



H HENDRICKSON
The World Rides On Us®

Pro Gear
AND TRANSMISSION

Primaax EX Sales Manual

Pro Gear's Hendrickson Primaax EX Sales Manual to assist in identifying your Hendrickson unit.

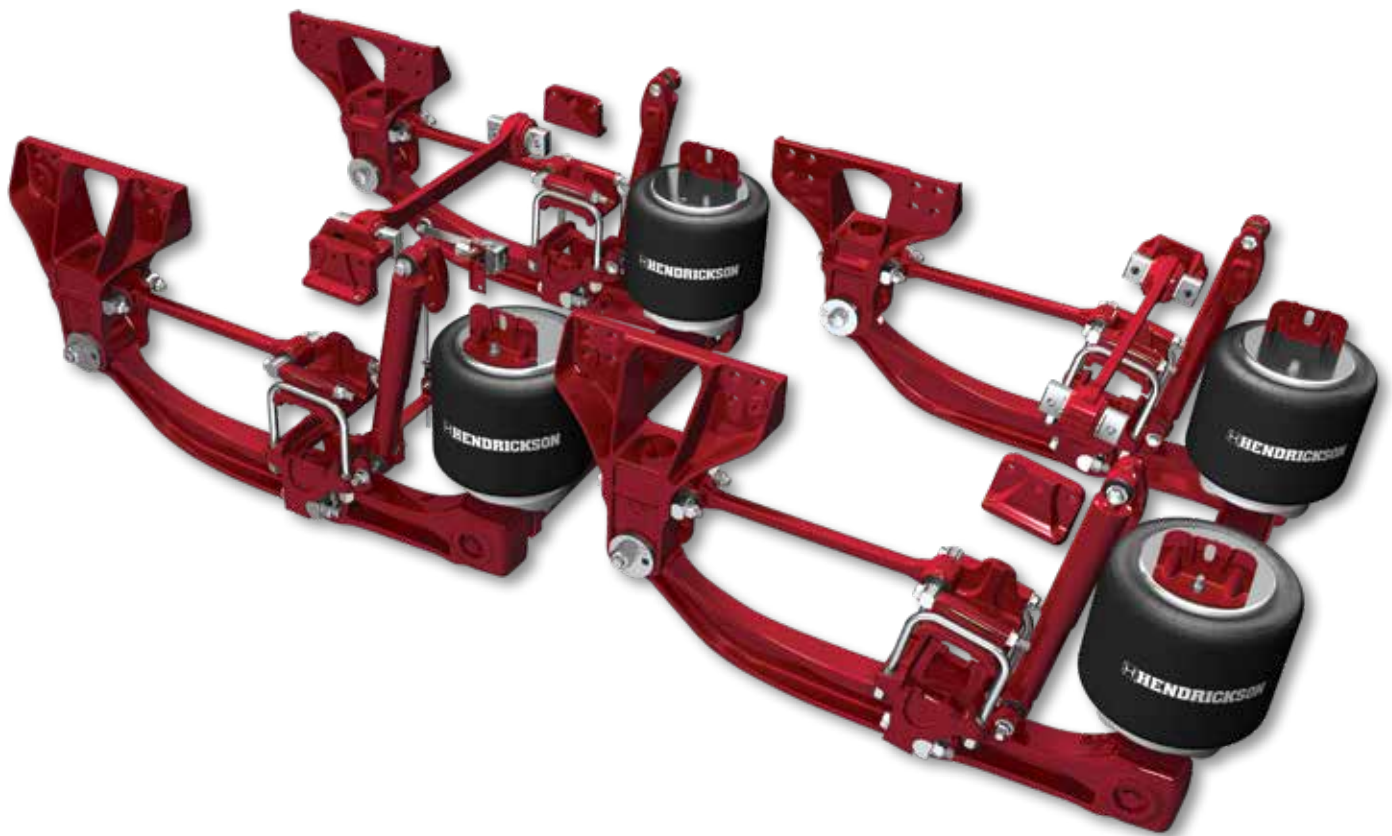
If you need any assistance identifying the correct transfer case unit for your truck and equipment, contact your Hendrickson replacement part specialists at Pro Gear and Transmission.

Pro Gear Transmission has same day shipping and 1000's of products in stock and ready to ship internationally for your next project.

For parts or service contact the Hendrickson specialists at Pro Gear & Transmission, Inc.

1 (877) 776-4600
(407) 872-1901
parts@eprogear.com

- MAAximize durability
- MAAximize driver comfort
- MAAximize performance



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

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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.



H PRIMAAX[®] EX Severe-Duty Truck Vocational Air Suspension

Genuine Hendrickson Torque Rods

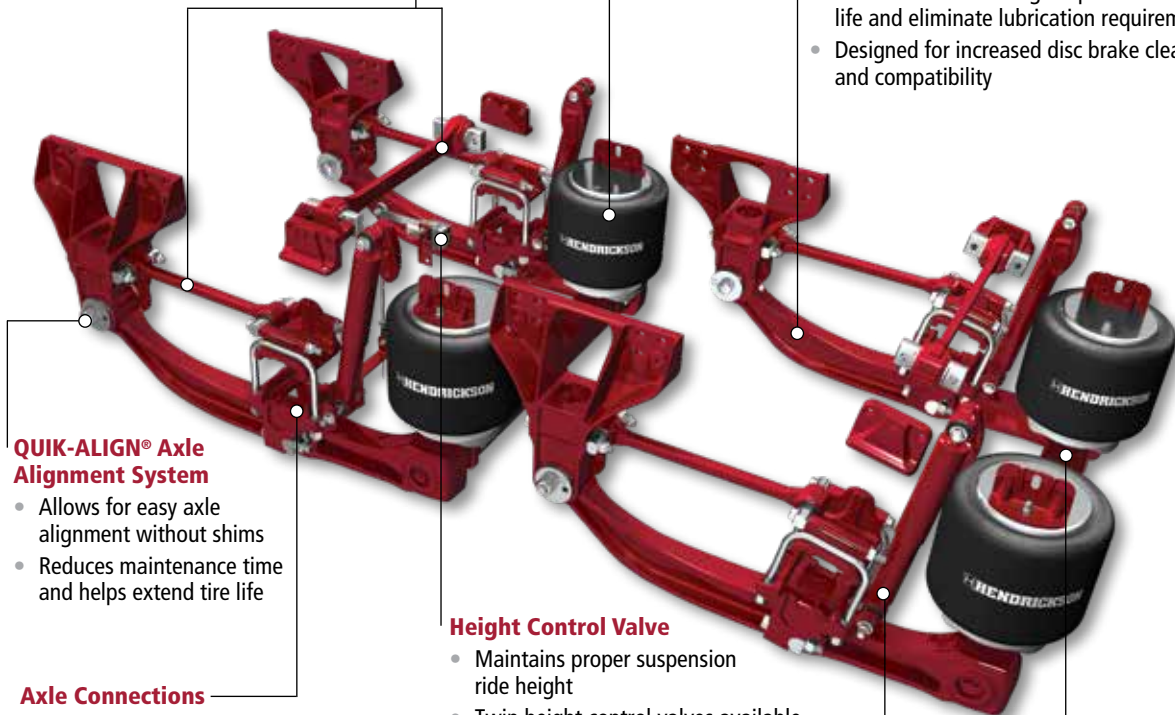
- Three-rod configuration reduces axle stress, welding and complexity
- Optimized configuration helps improve handling and roll stiffness for expanded applications
- Premium retained rubber bushings for increased service life and resistance to walkout
- Designed for optimum wheel-end clearance and articulation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

- Integrate end caps for increased reliability
- Utilize premium materials to improve durability
- 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[®] 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
- Newly designed torque rod bar-pin connection for increased reliability and reduced maintenance time

Height Control Valve

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

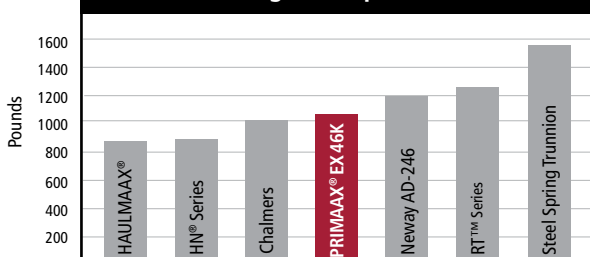
Heavy-Duty Shock Absorbers

- 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

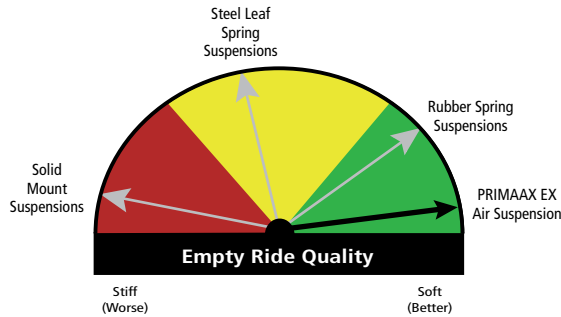
Weight Comparison



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.

* Based on lab testing

MAAXimize Driver Vehicle Protection



Above data is based upon internal testing and/or published specifications. Actual product specifications and performance may vary depending upon 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.



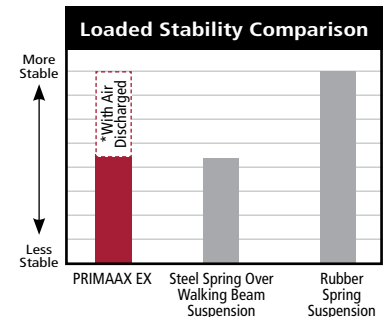
MAAXimize Stability and Handling

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 provides a further increase in stability during job site operation.



Stabilizer System

PRIMAAX 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.

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

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.



Optimized geometry design

- **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** – Now available to broaden packaging compatibility with disc brakes.

- **Frame hanger** – New, more robust design to meet a variety of grueling vocational and severe-duty applications.



Air disc brake configuration



No re-torque required

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

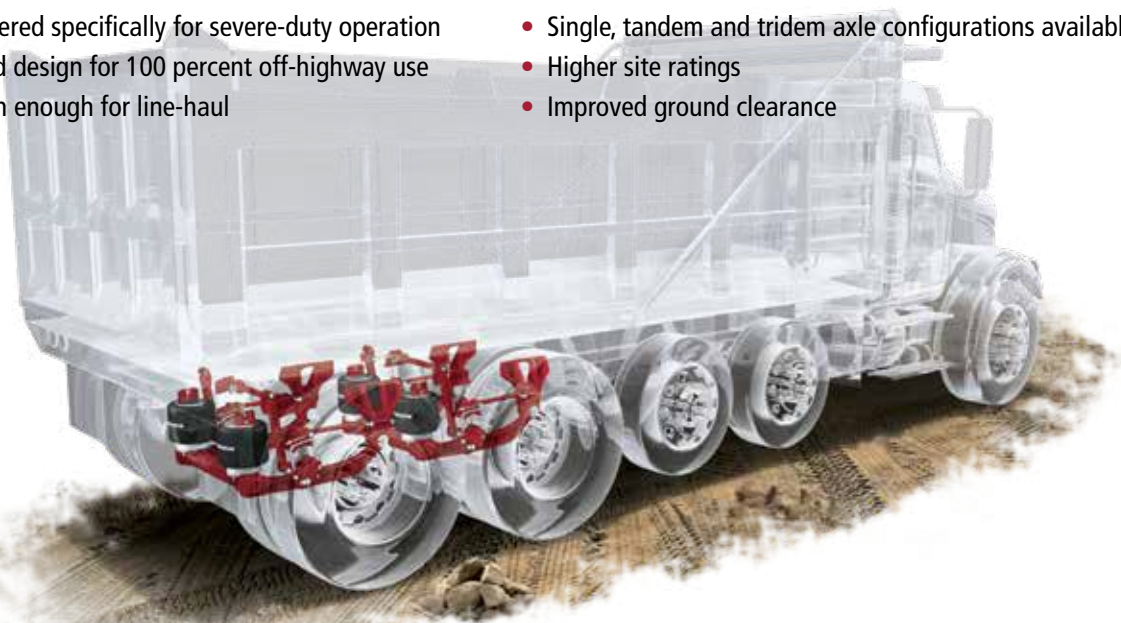
- **Cast structural beam** – Redesigned beams utilize premium materials to improve durability more than 350 percent.*

* Based on lab testing

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 line-haul
- Single, tandem and tridem axle configurations available
- Higher site ratings
- Improved ground clearance



PRIMAAX® 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 ¹	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 ²	95,000 lbs.	142,000 lbs.	190,000 lbs.	245,000 lbs.	See Axle Manufacturer Recommendation	See Axle Manufacturer Recommendation
Site Travel Rating ³	30,000 lbs.	33,000 lbs.	60,000 lbs.	66,000 lbs.	90,000 lbs.	99,000 lbs.
Axle Travel ⁴	8 in.	8 in.	8 in.	8 in.	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 ⁵	8.5 - 10.5 in. 12.5 - 15.5 in.	8.5 - 10.5 in. 12.5 - 15.5 in.	8.5 - 10.5 in. 12.5 - 15.5 in.	8.5 - 10.5 in. 12.5 - 15.5 in.	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 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. Contact Hendrickson for applications that may exceed GVW approval ratings.
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.
5. Contact Hendrickson for availability of beam lengths.

This product is covered by at least one or more U.S. and/or foreign patents and/or pending U.S. and/or foreign patent applications. See Hendrickson for details.

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, and operation, service and maintenance instructions.

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



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