

TRUCK REAR SUSPENSION APPLICATION APPROVAL REQUEST

SELECT ONE

☐ Vehicle Manufacturer (OEM) Request ☐ Aftermarket Suspension Conversion Request



applicationsubmittals@hendrickson-intl.com



1.630.910.2847

DATE: _____ ATTN: _____

APPLICATION APPROVAL REQUESTER – REQUIRED INFORMATION

(All such information provided to Hendrickson will be subject to Hendrickson's Privacy Policy posted at www.hendrickson-intl.com/privacy-policy.)

Company Name	Mailing Address
Contact Person	City, State, Zip
Telephone	Email Address

VEHICLE APPLICATION

SELECT ALL THAT APPLY (NON-FIRE RESCUE)

- ☐ Beverage
- ☐ Car Carrier
- ☐ City Delivery
- ☐ Construction
- ☐ Crane / Boom
- ☐ Dump - Rear
- ☐ Dump - Side
- ☐ Heavy Haul Tractor
- ☐ Line Haul
- ☐ Logger
- ☐ Milk
- ☐ Mining
- ☐ Mixer (Concrete) - Front Discharge
- ☐ Mixer (Concrete) - Rear Discharge
- ☐ Oil Field
- ☐ Pumper (Concrete)
- ☐ Snow Plow - Front
- ☐ Snow Plow - Front with Wing
- ☐ Recycle
- ☐ Refuse - Front Loader
- ☐ Refuse - Rear Loader
- ☐ Refuse - Side Loader
- ☐ Refuse - Roll Off
- ☐ Tank Truck
- ☐ Tractor (On-highway)
- ☐ Tractor (Vocational)
- ☐ Wrecker
- ☐ Yard Tractor

Other: _____

FIRE RESCUE APPLICATION SELECT ONE AS APPLICABLE

- ☐ Ambulance (Emergency)
- ☐ Aerial / Ladder (Emergency)
- ☐ Fire / Pumper (Emergency)
- ☐ Rescue (Emergency)
- ☐ Tanker (Emergency)

OPERATION

Country _____
On-Highway % _____
Off-Road % _____
Off-Highway % _____

VEHICLE INFORMATION

SUSPENSION APPLICATION: ☐ Commercial ☐ Defense ☐ Both

Vehicle Identification No. (VIN): _____ Mileage: _____

Make: _____ Model: _____ Year: _____ Number of Units: _____

Maximum Load on Suspension (lbs): _____ Lift Axles (if equipped): Down (lbs) _____ Up (lbs): _____

Maximum Gross Combination Weight (GCW) (lbs): _____ Maximum Gross Vehicle Weight (GVW) (lbs): _____

Unsprung Weight (lbs): _____ Wheel Base (inches): _____ Build Date: _____

Aftermarket Conversion Request Only:

Provide current rear suspension on vehicle (Suspension Make / Model / Series): _____

OEM Request Only: Provide initial demand quantity: _____ Annual demand quantity: _____

VEHICLE TYPE: ☐ Tractor with Semi-Trailer ☐ Straight Truck Other _____

DRIVE AXLE(S) – SELECT ONE

- ☐ 4x2
- ☐ 6x4
- ☐ 6x6
- ☐ 8x4
- ☐ 8x6
- ☐ 8x8

AUXILIARY LIFT AXLE(S) – SELECT ONE IF EQUIPPED

Drive Axle with Pusher

- ☐ 6x2
- ☐ 8x4
- ☐ 10x4
- ☐ 12x4
- ☐ 14x4

Drive Axle with Tag

- ☐ 6x2
- ☐ 8x4
- ☐ 10x4
- ☐ • Drive Axle Pusher & Tag

Other: _____

Legend:
● = Drive Axle

CURRENT EQUIPMENT INFORMATION

DRIVE AXLE(S) INFORMATION

Make: _____ Model: _____ Ratio: _____

Enter the dimensions A and B for the appropriate axle shown.

AXLE	Inches <input type="checkbox"/> Millimeters <input type="checkbox"/>	
	Dim. A	Dim. B
Front Rear Drive		
Mid Rear Drive		
Rear Rear Drive		

TIRE INFORMATION

Make: _____

Front Size: _____ Rear Size: _____

Static Loaded Radius (SLR): _____

Front: _____ Rear: _____

ENGINE INFORMATION – MANDATORY FOR AIR SUSPENSIONS

Engine Model: _____

Transmission Model: _____

Peak HP: _____ @ RPM: _____

Peak Torque: _____ @ RPM: _____

REAR BRAKE INFORMATION ☐ Inches ☐ Millimeters

☐ Air Brake ☐ Disc Brake, Dia.: _____

or ☐ Hydraulic Brake ☐ Drum Brake, Dia.: _____ Width _____

Make _____ Model _____ CBA/BAF _____

FMSI No.: _____

DRIVELINE RETARDER ☐ Yes ☐ No



TRUCK REAR SUSPENSION DESIRED – SELECT ONE

MECHANICAL SUSPENSIONS



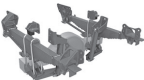
- AR2™**
(Air over equalizing beam)
☐ **Conversion**
☐ **Complete Suspension**
(Includes beam)



- ☐ ****RT™**
(Steel Springs)



- ☐ ***RTE™**
(Steel Springs with
extended leaf springs)



- ☐ **HTS™**



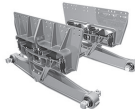
- ☐ **HAULMAAX® EX**
(Rubber Springs)



- ☐ ***HAULMAAX®**
(Rubber Springs)



- ☐ ***HN®**
(Rubber Springs)



- ☐ **ULTIMAAX®**
(Rubber Springs)



- ☐ **RS™** – 65K-120K
(Rubber Load
Cushions)



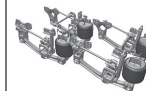
- ☐ **R™** – 65K-120K
(Solid Mount)

Other Hendrickson Truck Suspension _____

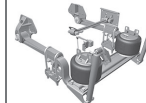
AIR SUSPENSIONS



- ☐ **PRIMAAX® EX**



- ☐ **FIREMAAX® EX**



- ☐ **COMFORT AIR®**



- ☐ **HAS™**



- ☐ **ROADMAAX®**

NOTES: * **Not available** for new production vehicles built after January 1, 2023.

** **Limited offering** – 46K and 52K capacity.

EQUALIZING BEAM EQUIPPED – OPTIONS

• **If equipped with R, RS, **RT, *RTE CENTER BUSHING – SELECT ONE**

- ☐ Bronze Center Bushing
☐ Rubber Center Bushing

• **END BUSHING – SELECT ONE**

- ☐ Bar Pin End Bushing
☐ Shim Type ☐ Non-shim Type
☐ Adapter Style End Bushing

• **SHOCK ABSORBER OPTION – SELECT ONE**

- ☐ Outboard ☐ Inboard ☐ None

• **LONGITUDINAL TORQUE ROD**

OPTIONS – SELECT ONE

- ☐ Use existing longitudinal torque rod
☐ **TWO-PIECE**
☐ **ONE-PIECE** – Provide torque rod
length (center to center)

- ☐ Inches ☐ Millimeters

Front Torque Rod Length _____

Rear Torque Rod Length _____

TORQUE ROD FRAME BRACKET

- ☐ Straddle ☐ Taper

TORQUE ROD AXLE BRACKET

Furnished by Axle Manufacturer

What type:

- ☐ Straddle ☐ Thru Bolt

Bracket Part No _____

TRANSVERSE TORQUE RODS

Transverse torque rods are required for all Hendrickson rear air suspensions. For those suspensions equipped with equalizing beams, refer to Hendrickson Literature No. 59310-004 or 59310-058 for mandatory use of transverse torque rods.

OPTIONS – SELECT ONE

- ☐ Use existing transverse torque rod
☐ **TWO-PIECE**

- ☐ **ONE-PIECE** – Provide torque rod
length (center to center)
☐ Inches ☐ Millimeters

Front Torque Rod Length _____

Rear Torque Rod Length _____

FRAME BRACKET

- ☐ Straddle ☐ Taper

TORQUE ROD AXLE BRACKET

Furnished by axle manufacturer

Part of axle ☐ Yes ☐ No

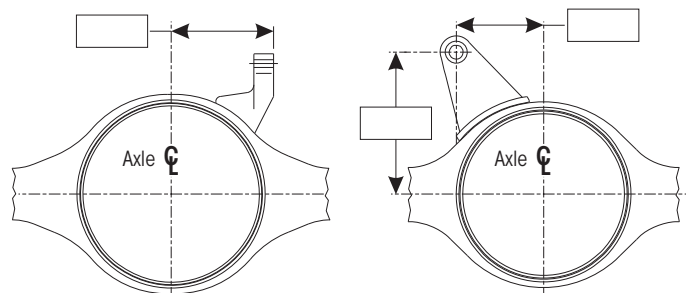
If yes, what type:

- ☐ Straddle ☐ Taper ☐ Thru Bolt

***Bracket Part No _____

NOTE: ***If the torque rod bracket part number is not available, provide the horizontal and vertical distance off the axle centerline, as shown in the graphic below.

Specify measurements in ☐ Inches ☐ Millimeters





CURRENT REAR SUSPENSION AND RELATED MEASUREMENTS – FILL IN ALL APPLICABLE MEASUREMENTS

DIAGRAM A

Specify measurements in ☐ Inches ☐ Millimeters

A1 Frame Width _____
(Frame Rail to Frame Rail)

A2 Section _____

A3 Flange _____

A4 Liner Thickness _____

A5 Frame Thickness _____

A6 Centers, as applicable
☐ Dowel Pin Centers
☐ Beam Hanger Centers

REAR TIRES

A7 Inside Walls _____

A8 Track _____

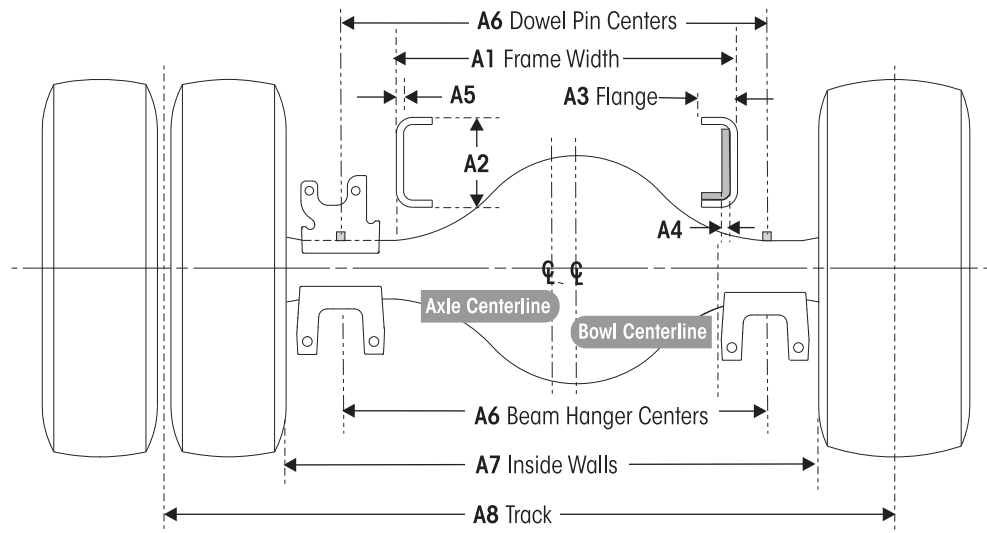


DIAGRAM B

Specify measurements in ☐ Inches ☐ Millimeters

B1 Empty Height _____
(Bottom of Frame to Ground)

B2 Loaded Height _____
(Bottom of Frame to Ground)

B3 Empty Height _____
(Bottom of Frame to Centerline of Axle)

B4 Loaded Height _____
(Bottom of Frame to Centerline of Axle)

B5 Empty Frame Slope _____ °
(Not Shown)

B6 Loaded Frame Slope _____ °
(Not Shown)

B7 Front Pinion Angle _____ °

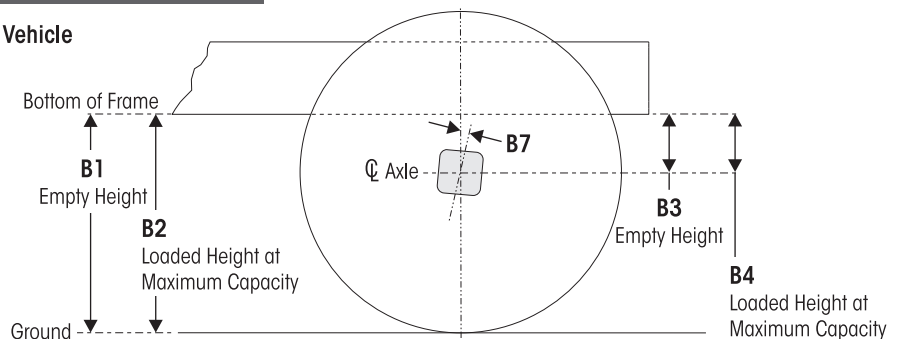
B8 Rear Pinion Angle _____ °

B9 Offset _____
(Measurement required only if fifth wheel equipped)

B10 Rear Drive Axle Spacing _____

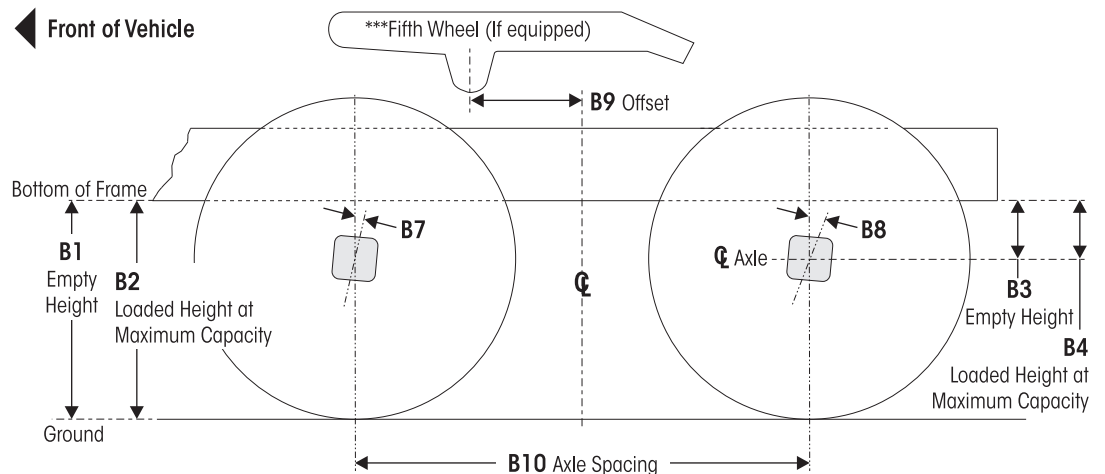
SINGLE REAR SUSPENSION

◀ Front of Vehicle



TANDEM REAR SUSPENSION

◀ Front of Vehicle





ADDITIONAL INFORMATION / CONCERNS PLEASE PRINT

WARNING

ADHERE TO THE PUBLISHED CAPACITY RATINGS FOR THE SUSPENSION. ADD-ON AXLE ATTACHMENTS AND OTHER LOAD TRANSFERRING DEVICES, SUCH AS LIFTABLE AXLES, CAN INCREASE THE SUSPENSION LOAD ABOVE ITS RATED AND APPROVED CAPACITIES, WHICH CAN RESULT IN COMPONENT DAMAGE, ADVERSE VEHICLE HANDLING, AND POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE.

TERMS AND CONDITIONS

This Truck Rear Suspension Application Approval ("Approval") by Hendrickson Truck Commercial Vehicle Systems ("Hendrickson") is subject to, at minimum, the following terms and conditions:

1. This Approval is (i) general in nature, (ii) based solely upon the above-referenced information as provided by the REQUESTER and without Hendrickson's first-hand knowledge of such information, and (iii) does not account for any additional information regarding the subject vehicle's operating condition and configuration, or any unauthorized modifications or repairs that may have been conducted.
2. The subject application(s) and the installation, operation, service and maintenance of Hendrickson suspension systems and related components must comply with all applicable written capacity ratings, specifications, instructions and guidelines from Hendrickson and the respective vehicle manufacturer. Contact Hendrickson for any additional copies of its applicable written materials.
3. This Approval does not account for, nor shall Hendrickson in any way be responsible for, any adverse effect on the suspension's form, fit or function or any damages due to improper installation, operation, service or maintenance, unauthorized modification, neglect, accident, misuse, or operation beyond the written capacity ratings of the suspension system or the vehicle to which such equipment and components are attached.
4. This Approval is null and void if (i) any of the information provided by the REQUESTOR is incorrect or incomplete, or (ii) there is any deviation from the applicable written capacity ratings, specifications, instructions and guidelines from Hendrickson and the respective vehicle manufacturer regarding the installation, operation, service and maintenance of the suspension systems and related components.
5. **THIS APPROVAL DOES NOT CONSTITUTE AN EXPRESSED OR IMPLIED WARRANTY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**
6. Hendrickson reserves the right to modify this Approval, and any recommendations and/or prices if the above-referenced information provided by the REQUESTOR changes in any way. The REQUESTOR shall immediately notify Hendrickson's Engineering Department in writing of any/all changes in such information (including, but not limited to, vehicle frame, height, load, rear axle and tire size) that may affect the suspension.
7. Hendrickson may need to obtain additional information from the REQUESTER, depending upon the scope and nature of the proposed application.

REQUESTER

Authorized Contact Person

Title

Signature

Date

FOR OFFICE USE ONLY

Rear Suspension Recommended:		BOM Number:	APPLICATION NO.
Approved by:	Date:	Customer Number:	
Comments:		CN Number:	

Call Hendrickson at **1.866.755.5968** (toll-free) or **1.630.910.2800** for additional information.



www.hendrickson-intl.com

TRUCK COMMERCIAL VEHICLE SYSTEMS
800 South Frontage Road
Woodridge, IL 60517-4904 USA
1.866.755.5968 (Toll-free U.S. and Canada)
1.630.910.2800 (Outside U.S. and Canada)
Fax 1.630.910.2899

58985-000 Rev 1 06-22

© 1998 – 2022 Hendrickson USA, L.L.C. All Rights Reserved. All trademarks shown are owned by Hendrickson USA, L.L.C., or one of the affiliates, in one or more countries.
Information contained in this literature was accurate at the time of publication. Product changes may have been made after the copyright date that are not reflected.

Printed in United States of America