

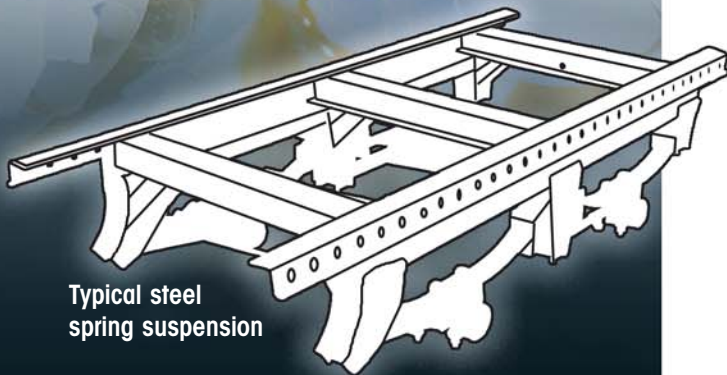
HAVE THE CONFIDENCE —

HAUL ANY LOAD

OVER ANY ROAD



VANTRAAX®
Air-ride suspension



Typical steel
spring suspension

H AIR vs. SPRING Trailer Suspension Systems

Air-ride investment delivers value

Day after day more fleets specify air-ride suspensions for over-the-road and vocational trailers to cash in on the advantages of a smoother ride and enhanced performance. Air ride delivers supreme comfort for drivers and gives them the confidence of cargo protection on any road. Reduced cargo damage and comfortable, confident drivers help boost fleet productivity.

Aside from the performance enhancements of improved ride quality, air ride delivers a myriad of advantages including reduced maintenance, improved durability, operational efficiencies and increased value. Hendrickson's introduction of system integration with INTRAAX® and VANTRAAX® broadened the already considerable benefits of air ride.

With all of these advantages, air ride has seen a tremendous growth in popularity — catapulting from 12 percent of trailers built in North America in 1987 to nearly 70 percent today. In the process, Hendrickson made air ride competitive with steel springs in terms of weight and cost savings.

The ability to carry any cargo from glass display cases to rolled steel gives you unparalleled load flexibility, including more options for backhauls. With air ride, your drivers enjoy more comfort and more productivity helping to decrease driver fatigue. With reduced vibration, air ride enhances protection of your trailers from structural fatigue and helps extend the life of light bulbs, wiring, latches, hinges and door seals.

More and more fleets and owner operators find that investing in air ride proves the smartest business decision they can make when spec'ing trailers. Riding on air can help your fleet save thousands of dollars over the life of the vehicle due to fewer cargo damage claims, lower maintenance costs and increased road time. Therefore, your air-ride trailer can demand a higher resale or trade-in value.

Examine the table on the back of this publication to see the boost you can give your bottom line by converting to air ride.

For additional information, see Hendrickson's *Understanding Air Ride (L761)*, call toll free 866-RIDEAIR (743-3247) or visit our web site at www.hendrickson-intl.com.

For The Road Ahead™

H HENDRICKSON

	Hendrickson Air Ride (INTRAAX® & VANTRAAX®)	Typical Steel Spring Suspension
Life Cycle Costs		
Tire Wear	<ul style="list-style-type: none"> Fewer tire replacements — less time in the shop Independent case studies on air ride show an average of \$460 per trailer less than spring for 28-month period and an average of 13-percent improvement in tire life 	<ul style="list-style-type: none"> Excessive wheel hop causes increased irregular tire wear and requires more individual tire replacements Independent case studies show an increased frequency of trailers in the shop and tire labor costs
Parts and Maintenance	<ul style="list-style-type: none"> INTRAAX® and VANTRAAX® — integrated, unitized systems Two pivot connections per axle — no retorquing requirements QUIK-ALIGN® for easy alignment No torque rods Fewer parts to inventory 	<ul style="list-style-type: none"> Leaf springs subject to rust and breakage — generally replaced in pairs Metal-to-metal and multiple bushing wear points Torque rods subject to rust, corrosion and wear Extra effort required for alignment Multiple fasteners require retorquing
Trailer Resale Value		
Resale Value	<ul style="list-style-type: none"> <i>Commercial Trailer Blue Book</i> specifies a credit of up to \$1,800 for air-ride trailers Recoup 50 to 100 percent of original investment 	<ul style="list-style-type: none"> Lower resale value No credit for spring
Performance		
Ride Quality	<ul style="list-style-type: none"> Soft spring rates minimize trailer bounce — shock absorbers dampen axle vibration Damps in loaded and unloaded conditions Trailing arm suspensions keep tires on the road — wheel hop virtually eliminated Tough, long-life air springs provide cushion under loaded and unloaded conditions 	<ul style="list-style-type: none"> No shocks or air springs Damping depends on amount of load — harsh ride in lightly loaded conditions Potentially excessive trailer bounce on rough roads and crossing railroad tracks Spring stiffness can permit excessive wheel hop
Cargo Protection	<ul style="list-style-type: none"> Trucking fleets report fewer damage claims 	<ul style="list-style-type: none"> Limited cargo protection due to stiff ride
Driver Satisfaction	<ul style="list-style-type: none"> Drivers report decreased fatigue from riding on total air Improved ride comfort can help driver recruiting, retention 	<ul style="list-style-type: none"> Drivers feel rough road inputs through suspension Drivers report increased fatigue
Braking	<ul style="list-style-type: none"> INTRAAX and VANTRAAX improve brake response and reduce wind-up due to short S-cam 	<ul style="list-style-type: none"> Uses conventional long S-cam More wheel hop and wind-up, less responsive brakes can result in longer stopping distance
Stability	<ul style="list-style-type: none"> Air can be exhausted to help increase stability when loading / unloading, maintaining constant trailer deck height 	<ul style="list-style-type: none"> Trailer deck height changes based on loading conditions
Durability		
Trailer Structure	<ul style="list-style-type: none"> Softer ride helps reduce trailer wear Structural integrity remains intact Doors, hinges, lights and electrical components last longer 	<ul style="list-style-type: none"> Higher frequency of trailer component replacement due to increased vibration and increased structural fatigue
Suspensions	<ul style="list-style-type: none"> INTRAAX and VANTRAAX incorporate Hendrickson's patented axle-to-trailing arm connection No welding to axle between trailing arms 10-year axle-to-trailing-arm limited warranty On-highway bushing limited warranty up to seven years 	<ul style="list-style-type: none"> Inconsistent hand-welded axle connections between axle and seat can exhibit lower durability Welding between axle seats can result in axle cracking U-bolts require retorquing
Weight		
Weight	<ul style="list-style-type: none"> INTRAAX and VANTRAAX suspension weights are similar to spring and lighter than conventional air suspensions 	<ul style="list-style-type: none"> Traditionally lighter weight than conventional air-ride suspensions Similar in weight to Hendrickson's INTRAAX and VANTRAAX products
Operation		
Added Value	<ul style="list-style-type: none"> Equalizes payloads between axles Lift axles available to reduce tire wear Potential to secure higher freight rates — many shippers require air ride Fleet versatility — for hauling a wide variety of cargo 	<ul style="list-style-type: none"> No equalization can result in overloaded axles and accompanying damage, fines or reduced payloads

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