## **PRIMAAX<sup>®</sup> EX** Severe-Duty Vocational Air Suspension

- MAAXimize durability
- MAAXimize driver comfort
- MAAXimize performance



To learn more about Military Suspension Products, call 630.910.2800 or visit www.hendrickson-defense.com



# **HPRIMAAX<sup>®</sup> EX** Severe-Duty Vocational Air Suspension

#### 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

#### **Cast Structural Beams**

- Maintenance-free connection with the cross beam for increased uptime
- Robust rubber bushings improve service life and eliminate lubrication requirements
- Designed for increased disc brake clearance and compatibility

#### **QUIK-ALIGN®**

- 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 for reduced maintenance time

#### **Height Control Valve**

- Maintains proper suspension ride height
- Twin 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



Weight includes the suspension system and related components. Data is based on internal testing and / or published specifications. Actual product specifications and performance may vary depending upon suspension and vehicle configuration, operation, service and other factors.

## MAAX imize 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<sup>®</sup> axle alignment system helps save time and money — offers a fast method to ensure proper alignment for improved tire life.
- D-pin axle connection and clamp group 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.
- Large volume air springs Reduce noise, vibration and harshness to cab, chassis and body equipment for reduced total vehicle maintenance; new integrated pistons and spacers provide a more robust beam connection while lifting and supporting the load with less air pressure.
- Alternative torque rods Available for disc brake configuration.
- 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.



Air disc brake configuration

## MAAX imize Stability and Handling

Offering up to two times the roll stability against the other air suspensions, 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 provides a further increase in stability during job site operation.



PRIMAAX<sup>®</sup> EX has better handling characteristics to improve road feel. The unique torque rod configuration contributes 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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Optimized geometry design

## MAAXimize Driver Vehicle Protection



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.



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## **PRIMAAX<sup>®</sup> EX** Specifications

	PAX 232	PAX 262	PAX 462	PAX 522	PAX 692	PAX 782
Capacity	23,000 lbs.	26,000 lbs.	46,000 lbs.	52,000 lbs.	69,000 lbs.	78,000 lbs.
Installed Weight <sup>1</sup>	542 lbs.	651 lbs.	1,078 lbs.	1,292 lbs.	1,629 lbs.	1,931 lbs.
Axle Configuration	Single	Single	Tandem	Tandem	Tridem	Tridem
GCW Approval <sup>2</sup>	95,000 lbs.	142,000 lbs.	190,000 lbs.	245,000 lbs.	See Axle Manufacturer Recommendation	See Axle Manufacturer Recommendation
Site Travel Rating <sup>3</sup>	30,000 lbs.	33,000 lbs.	60,000 lbs.	66,000 lbs.	90,000 lbs.	90,000 lbs.
Axle Travel <sup>4</sup>	8 in.	8 in.				
Ground Clearance	10.75 in.	10.5 in.	10.75 in.	10.5 in.	10.75 in.	10.5 in.
Lift Axles	Approved	Approved	Approved	Approved	Approved	Approved
Ride Heights <sup>⁵</sup>	8.5 - 10.5 in. 12.5 - 15.5 in.	8.5 - 10.5 in. 12.5 - 15.5 in.				
Axle Spacing	N/A	N/A	52 to 72.5 in.	54 to 72.5 in.	52 to 60 in.	54 to 60 in.

PRIMAAX EX is approved for vocational and heavy-haul vehicle applications. All applications must comply with applicable Hendrickson specifications and must also be approved by the respective vehicle manufacturer with the vehicle in its original, as-built configuration. Contact Hendrickson and the respective vehicle manufacturer for approval of additional applications.

- 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. Contact Hendrickson for applications that may exceed GVW approval ratings.
- 3. Site travel rating operators using vehicles equipped with liftable pusher or tag axles must not exceed published ratings. 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 off-road use or when vehicle is empty. Site travel ratings are consistent with published axle manufacturer's limitations. Axle and suspension 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.
- 5. Contact Hendrickson for availability of beam lengths.

U.S. and foreign patents granted and / or pending.

Actual product performance may vary depending upon vehicle configuration, operation, service and other factors.

**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.

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



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