HRT / RTE SERIES Steel Leaf Spring Suspensions

Exceptional durability Versatile applications Outstanding mobility

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Enhanced Design for Superior Durability, Stability and Off-road Maneuverability

ULTRA ROD[®] -

- Heavy-duty forgings reduce weight, yet improve durability over conventional rods
- Controls braking and acceleration forces generated by the axles
- Optional transverse rods improve cornering by controlling lateral forces

No. 1 Spring Hanger

 Helps absorb the forces of braking and acceleration, while providing longer hanger and spring eye bushing life

Spring Pack

- Genuine Hendrickson springs are made from high-strength steel
- Heat treated and shot peened for exceptional fatigue life

No. 3 Spring Hanger

 Serves as the primary load point for the lengthened RTE spring pack in unloaded conditions

Equalizing Beam

- Distributes load equally between both axles for improved traction
- Lowers the center of gravity to increase stability
- Establishes a solid axle connection for improved handling

Saddle-

- Engineered to increase durability without adding weight
- High stress concentration areas such as chair back and legs are fortified for strength and durability

Extended Leaves

 Extended leaf spring design of the RTE provides a smooth, comfortable ride when empty or lightly loaded

Bar Pin End Connection

 Rugged axle connection extends bushing life and allows easy axle alignment

No. 2 Spring Hanger

 Cam and leg areas receive a special flame hardening treatment that increases durability and extends life



Fabricated Beam Higher Strength, Higher Payloads

The Hendrickson walking beam design has been the standard in the vocational truck industry since its introduction over 90 years ago. The walking beam, or equalizing beam, became popular for its durability and traction. Following this tradition of Hendrickson innovation, the RT/RTE Series suspensions in 34,000- to 52,000-pound capacities utilize fabricated walking beams, replacing the forged beams of the past. Our core competency in fabrication technology allows us to control the quality and workmanship of the system.



The fabricated walking beams provide an even greater strength-to-weight ratio than former designs. This means that they will stand up under the heaviest loads on the job site and still allow you to maximize your payload.

The beams are constructed by roll forming steel into a channel, which is robotically welded to the sturdy bottom plate, eliminating weak or heavy spots along the length of the beam. In testing, the beam proved its strength, supporting static loads in excess of the rated load of the entire suspension. Further testing, performed on rugged job sites, has demonstrated the strength of the fabricated walking beam.

Hendrickson offers a heavy-duty beam option for use in 46,000-pound capacity applications with 52- and 54-inch axle spacings. These beams are ideal for severe applications such as coal hauling, oil field service or logging.

Better ride when you're traveling light, better handling when you're fully loaded

The extended leaf spring design of the RTE suspension provides a smoother, more comfortable ride when empty or lightly loaded and uncompromised stability when fully loaded. Here's how it works.

The upper leaves of the RTE extend past the No. 2 spring hanger to the No. 3 hanger. In the empty or lightly loaded condition (Figure 1), the extended spring leaves do not make contact with the No. 2 hanger. The resulting longer effective spring length produces a softer ride for greater driver comfort and equipment protection.

When load is added, the extended leaves deflect and make contact with the No. 2 hanger (Figure 2). This shortens the spring's effective length to that of the RT spring for a more stable ride.



RT[™]/RTE[™] Series Specifications

Model	Installed Weight 1 (Ibs.)	Suspension Capacity² (lbs.)	GVW Approval³ (lbs.)	GCW Approval (lbs.)	Rubber Center Bushings	Bronze Center bushings	Site Rating⁴ (Ibs.)	Transverse Torque Rods ⁵
RT 343	1,199	34,000	60,000	125,000	STD	OPT	46,000	OPT
RT 403	1,207	40,000	73,000	160,000	STD	OPT	55,000	OPT
RT 463	1,301	46,000	80,000	190,000	OPT	STD	60,000	OPT
RT 503	1,418	50,000	80,000	225,000	OPT	STD	65,000	OPT
RT 523	1,443	52,000	80,000	245,000	OPT	STD	65,000	OPT
RTE 343	1,253	34,000	60,000	125,000	STD	OPT	46,000	OPT
RTE 403	1,242	40,000	73,000	160,000	STD	OPT	55,000	OPT
RTE 463	1,338	46,000	80,000	190,000	OPT	STD	60,000	OPT
RTE 503	1,465	50,000	80,000	225,000	OPT	STD	65,000	OPT

 Installed weight includes complete suspension, torque rods, axle brackets and frame brackets at 54-inch axle spacing.

2. Contact Hendrickson for availability of additional capacities.

- 3. Contact Hendrickson for applications that may exceed GVW approval rating.
- 4. Site Travel Rating operations 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 a 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.
- 5. Transverse rods are standard with axle spacing of 60 inches or more and on 46,000- to 52,000-pound capacity suspensions with rubber center bushings.

See Tech. Pub. 17730-070 for specific RT Series suspension service details. See Tech. Pub. 17730-190 for beam/torque rod details.

Optional shock absorbers available; contact Hendrickson or your local dealer for details.



RTE Suspension Profile



RT Suspension Profile

Axle	Capacity (lbs.)								
Spacing	34K	40K	46K	50K	52K				
52 in.	Fab.	Fab.	Fab.*	Fab.	Fab.				
54 in.	Fab.	Fab.	Fab.*	Fab.	Fab.				
56 in.	N/A	Cast	Cast	Cast	Cast				
60 in.	N/A	Fab.	Fab.	Fab.	Fab.				
72.5 in.	N/A	Fab.	Fab.	Fab.	Fab.				

* Heavy-duty beam option available.

HENDRICKSON Genuine Parts

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 — Hendrickson.

www.hendrickson-intl.com -



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