

## TRUCK REAR SUSPENSION APPLICATION APPROVAL REQUEST

### SELECT ONE

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

DATE: \_\_\_\_\_ ATTN: \_\_\_\_\_



applicationsubmittals@hendrickson-intl.com



1.630.910.2847

### 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](http://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: \_\_\_\_\_

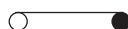





#### Aftermarket Conversion Request Only:

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 \_\_\_\_\_

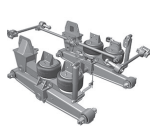
FMSI No.: \_\_\_\_\_

DRIVELINE RETARDER ☐ Yes ☐ No



## TRUCK REAR SUSPENSION DESIRED – SELECT ONE

### MECHANICAL SUSPENSIONS

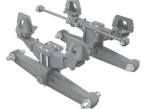


#### AR2™

(Air over equalizing beam)

☐ Conversion

☐ Complete Suspension  
(Includes beam)



#### \*\*RT™

(Steel Springs)



#### \*RTE™

(Steel Springs with  
extended leaf springs)



#### HTS™



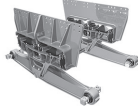
☐ HAULMAAX® EX  
(Rubber Springs)



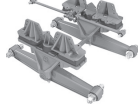
☐ \*HAULMAAX®  
(Rubber Springs)



☐ \*HN®  
(Rubber Springs)



☐ ULTIMAAX®  
(Rubber Springs)



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



☐ R™ – 65K-120K  
(Solid Mount)

Other Hendrickson Truck Suspension \_\_\_\_\_

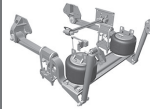
### AIR SUSPENSIONS



☐ 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

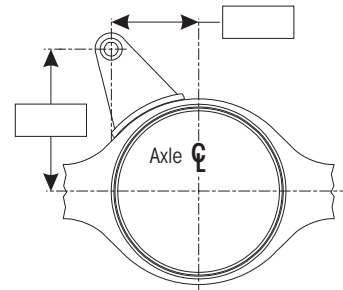
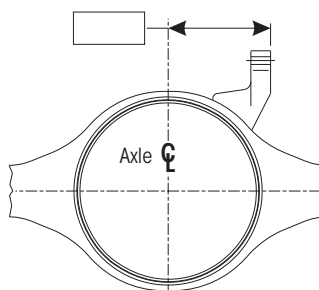
If yes, what type:

☐ 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 \_\_\_\_\_

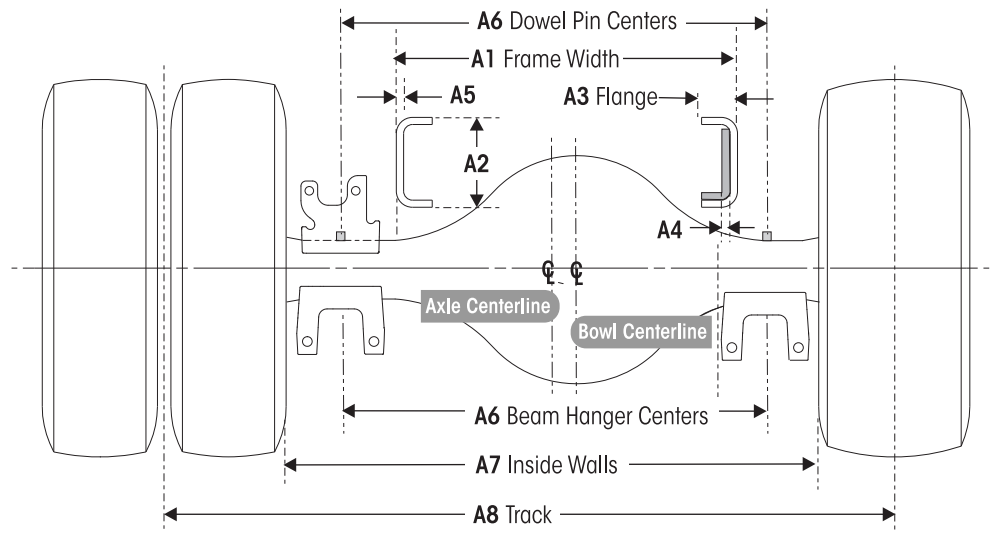
**A5** Frame Thickness \_\_\_\_\_

**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 \_\_\_\_\_ °

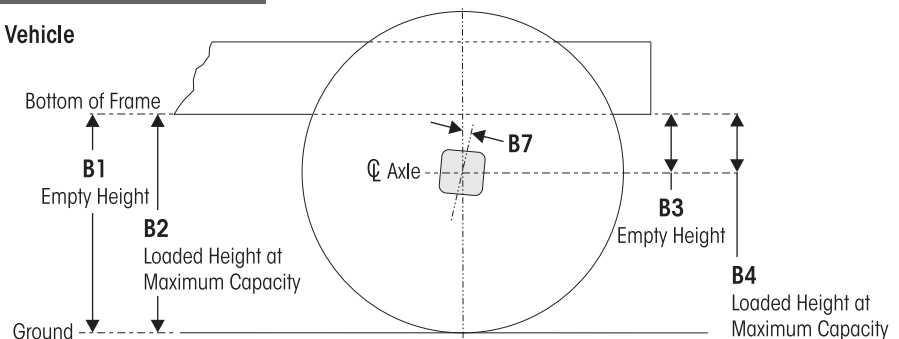
**B8** Rear Pinion Angle \_\_\_\_\_ °

**B9** Offset \_\_\_\_\_  
(Measurement required only if fifth wheel equipped)

**B10** Rear Drive Axle Spacing \_\_\_\_\_

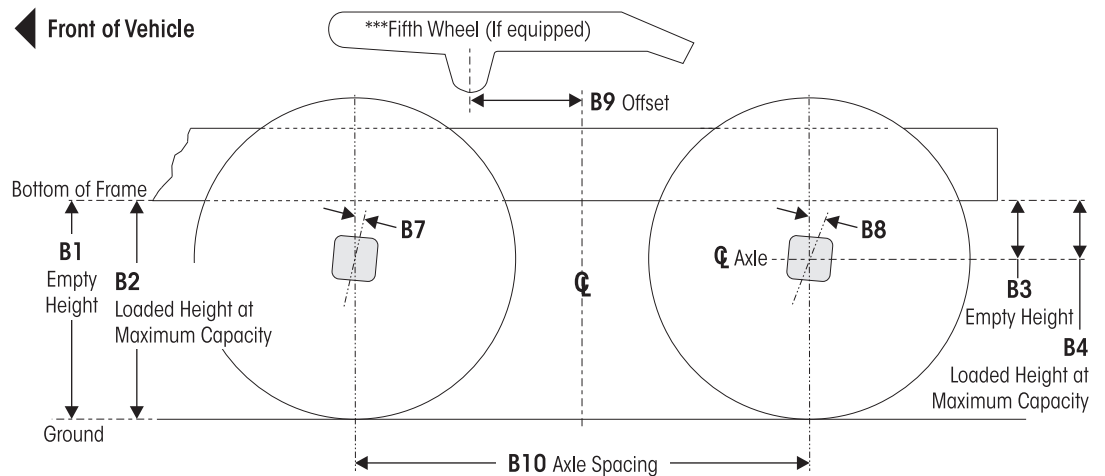
#### SINGLE REAR SUSPENSION

◀ 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](http://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

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