

PRIMAAX[®] EX

Severe-Duty Vocational Truck Rear Air Suspension System



- MAAximize durability
- MAAximize driver comfort
- MAAximize performance



With its rugged, weight efficient design, PRIMAAX[®] EX is a severe-duty vocational rear air suspension that delivers advanced suspension technology for the rigorous demands of vocational, severe-service and heavy-haul applications. The system features a robust structural design with optimized suspension geometry for exceptional stability, handling and ride.

Suspension-induced driveline vibration is significantly reduced with PRIMAAX EX compared to competitive trailing-arm air suspensions, resulting in higher driver comfort and less premature wear on expensive truck and body equipment.

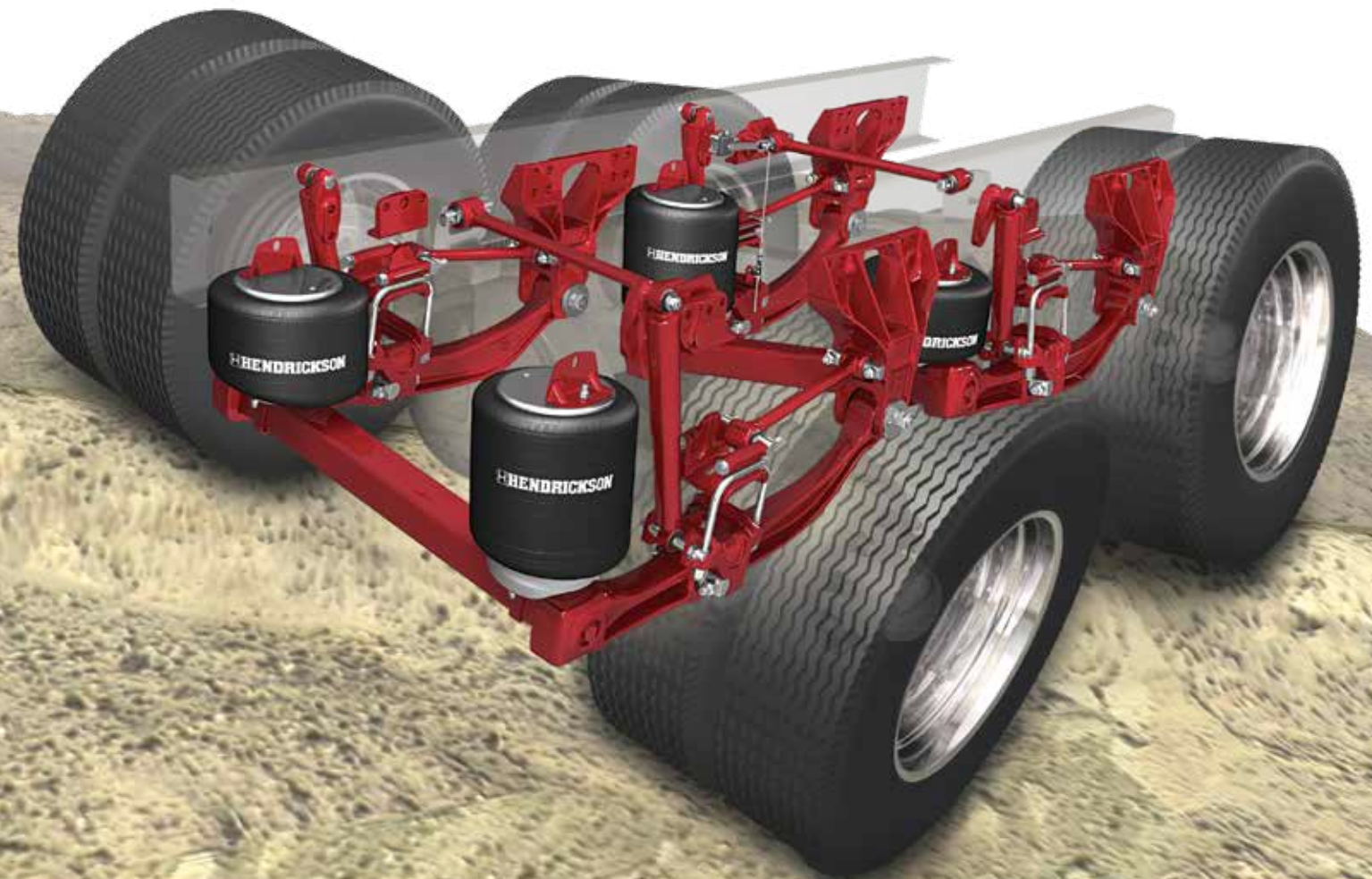
To learn more about PRIMAAX EX, call 855.743.3733
or visit www.hendrickson-intl.com

 **HENDRICKSON**
The World Rides On Us[®]

MAAXimize Performance



MAAXimize the performance of vocational and heavy-haul vehicles with a suspension engineered specifically for demanding on- and off-highway conditions. With over 100 years of robust suspension design, Hendrickson delivers another premium suspension with **PRIMAAX® EX**. Rugged, dependable and extensively tested in challenging applications, PRIMAAX EX paves a new road for suspension technology.



PRIMAAX® EX Severe-Duty Vocational Truck Rear Air Suspension System

Genuine Hendrickson Torque Rods

- Three-rod configuration reduces axle stress, welding and complexity
- Optimized configuration helps improve handling and roll stiffness for expanded applications
- Premium retained rubber bushings for increased service life and resistance to walkout
- Designed for optimum wheel-end clearance and articulation
- Alternative rods available for disc brake use

Air Springs

- Large-volume, low-frequency design for improved ride
- Advanced design air springs lift and support the load with less air pressure
- Robust rubber bushings help improve service life and eliminate lubrication requirements

Cast Structural Beams

- Utilize premium materials to improve durability
- Maintenance-free connection with the cross beam for increased uptime
- Robust rubber bushings help improve service life and eliminate lubrication requirements

QUIK-ALIGN® Axle Alignment System

- Allows for easy axle alignment without shims
- Reduces maintenance time and helps extend tire life

Axle Connections

- D-pin axle connection decreases torsional axle stress for reduced maintenance and increased joint integrity
- Integrated axle stop contact pads reduce axle stress
- Torque rod bar pin connection increases reliability and reduces maintenance time

Height Control Valve

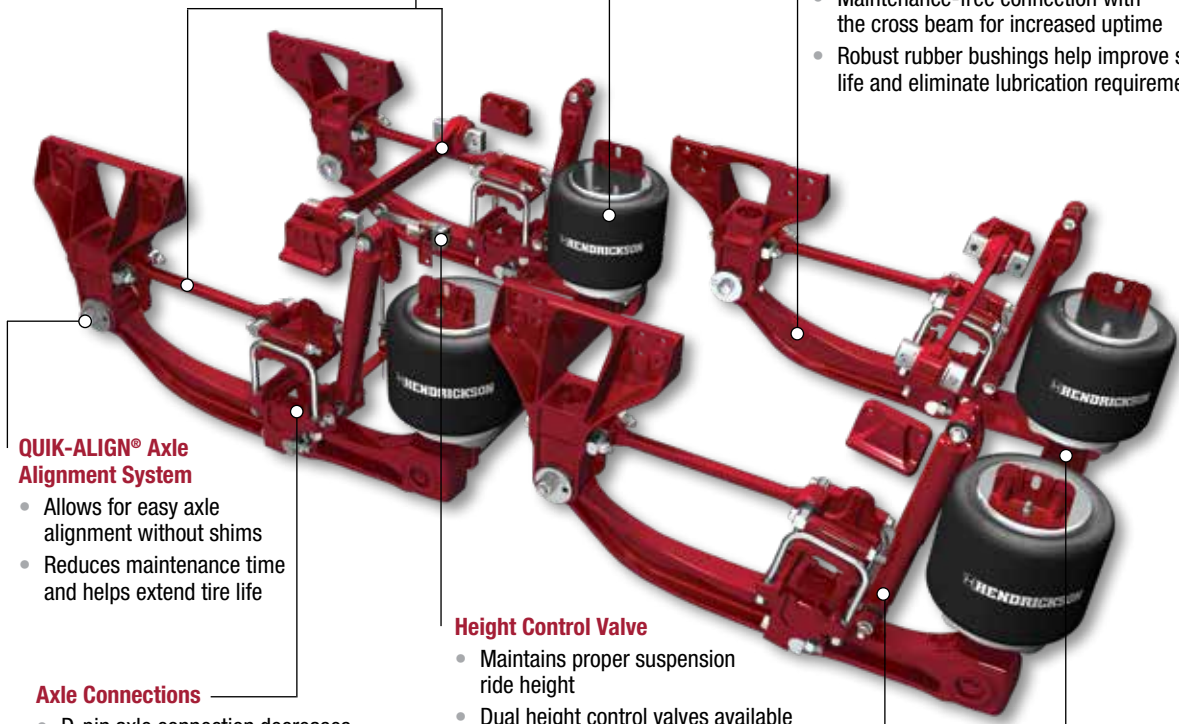
- Maintains proper suspension ride height
- Dual height control valves available for improved leveling (if required)

Heavy-Duty Shock Absorbers

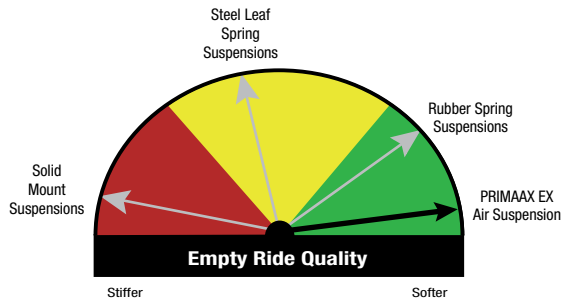
- Positioned and tuned for optimum damping characteristics
- Protect air springs from over-extension

Cross Beams

- Seamless fabrication technology forms a robust torsion system with cast structural beams, improving stability
- Integrated air spring mounts
- Increased ground clearance versus similar air suspensions



MAAXimize Driver Vehicle Protection



Above data is based upon internal testing and / or published specifications. Actual product specifications and performance may vary depending on suspension and vehicle configuration, operation, service and other factors.

Drivers, cargo and vehicles are major investments that require protection. PRIMAAX® EX adjusts to variations in load and road conditions for optimal ride and performance. The high flow height control valve maintains constant ride height in empty and loaded conditions.



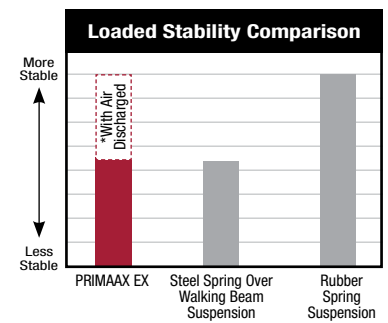
MAAXimize Stability and Handling

Cast structural beams form a solid connection with the square cross brace to form a rigid torsion and stabilizer system **without the need for re-torque**. This low-maintenance design delivers greater stability for improved control on and off the job site. Exhausting the air springs further increases stability during job site operation.



Stabilizer System

PRIMAAX EX has better handling characteristics to improve road feel. The unique torque rod configuration can contribute to more than twice the roll stability versus competitive air suspensions, along with improved handling. Roll steer is reduced to provide greater control during lane changes, highway ramp operation and tight or twisting road maneuvers.



* Air exhausted from suspension system to provide additional stability when dumping or in stationary events where there is a high center of gravity or uneven terrain.

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MAAXimize Off-Highway Mobility

PRIMAAX EX produces up to 12.5 inches of diagonal wheel articulation and 8 inches of vertical axle travel for improved traction. 10.75 inches of ground clearance provide the ability to traverse uneven terrain on more demanding job sites.^{1,2}



1. Axle travel may be limited by vehicle manufacturer; axle stop settings may restrict suspension's articulation.
2. Ground clearance was measured using properly inflated 11R 22.5 tires

MAAXimize Driver Comfort and Confidence

- **Unique suspension geometry** – Optimized configuration significantly controls suspension windup and corresponding frame rise while increasing roll stiffness and reducing roll steer.



QUIK-ALIGN — Rotating the eccentric collar allows up to 1-inch of axle alignment per side

- **Easy axle alignment** – Hendrickson's proven QUIK-ALIGN® axle alignment system helps save time and money — offers a fast method to ensure proper alignment for improved tire life. Reduces stress input to the axle housing by transferring the torsional loads to the integrated stabilizer system, which helps extend axle and joint service life. Reduce noise, vibration and harshness to cab, chassis and body equipment for reduced total vehicle maintenance; integrated pistons and spacers provide a more robust beam connection while lifting and supporting the load with less air pressure.



Optimized geometry design

- **Alternative torque rods** – Available to broaden packaging compatibility, 23,000 & 26,000 lb. per axle with disc brake options.

- **Frame hanger** – Robust design to meet a variety of grueling vocational and severe-duty applications.

- **Structural beam end joint** – Maintenance-free connection with cross brace reduces downtime for improved productivity.



No re-torque required

- **Cast structural beam** – Advanced design utilizes premium materials to enhance beam durability.



Air disc brake configuration

MAAXimize Versatility

PRIMAAX® EX is approved for a wide array of applications

- Engineered specifically for severe-duty operation
- Rugged design for 100 percent off-highway use
- Smooth enough for linehaul
- Single, tandem and tridem axle configurations available
- Higher site ratings
- Improved ground clearance



PRIMAAX® EX Specifications

	PRIMAAX EX®					
Capacity (lbs.)	23,000	26,000	46,000	52,000	69,000	78,000
Installed Weight¹ (lbs.)	542	651	1,078	1,292	1,629	1,931
Axle Configuration	Single	Single	Tandem	Tandem	Tridem	Tridem
GCW Approval² (lbs.)	Contact vehicle OEM	Contact vehicle OEM	Contact vehicle OEM	Contact vehicle OEM	Contact vehicle OEM	Contact vehicle OEM
Site Travel Rating³ (lbs.)	30,000	33,000	60,000	66,000	90,000	99,000
Axle Travel⁴ (in.)	8	8	8	8	8	8
Ground Clearance (in.)	10.75	10.5	10.75	10.5	10.75	10.5
Lift Axles	Approved	Approved	Approved	Approved	Approved	Approved
Ride Heights (in.)	8.5 - 15.5	8.5 - 15.5	8.5 - 15.5	8.5 - 15.5	8.5 - 15.5	8.5 - 15.5
Axle Spacing (in.)	N/A	N/A	52 to 72.5	54 to 72.5	52 to 72.5	54 to 72.5

PRIMAAX EX is approved for vocational and heavy-haul vehicle applications including, but not limited to: truck, tractor, dump, front and rear discharge mixer, logging, crane mounted, platform, fire / rescue, specialty and vehicles equipped with outriggers.

1. Installed weight includes complete suspension, torque rods, axle and frame brackets and all hardware. Published weight is for standard PRIMAAX EX suspension using 10-inch ride height. Other configurations may change weight.
2. Suspension must be paired with appropriate axle rating.
3. Job site travel rating – operators using vehicles equipped with liftable pusher or tag axles must not exceed published ratings. Job site ratings are limited to no more than five percent of vehicle operation at speed not to exceed five mph. Liftable pusher or tag axles should only be raised (or unloaded) to improve vehicle maneuverability in job site applications or when vehicle is empty. Job site travel ratings are consistent with published axle manufacturer's limitations. Axle and suspension job site travel specifications must not be exceeded.
4. Suspension articulation may exceed vehicle's capability and may be limited by vehicle manufacturer; vehicle manufacturer installed axle stops may restrict suspension's articulation.

Hendrickson Genuine Parts are the same quality components installed in Hendrickson original equipment suspensions — consisting of the same design, construction, performance and durability. There's only one way to maintain and protect your suspension's original performance. Ask for the name that is synonymous with the finest manufactured suspensions in the world.

Actual product performance may vary depending upon vehicle configuration, operation, service and other factors.
All applications must comply with applicable Hendrickson specifications and must be approved by the respective vehicle manufacturer with the vehicle in its original, as-built configuration.
Contact Hendrickson for additional details regarding specifications, applications, capacities, operation, service and maintenance instructions.

Call Hendrickson at **630.910.2800** or **855.RIDERED (743.3733)** for additional information.



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45745-178 Rev T 04-25

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