low	34.50"
Head Room - Seat high	30.50"
Leg Room - Smallest	19.05"
Leg Room - Largest	28.32"
Average Leg Room*	23.60"
Maximum Belly Room	21.00"
HVAC vents at dash at windshield	4 5
Interior Noise Levels @ 750 RPM	58.6-66.6 db
@ 1500 RPM	68.8-72.6 db
Exterior Noise Levels** @ 750 RPM	75.4-78.2 db

Hino 238-338

Head Room - Seat low	43.50"
Head Room - Seat high	40.50"
Leg Room - Smallest	21.16"
Leg Room - Largest	27.40"
Average Leg Room*	24.25"
Maximum Belly Room	18.25"
HVAC vents at dash at windshield	4 1
Interior Noise Levels @ 750 RPM	65.0-69.9 db
@ 1500 RPM	65.9-70.0 db
Exterior Noise Levels** @ 750 RPM	74.2-75.9 db

Note: Gauges partially obstructed

Kenworth T270/370

Head Room - Seat low	39.75"
Head Room - Seat high	35.25"
Leg Room - Smallest	19.08"
Leg Room - Largest	26.67"
Average Leg Room*	22.83"
Maximum Belly Room	16.75"
HVAC vents at dash at windshield	4 3
Interior Noise Levels @ 750 RPM	71.7-77.0 db
@ 1500 RPM	70.9-75.4 db
Exterior Noise Levels** @ 750 RPM	74.8-81.5 db

Noise level methodology

Noise levels were measured using a tripod-mounted sound level meter (accuracy rated to ±2 db) positioned consistently for each model. Readings were taken over an approximate 20-second recording with the high and low noted for that period.

INTERIOR EQUIPMENT



DURAStar
POWERED BY MAXFORCE



Freightliner
M2 106



Hino
238-338



Kenworth
T270/370



Trim Levels 2 available trim levels

Available Dash Panel Configurations Flat panel and angled, ergonomic center panel

- Interior Features
- Standard overhead console with retainer nets
 - (2) Standard console-mounted cup holders
 - Standard driver door storage compartment
 - Standard full-width bench seat

Seat Manufacturers National Seating, Seats Inc., and Gra-Mag

NFPD/SCBA* Compliant Seating Available

Air-ride seat without air brakes Available self-contained air-ride seat

Horizontal seat travel 7"

Vertical seat travel 5.5"

1 interior trim level, 2 convenience packages

Standard, flat dash center panel
Optional, angled center panel

- Standard overhead console, optional retainer nets
- (2) Standard dash-mounted cup holders
- Optional door storage compartment
- Optional full-width bench seat

Seats Inc., National Seating, Sears, Bostrom

Compliant Seating Available

Self-contained air-ride seat is not available

9.25"

4"

2 interior trim levels

No optional dash configurations

- Standard overhead console with covers
- Standard cup holders
- Standard door storage compartments
- Bench seat is not available

Gra-Mag

Not available

Self-contained air-ride seat is not available

6"

3"

1 trim level, 2 accents

No optional dash configurations

- Overhead console is not available
- (1) Standard cup holder located under dash
- Standard door pockets both doors
- Bench seat is not available

Kenworth, Seats Inc.

Compliant Seating Available

Self-contained air-ride seat is not available

6.75"

4.5"

* National Fire Protection Association/Self Contained Breathing Apparatus

CHASSIS

CHASSIS

Frame and Axle

- ▶ 50K, 80K, and 120K yield strengths and a wide range of RBM ratings
- ▶ Available full outer C-Channel reinforcement and bolt-on front frame extension
- ▶ Custom frame piercing minimizes the number of open holes and maximizes frame strength
- ▶ Frames are squared prior to assembly to ensure proper geometry during assembly
- ▶ Set-back front axle with axles available from three major manufacturers

Electrical

- ▶ Multiplexed electrical system reduces wiring and simplifies circuit design
- ▶ Well organized and efficiently-routed chassis lines are color-coded and numbered to help prevent electrical problems and simplify diagnostics

Diamond Logic® Application Solutions

- ▶ Streamlines the process of integrating equipment into the chassis electrical system
- ▶ Utilizes chassis diagnostics tools for integrated body equipment improving quality and customer satisfaction

Exhaust Equipment

- ▶ More available configurations for the customer and greater flexibility for the upfitter
- ▶ Ensures efficient upfitting and helps minimize post-production costs



CHASSIS

FRAME AND EQUIPMENT



DURAStar
POWERED BY MAXFORCE



Freightliner
M2 106



Hino
238-338



Kenworth
T270/370



DuraStar's Frames

Offer a range of section modulus, yield strengths and RBM ratings.

Custom Piercing

- ▶ Minimizes open holes and maximizes strength

Proper Squaring

- ▶ Frames, crossmembers and spring hangers are arranged and clamped in place prior to assembly to ensure proper squaring

Additional Frame Benefits

- ▶ Available full outer C-Channel reinforcement — unlike our three competitors
- ▶ Available bolt-on front frame extension — none of the three competitors offer this
- ▶ Chassis routing is well organized, clipped and off-set from the rail to prevent electrical problems
- ▶ **50–100 Gallon Fuel Tanks**
- ▶ Available in either rectangular or D-style — Hino only offers rectangular tanks

Yield strength (PSI)	50K, 80K, 120K
RBM	917,600 – 3,806,000
Section Modulus	10.74 – 31.72
Available Reinforcements	Outer C-Channel
Front Frame Extension	20" bolt-on
Bumpers	Single-piece steel (painted or chromed); steel HD; aerodynamic
Fuel Tank Construction	Aluminum
Design	Rectangular or D-style (D-style beveled or non-beveled)
Depth or Cross-Section	13", 16" or 19" depth
Capacities	50 – 100 gallon
Treatment	Polished or unpolished

Yield strength (PSI)	50K, 80K, 120K
RBM	508,000 – 3,715,000
Section Modulus	10.158 – 31.000
Available Reinforcements	Inner C-Channel
Front Frame Extension	Not Available (106V only)
Bumpers	Single or three-piece steel (painted or chrome); HD steel; flexible and collapsible ends
Fuel Tank Construction	Aluminum
Design	Rectangular or Cylindrical
Depth or Cross-Section	23", 25" or 26" cross-section
Capacities	28 – 100 gallon
Treatment	Polished or unpolished

Yield strength (PSI)	80K or 120K
RBM	1,031,900 – 3,866,400
Section Modulus	13.02 – 16.11
Available Reinforcements	Not Available
Front Frame Extension	Not Available
Bumpers	Single or three-piece steel (black, white or chromed); no HD
Fuel Tank Construction	Aluminum
Design	Rectangular only
Depth or Cross-Section	19" cross-section
Capacities	50 (clean CA), 52 or 90 gallon
Treatment	Polished not available

Yield strength (PSI)	120K
RBM	1,254,767 – 2,925,000
Section Modulus	9.80 – 24.37
Available Reinforcements	Inner C-Channel
Front Frame Extension	Not Available
Bumpers	Single piece painted steel; aerodynamic painted or chromed; no HD
Fuel Tank Construction	Steel or aluminum
Design	Rectangular or Cylindrical
Depth or Cross-Section	22" or 24.5" cross-section
Capacities	45 – 120 gallon
Treatment	Polished or unpolished

FRONT AXLE AND EQUIPMENT



DURAStar
POWERED BY MAXFORCE



40" Set-Back Front Axle

- ▶ Up to 50° wheel cut achievable with select specifications
- ▶ Improves maneuverability and weight transfer to the front axle
- ▶ Effective weight transfer maximizes payload capacity
- ▶ Wide track front axles provide increased wheel cut or improved turn radius, greater maneuverability and improved productivity

Three OEM Axle Choices

- ▶ Represents an opportunity for additional cost-reduction for the operator
- ▶ Greater parts commonality within a fleet means fewer parts for the maintenance department to stock

Additional DuraStar Advantages

- ▶ A very competitive range of axle capacities
- ▶ A factory-installed front driving axle with double-carden joints improves wheel cut
- ▶ Off-set gear housing lowers chassis height
- ▶ Hino does not offer factory installed front-drive axles
- ▶ Front spring pins have maintenance free rubber bushings

Axle Set-Back	40.0"
Manufacturers Capacities	International, Meritor, Dana 8,000 – 14,000 lbs.
Front Driving Axles Capacities	Fabco 8,000 – 10,000 lbs.
Front Suspensions Capacities	Parabolic taper-leaf 8,000 – 14,000 lbs.
Measured Wheel Cut (RH wheel, RH turn)	49° as configured
RH curb-to-curb turning radius (with above wheel cut, 270" WB and 11R22.5 tires)	34.5'
Brakes	Four-wheel disc
Steering	TRW TAS-40 power steering

Freightliner
M2 106



Axle Set-Back	40.9"
Manufacturers Capacities	Axle Alliance (FTL), Meritor 6,000 – 20,000 lbs.
Front Driving Axles Capacities	Meritor 10,000 – 16,000 lbs.
Front Suspensions Capacities	Taper-leaf or multi-leaf 6,000 – 20,000 lbs.
Measured Wheel Cut (RH wheel, RH turn)	43°
RH curb-to-curb turning radius (with above wheel cut, 270" WB and 11R22.5 tires)	38.3'
Brakes	Front: Disc Rear: 15"x6" drum
Steering	TRW THP-45 power steering

Hino
238-338



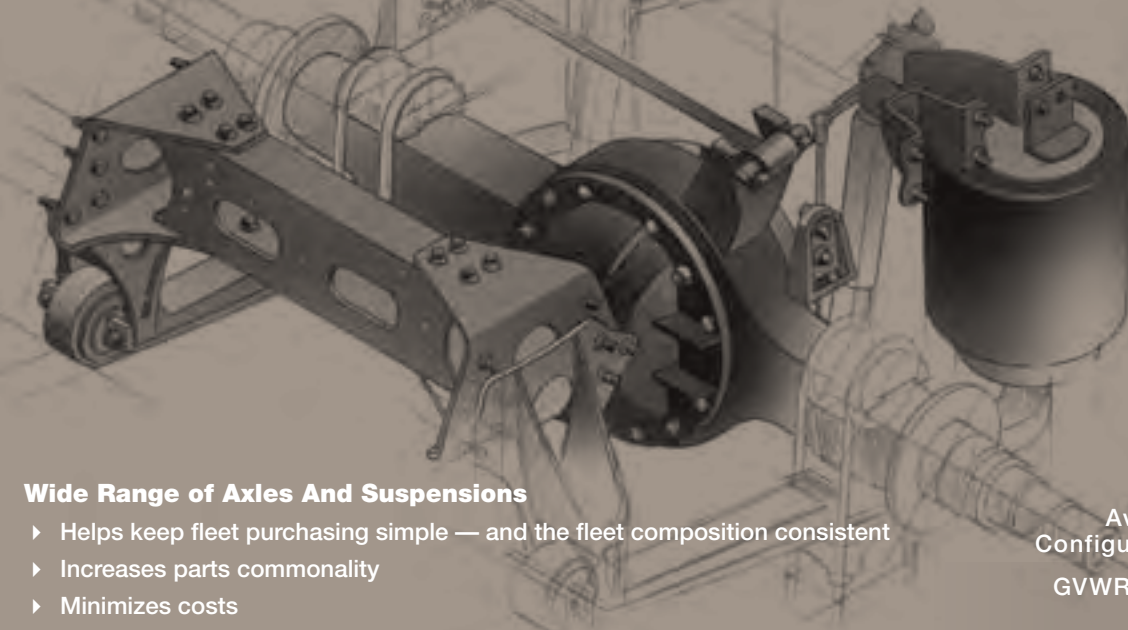
Axle Set-Back	39.3"
Manufacturers Capacities	Meritor only 8,000 – 14,000 lbs.
Front Driving Axles Capacities	Not available
Front Suspensions Capacities	Taper-leaf 8,000 – 12,000 lbs.
Measured Wheel Cut (RH wheel, RH turn)	51°
RH curb-to-curb turning radius (with above wheel cut, 270" WB and 11R22.5 tires)	33.5'
Brakes	Four-wheel disc
Steering	TRW recirculating ball with hydraulic booster, integral type
Note: Suspensions are packaged with axles and are not individually selectable	

Kenworth
T270/370



Axle Set-Back	37.2"
Manufacturers Capacities	Dana only 8,000 – 14,600 lbs.
Front Driving Axles Capacities	Fabco 10,000 – 14,000 lbs.
Front Suspensions Capacities	Taper-leaf 8,000 – 20,000 lbs.
Measured Wheel Cut (RH wheel, RH turn)	31°
RH curb-to-curb turning radius (with above wheel cut, 270" WB and 11R22.5 tires)	49.5'
Brakes	Four-wheel disc
Steering	TRW THP-60 power steering

REAR AXLE AND EQUIPMENT



Freightliner
M2 106



Hino
238-338



Kenworth
T270/370



Wide Range of Axles And Suspensions

- ▶ Helps keep fleet purchasing simple — and the fleet composition consistent
- ▶ Increases parts commonality
- ▶ Minimizes costs

Axles

- ▶ 4x2, 4x4 or 6x4 configurations
- ▶ Capacities from 12,200 – 46,000 lbs.

International® Ride Optimized Suspension (IROS)

- ▶ Designed for on-highway applications
- ▶ Adjusts to different loads to maintain constant frame height
- ▶ The spring rate will vary with load (softer with light loads and stiffer with heavy loads) to protect cargo by minimizing shock and vibration
- ▶ Excellent ride, handling and stability

International® 4-Spring Multileaf Suspension

- ▶ A separate set of springs for each axle
- ▶ Torque rods maintain proper axle alignment
- ▶ Shot-peened leaf springs for improved strength and reliability

Available Configurations	4x2, 4x4, 6x4
GVWR Range	23,500 – 60,000 lbs
Single Axles Capacity	Meritor 13,500 – 30,000 lbs. Dana 12,200 – 30,000 lbs.
Tandem Axles Capacity	Meritor 34,000 – 46,000 lbs. Dana 34,000 – 46,000 lbs.
Differential Lock	Available
Suspensions	International®: Vari-Rate, 4-spring Multileaf, International Ride Optimized Suspension (IROS) Hendrickson: HMX, RT Chalmers: 1030 Series

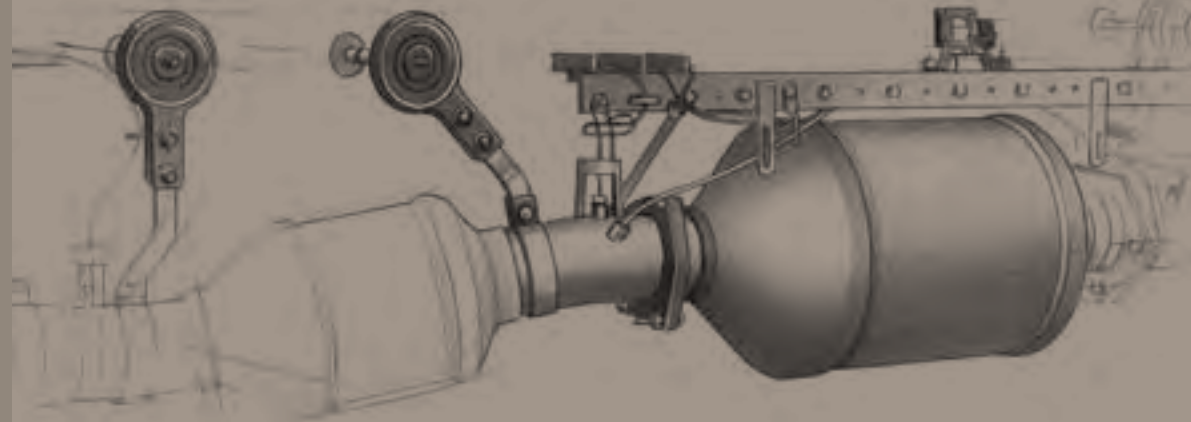
Available Configurations	4x2, 4x4, 6x4
GVWR Range	19,000 – 60,000 lbs.
Single Axles Capacity	Meritor 13,000 – 30,000 lbs. Axle Alliance 13,000 – 23,000 lbs.
Tandem Axles Capacity	Meritor 40,000 – 46,000 lbs. Axle Alliance 40,000 – 46,000 lbs.
Differential Lock	Available
Suspensions	Freightliner: Multileaf, Fatleaf, Taperleaf, 4-spring, AirLiner, TufTrac Hendrickson: FIREMAAX, PRIMAAX, HAULMAAX, RT

Available Configurations	4x2 only
GVWR Range	23,000 – 33,000 lbs. (no tandems)
Single Axles Capacity	Meritor 17,000 – 19,000 lbs.
Tandem Axles Capacity	Tandems not available
Differential Lock	Available
Suspensions	No specialized suspensions

Note: In order to maintain the closest possible comparison, Hino 238, 258, 268 and 338 model specifications were also considered here – since each model carries a specific GVWR

Available Configurations	4x2, 4x4 (6x4 T370 only)
GVWR Range	24,000 – 54,600 lbs.
Single Axles Capacity	Dana Spicer 13,500 – 26,000 lbs.
Tandem Axles Capacity	Dana Spicer 40,000 – 44,000 lbs.
Differential Lock	Available
Suspensions	Kenworth Air Reyco: Taperleaf, Multileaf Chalmers: 854 Series Hendrickson: HAS, RT

EXHAUST SYSTEM



Exhaust System Offerings

- ▶ Provide the production flexibility of nearly 40 exhaust configurations to help keep post-production costs and upfitting time to a minimum

Flexible Configurations

- ▶ Horizontal or vertical
- ▶ ATD (After-Treatment Device) mounted vertically or horizontally, LH or RH side, BOC or under-cab with LH or RH tailpipes.
- ▶ Available with the oxidation catalyst and diesel particulate filter as separate components
- ▶ Available space-saver, integrated single-can configuration
- ▶ Available clean-CA above and below rail
- ▶ No DEF tank required, freeing valuable frame space for greater upfitter flexibility

Design

- ▶ To allow for engine/frame twist and temperature change expansion, the exhaust system utilizes a rubber isolator design with all hanger brackets — something not all manufacturers include

Horizontal ATD and tailpipe

ATD mounted RH or LH side, under cab or BOC with special options available for Mid Cab Tractor

Horizontal ATD with vertical tailpipe

ATD mounted RH or LH side, under cab or BOC, outside rail allows for clean CA option

Vertical ATD and tailpipe

Vertical ATD mounted RH side with vertical pipe

Tailpipe treatment

Straight or turn-out

Available exhaust heights

5 options: 8'10" – 13'3"

Freightliner
M2 106



In-line DPF and SCR
Parallel DPF and SCR, BOC

DPF/SCR mounted BOC

DPF/SCR mounted under-step, vertical pipe, RH or LH

Straight or turn-out

4 options: 10' – 13'6"

Notes: Options are engine-specific

Hino
238-338



DPF/SCR mounted under-step with horizontal pipe

DPF/SCR mounted under-step with vertical pipe

Vertical tailpipe only available on the 338CT

No options

No options

Notes: Basically 2 options; either horizontal or vertical tailpipe – DPF/SCR arrangement remains the same
EPA07 ATD image (EPA10 similar)

Kenworth
T270/370



In-line, DPF/SCR, RH only
Parallel DPF/SCR

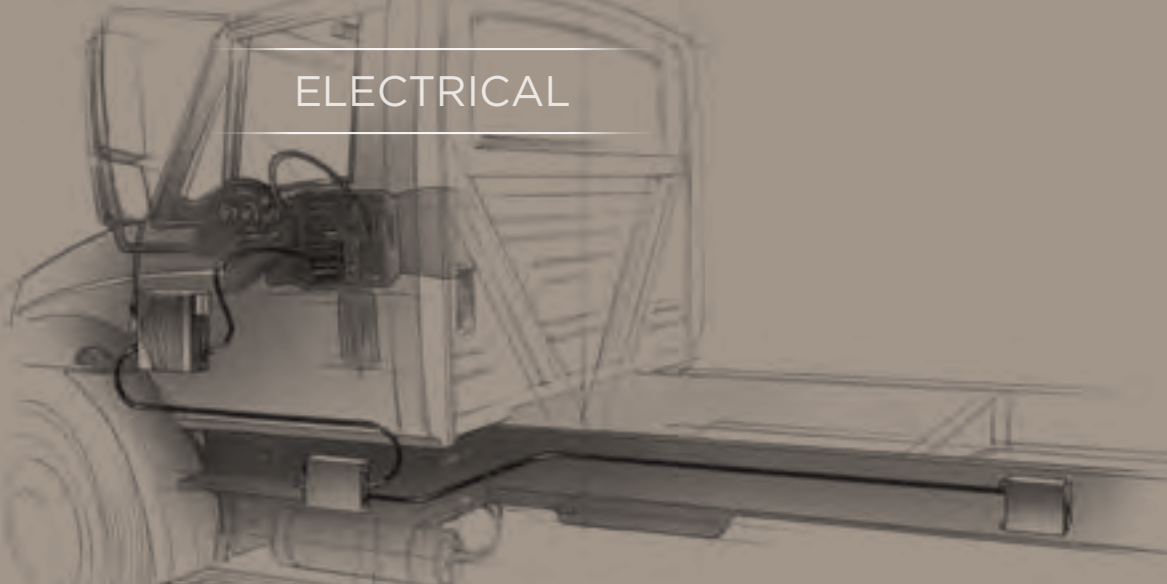
DPF/SCR mounted under-step, RH stack only

BOC vertical. parallel-mounted DPF and SCR

Turn-out only

7 options: 24" – 58"

ELECTRICAL



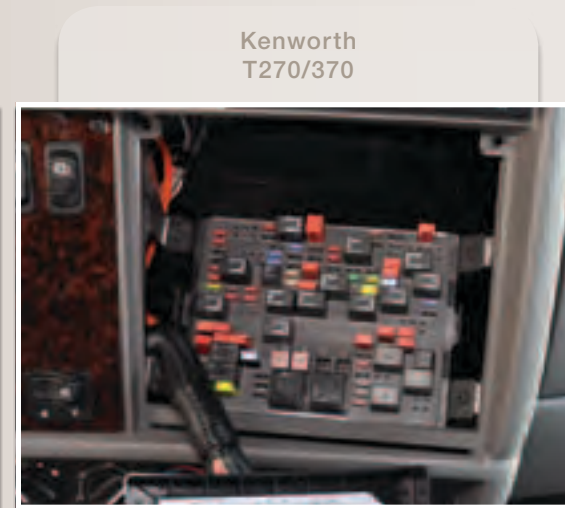
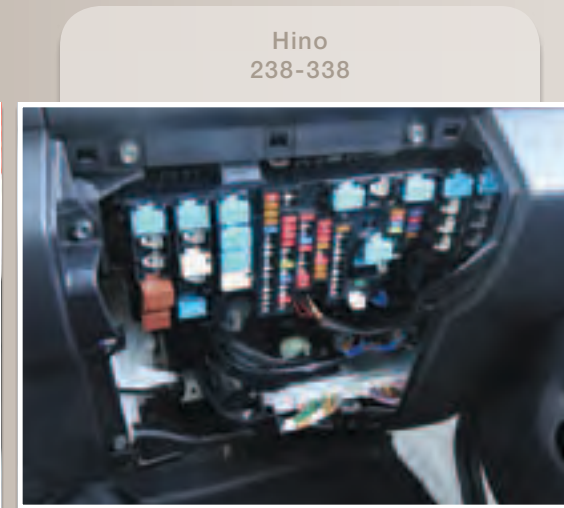
Diamond Logic® Electrical System

Simplifies the integration of added application-specific equipment to the chassis electrical system. None of these competitors offer anything this comprehensive.

- ▶ Factory installed switches designed specifically for International's instrument panel
- ▶ Labels included with optional body integration switches
- ▶ Factory installed warning lights are incorporated in the gauge cluster
- ▶ Reduced Installation time – Centralized connections outside the cab
- ▶ Improved Quality – Eliminates the need to route wires into the cab or splice into chassis circuits
- ▶ Smart Diagnostics – Utilize chassis diagnostic tools for integrated body equipment
- ▶ Remote Power Module serves as the gateway into International's electrical system. This module can be utilized to control many different types of added equipment with additional software
- ▶ Software available to program custom body functions

State-of-the-Art Multiplexing Technology

- ▶ The foundation for communication between functional areas of the vehicle
- ▶ Reduces wiring — by sending multiple electrical communication signals via a data link
- ▶ Electronic circuit modules and software perform vehicle functions instead of a complex wiring harness with electro-mechanical relays and switches



Electrical System Design	Multiplexed
Factory-Installed Body Integration System or Components	Diamond Logic® Applications Solutions
Electrical Panel Location	Passenger dash panel
Alternator	
Manufacturers	Leece-Neville, Delco Remy, Bosch
Amperage	120 – 320 amps
Mounting	Pad mounted
Batteries	2 or 3 1100 – 2775 CCA
Battery Disconnect	In cab or at battery box
Jump-start Studs	Inside or outside battery box
Block Heaters	Under cab door or front bumper

Electrical System Design	Multiplexed
Factory-Installed Body Integration System or Components	Available auxiliary switch banks and power-distribution box wiring for customer-installed equipment
Electrical Panel Location	Under-hood
Alternator	
Manufacturers	Leece-Neville, Delco
Amperage	160 – 320 amps
Mounting	Pad mounted
Batteries	2, 3 or 4 1850 – 4400 CCA
Battery Disconnect	In cab or at battery box
Jump-start Studs	Under hood, BOC or battery box
Block Heaters	Under driver door

Electrical System Design	Conventional electrical system
Factory-Installed Body Integration System or Components	Not available
Electrical Panel Location	Passenger dash panel
Alternator	
Manufacturers	Delco
Amperage	130 amps
Mounting	Bracket mounted
Batteries	2 or 3 1200 – 2100 CCA
Battery Disconnect	Not Available
Jump-start Studs	Not available
Block Heaters	Under driver's cab step

Electrical System Design	Multiplexed
Factory-Installed Body Integration System or Components	Optional factory-installed auxiliary, PTO-control switches and body harnesses
Electrical Panel Location	Dash center panel
Alternator	
Manufacturers	Leece-Neville, Paccar, Bosch
Amperage	130 – 270 amps
Mounting	Pad mounted
Batteries	2 or 3 1400 – 2700 CCA
Battery Disconnect	Cab interior
Jump-start Studs	BOC – below top flange
Block Heaters	Driver's side cab step-mounted

POWERTRAIN

MaxxForce® Advanced EGR

A sophisticated, in-cylinder solution meets EPA 2010 emissions standards using proprietary emissions technology.

- ▶ Simple: refined from 2007 EGR system
- ▶ Reliable: no liquid urea tanks, additional catalysts, sensors, gauges or electronics
- ▶ Dependable: over 9 million miles of experience
- ▶ Cost-effective: stable and predictable residual value
- ▶ Turn-key: business as usual for our customers

MaxxForce® Engines

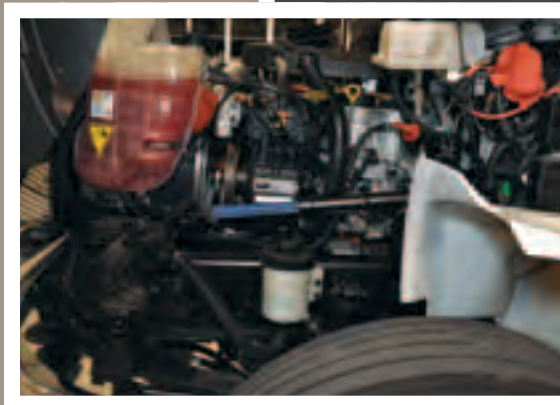
- ▶ 3 proprietary engines: MaxxForce® 7, DT and 9
- ▶ Industry-leading performance, reliability and resale
- ▶ Power ratings: 215 – 330 HP
- ▶ Torque ratings: 560 – 950 lbs.-ft.

Transmissions and Equipment

- ▶ Eaton Fuller and Allison
- ▶ Cost-effective 5, 6, 7 and 10-speed manuals
- ▶ Versatile automated and manual transmissions
- ▶ Durable and easy to operate Allison automatics

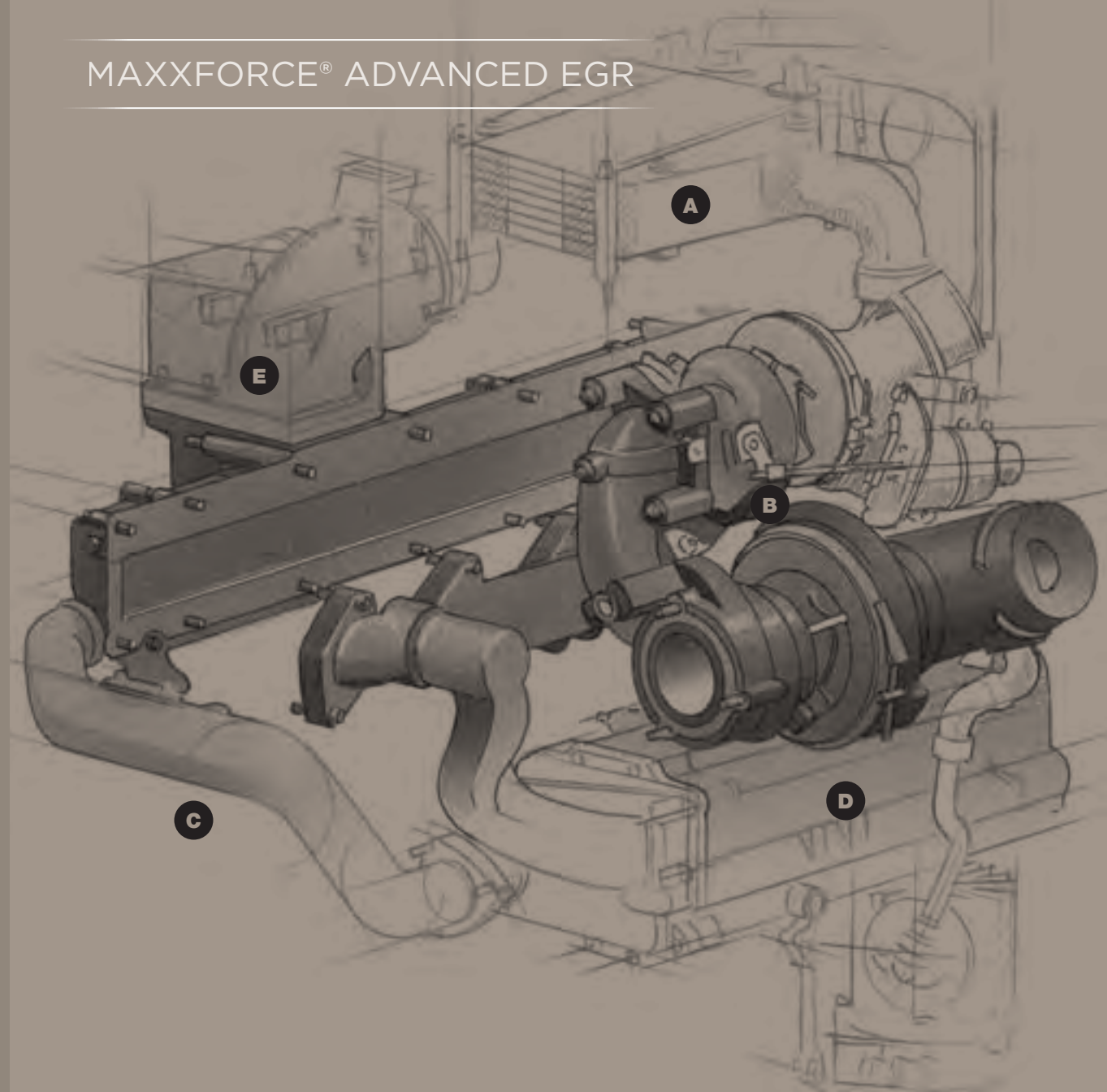
Serviceability

- ▶ Easy routine serviceability yields greater longevity
- ▶ Most routine service points located on driver's side
- ▶ Crucial fluids are easy to locate and read
- ▶ Many dependability-related features are standard



MAXXFORCE

MAXXFORCE® ADVANCED EGR



2010 Exhaust Gas Recirculation (EGR) system

- A.** Interstage cooler (for engines 245 HP and above)
- B.** Regulated 2-stage turbocharger
- C.** EGR crossover, rear of engine, into integrated passage of intake manifold
- D.** Single 2-pass modular EGR cooler
- E.** Integrated EGR valve, mixer, grid heater and throttle housing

INTERNATIONAL® TRUCKS POWERED BY MAXXFORCE® ENGINES

Dedicated to no-hassle emissions solutions today and tomorrow, enabling customers to focus on their business.

Smarter. Easier. Faster.

Presently, there are two competing systems designed to achieve the new 2010 EPA requirements:

- ▶ **Liquid Urea Selective Catalytic Reduction (SCR):** An after-treatment approach that utilizes liquid urea ... the solution most truck makers will incorporate
- ▶ **Advanced Exhaust Gas Recirculation (EGR):** A proven in-cylinder solution ... the customer preferred and International® solution

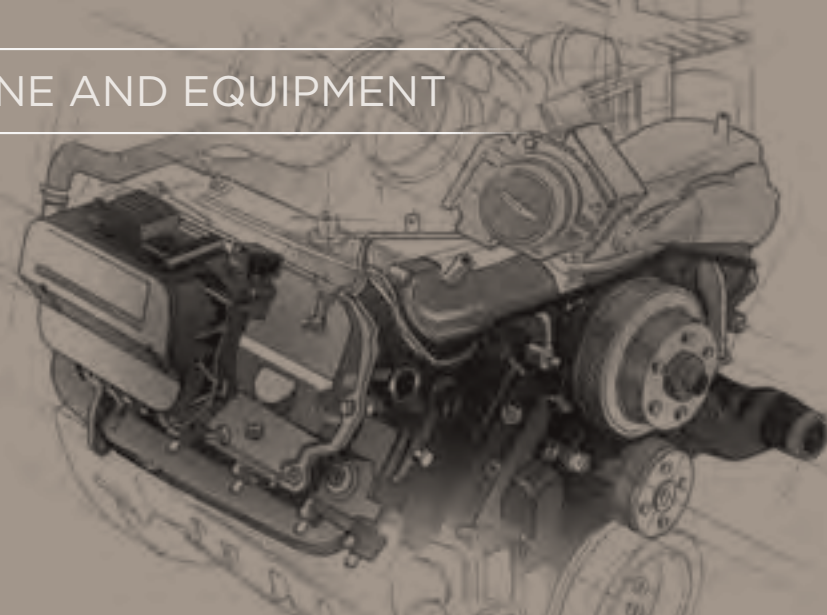
MaxxForce® Advanced EGR

- ▶ International® Trucks, powered by MaxxForce® engines, utilize Advanced EGR — a refinement of the 2007 EGR system already in place ... and proven over 9 million miles
- ▶ The same confidence customers have in today's MaxxForce® engines will carry forward into 2011 and beyond

MaxxForce® Advanced EGR Advantages

- ▶ Business as usual for MaxxForce® owners 2010 and beyond
- ▶ A simple, proven technology
- ▶ Simpler to maintain and operate than liquid urea SCR
- ▶ No radical hardware additions
- ▶ No liquid urea tanks, additional catalysts, sensors, gauges or electronics
- ▶ No additional exhaust after-treatment components for the body manufacturer to package equipment around during installation
- ▶ No additional fluids to understand, purchase or store
- ▶ No additional dash warning systems to monitor
- ▶ No worries about the availability of urea
- ▶ No additional driver training and technical training
- ▶ 200-300 lbs. lighter than liquid urea SCR
- ▶ Stable and predictable residual value

ENGINE AND EQUIPMENT



MaxxForce® Engines — true to International's reputation — provide industry-leading power, performance, reliability durability and resale value.

- ▶ Offer the choice of the industry's only Compacted Graphite Iron (CGI) block for class 7, or the heavy-duty heritage of an Inline6 — both available within the same truck model

MaxxForce® 7

- ▶ High Pressure Common Rail
- ▶ Dual Stage Turbo Chargers
- ▶ Quietest Diesel Engine in North America

MaxxForce® DT and 9 Engines

- ▶ Are plateau-honed wet-sleeved designs for even cylinder cooling and unmatched structural integrity
- ▶ Can be entirely re-built in-frame and returned to original factory specifications at a significantly reduced cost over complete re-manufacturing

MaxxForce® Average Residual Value

- ▶ Has outpaced the competition by 12–19 percent — over the past 10 years



Engine Manufacturers	MaxxForce®
Models	MaxxForce® 7, DT or 9 series
Block Design	MaxxForce® 7: Parent bore CGI block MaxxForce® DT and 9: Wet sleeve
Available HP Torque Ranges	MaxxForce® 7: 220 – 300 HP 560 – 660 lbs.-ft. MaxxForce® DT: 215 – 300 HP 560 – 860 lbs.-ft. MaxxForce® 9: 315 – 330 HP 950 lbs.-ft.
Engine Brake	Optional Diamond Logic® engine brake for I6 engines
Radiators	Aluminum cross-flow 717 sq. in. – 1045 sq. in. Note: 330 HP for fire and emergency

Freightliner
M2 106



Cummins
ISB, ISC
ISB: Parent bore dry sleeve ISC: Wet sleeve
ISB: 200 – 360 HP 500 – 820 lbs.-ft. ISC: 360 – 380 HP 660 – 1050 lbs.-ft.
Jacobs C-Brake
Aluminum cross-flow 805 sq. in. – 1100 sq. in.
Notes: ISB: 340 HP, 660 lbs.-ft. 360 HP, 800 lbs.-ft. ISC: 380 HP, 1050 lbs.-ft. For fire and emergency service

Hino
238-338



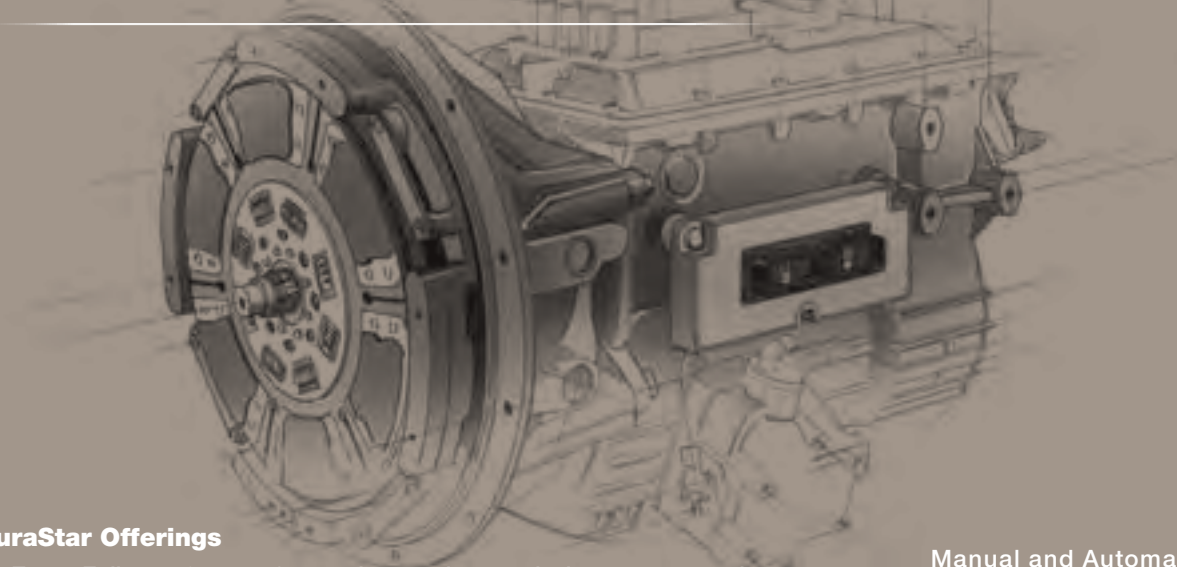
Hino
Class 6: Hino J08E-VC Class 7: Hino J08E-VB
Parent Bore with dry slip-fit sleeves
J08E-VC: 220 HP 520 lbs.-ft. J08E-VB: 260 HP 660 lbs.-ft.
Not available
Aluminum Sizes are not published
Note: Only one engine is available per model

Kenworth
T270/370



Paccar
PX6, PX8
PX6: Dry sleeve PX8: Wet sleeve
PX6: 200 – 325 HP 520 – 750 lbs.-ft. PX8: 260 – 350 HP 660 – 1000 lbs.-ft.
Engine Compression Brake
Aluminum 1000 sq. in.
Note: PX8: 380 HP, 1080 lbs.-ft. For fire and emergency service

TRANSMISSION AND EQUIPMENT



DuraStar Offerings

- ▶ Eaton Fuller: 5, 6, 7 or 10-speed manual transmissions, automated manual transmissions
- ▶ Allison: a full range of automatic transmissions

Additional Equipment

- ▶ Oil coolers, lube pumps, automatic neutrals, relocating lube dip sticks
- ▶ Several automatic transmission shift control configurations for either the push-button or electronic T-bar type column shifter
- ▶ Proprietary shift ratios available with Eaton transmissions

Body Builder Friendly

DuraStar simplifies the installation process and minimizes costs:

- ▶ Transmission interface wiring
- ▶ Transmission-shift inhibit
- ▶ Auto neutral for PTO and torque convertor lock-up



Manual and Automated Transmissions	Eaton Fuller and Allison
Types and available speeds	Manual: 6, 7 and 10-speed Automated manual: 6-speed Fully automatic manuals: 5 or 6-speed
Allison Automatics	1000, 2100, 2200, 2500, 2550, 3000 and 3500
Available speeds	5 or 6-speed
Available Allison Vocational Codes	HS, RDS, EVS, TRV and MH
PTO controls	Available dash-mounted PTO control
Oil Cooler	Available water to oil type
Available Transmission Shifter configurations	Push button: Instrument panel mounted T-bar type: Column shifter

Freightliner
M2 106



Mercedes, Eaton Fuller, TTC and Allison
Manual: 5, 6, 8, 9 and 10-speed Automated manual: 5 or 6-speed Fully automatic manuals: N/A
1000, 2000, 2100, 2500, 3000, 3200 and 3500
5 or 6-speed
HS, RDS, EVS and TRV
Available dash-mounted PTO control
Available water to oil type
Push button: Instrument panel mounted T-bar type: Column or panel mounted SmartShift™: Column mounted

Hino
238-338



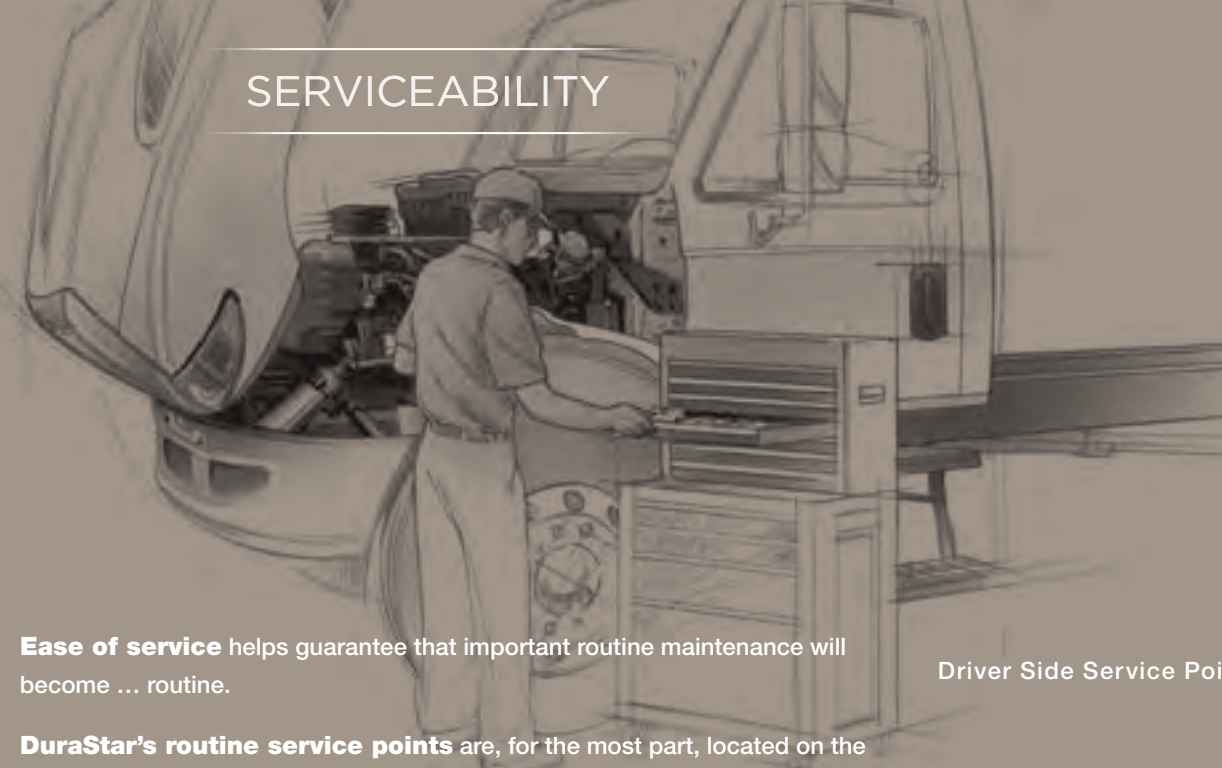
Eaton or Allison
Manual: 6-speed Automated manual: 6-speed Fully automatic manual: N/A
2200, 2500 and 3000
6-speed
HS or RDS
Not available
Not available
Optional shifter configurations are not available

Kenworth
T270/370



Eaton or Allison
Manual: 6, 9 and 10-speed Automated manual: 6-speed Fully automatic manual: N/A
1000, 2100, 2200, 2500, 3000 and 3500
5 or 6-speed
HS, RDS and EVS
Available dash-mounted PTO control
Not available
Optional shifter configurations are not available

SERVICEABILITY



Ease of service helps guarantee that important routine maintenance will become ... routine.

DuraStar's routine service points are, for the most part, located on the same side of the vehicle.

- ▶ Crucial fluids are easily located
- ▶ Most fluid levels are simply determined through translucent reservoirs
- ▶ Engine oil and transmission fluids are easy to access

Standard Service Related Features

- ▶ Extended life engine coolant
- ▶ Fuel-Water Separator with Restriction Indicator and Water-in-Fuel Sensor
- ▶ High-temperature radiator hoses (-40°F – +300°F)
- ▶ Gates shrink-band type thermoplastic coolant hose clamps

Shrink-Band Benefits

- ▶ Maintain a consistent, dynamic tension, so they never need retightening
- ▶ Apply more uniform force around the fitting
- ▶ Maintain higher percentage of force at low temperatures vs. metal clamps
- ▶ Joint fit and function improve with use, compared with others whose systems are only at their best when first installed



Driver Side Service Points

- Engine oil check/fill
- Transmission fluid check
- Coolant check/fill
- Washer fluid check/fill
- Power steering check/fill

Passenger Side Service Points

- Air cleaner filter minder

Clear Fluid Reservoirs

- Coolant, brake fluid, power steering

Coolant Available

- Standard: Extended life -40°F

Splash Shield Mounting

- Driver: raises with hood
- Passenger: stationary

Hose Clamps

- Standard: Thermoplastic shrink bands

Freightliner
M2 106



- Engine oil check
- Transmission fluid check
- Power steering fluid check

- Coolant check/fill
- Washer fluid fill
- Air cleaner filter minder

- Coolant, power steering check/fill

- Standard: HD pre-charged SCA -34°F
- Optional: Extended life

- Driver: raises with hood
- Passenger: raises with hood

- Standard: Constant-tension spring clamps
- Optional: Gates PowerGrip™ shrink band clamps

Note: Oil fill and dipstick located for enhanced serviceability is only available on the more expensive M2 106V

Hino
238-338



- Engine oil check/fill
- Coolant check/fill
- Power steering fluid check

- Transmission fluid check
- Air cleaner filter minder

- Coolant check/fill

- No published options

- Driver: raises with hood
- Passenger: stationary

- Standard: Screw clamps
- No optional clamps

Note: Dip-sticks are used for brake fluid and power steering reservoirs

Washer fluid reservoir located in-cab, under passenger seat

Kenworth
T270/370



- Engine oil check
- Transmission fluid
- Coolant check/fill
- Washer fluid check/fill
- Power steering check/fill

- Air cleaner filter minder

- Power steering check/fill

- Standard extended life coolant – no temperature parameters specified

- Driver: raises with hood
- Passenger: raises with hood

- Standard: Constant-tension spring clamps

Note: Site bowl is used for coolant reservoir

CUSTOMER SUPPORT

OnCommand™ provides customers with a unique group of business tools that helps them manage their business better — keeping their trucks on the road.

OnCommand™ Knowledge

- ▶ **Service:** Web-based service manuals, letters, circuit diagrams and VIN-specific data,
- ▶ **Parts:** Web, print, or CD-based parts catalog with detailed illustrations and optional electronic ordering

OnCommand™ Education

- ▶ Web-based vehicle and systems training courses for self-maintainers

OnCommand™ Control

- ▶ **Repair Advocate** — Integrated fleet repair management system
- ▶ **Service Partner** — Dealer-provided maintenance and repairs providing expedited service to customers
- ▶ **Fleet Charge** — Parts purchasing program
- ▶ **Maintenance and Inventory Management** — software solution for self-maintaining fleets and independent garages
- ▶ **Parts Return Program** — Surplus, unused and obsolete parts return for full cash value payout



Service Information	OnCommand™ Service Information (Formerly Fleet ISIS®)
Parts Information	OnCommand™ Parts Information (Formerly Fleet Parts Catalog Online and Custom Parts Catalogs)
Purchasing Card for Parts and Service	OnCommand™ Fleet Charge®
Network-Wide Consistent Price Preventive Maintenance	OnCommand™ Preventive Maintenance (Formerly Performance PM®)
Roadside Break Down Management	OnCommand™ Repair Advocate / EBS
Obsolete Parts Return Program	OnCommand™ Parts Return Program (Formerly CPR / GPRP)
Education Solutions	OnCommand™ Education
Labor Time Consistency	OnCommand™ Service Partner
Parts Inventory Management	OnCommand™ Maintenance and Inventory Management (Formerly Diamond Connection® Solutions)
Rapid Repair Assessment	Accelerated Service – Express Diagnostics



Freightliner
Service Pro
Parts Pro
FleetPack®
None
Excelerator
None
Service Training Academy
None
Freightliner Fleet Connect
Express Assessment

Hino
HinoNet
None
None
None
HINOWATCH
None
HinoNet Training (Hand-on only)
None
None
None

Kenworth
ServiceNet
PACCAR Parts Online
PACCAR Parts Fleet Services
PremierCare Preventive Maintenance
PremierCare RoadSide Assistance
None
PremierCare Training
None
PremierCare Connect
PremierCare Express Services

ENGINEERED FOR WHAT MATTERS MOST

Performance

- ▶ Meets the specific needs of your business
- ▶ Frames and axles are designed and rated to handle whatever job you take on

MaxxForce® Power

- ▶ 3 proprietary engines: MaxxForce® 7, DT and 9
- ▶ The only engines with hassle-free MaxxForce® Advanced EGR technology that enables customers to focus on their business — without worrying about meeting 2010 emissions requirements

Driver Satisfaction

- ▶ Roomy, wide, highly maneuverable 82" wide cab
- ▶ Smooth and easy entry and egress

Diamond Logic® Electrical System

- ▶ Streamlines the process of integrating equipment into the chassis electrical system
- ▶ Increases reliability and uptime ... reduces repair costs

Cost of Ownership

- ▶ Easy to service
- ▶ Extended/synchronized service intervals keep your truck on the road, out of the shop
- ▶ Industry-leading resale value





COMPETITIVE
COMPARISON GUIDE:
MEDIUM DUTY

