



BUS / RV FRONT AND REAR SYSTEM APPLICATION APPROVAL REQUEST

DATE: _____



applicationsubmittals@hendrickson-intl.com



1.630.910.2847

ATTN: _____

APPLICATION APPROVAL REQUESTER - REQUIRED INFORMATION

Company Name: _____	Mailing Address: _____
Contact Person: _____	City, State, Zip: _____
Telephone: _____	E-mail Address: _____

BUS TYPE <small>SELECT ALL THAT APPLY</small>	VEHICLE INFORMATION
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- Articulated
- Coach
- Midi
- Mini
- RV
- School
- Shuttle
- Transit
- Other: _____

SUSPENSION APPLICATION SELECT ALL THAT APPLY: Commercial Defense Aftermarket Rear Suspension Conversion

Left Hand Drive Right Hand Drive

VIN #: _____

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

Maximum Load on Suspension (at the ground) Front: _____ Rear: _____

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

Unsprung Weight Front: _____ Rear: _____ Wheel Base: _____ Build Date: _____

OPERATION

Country: _____

On-Highway %: _____

Max. Grade %: _____

Average Grade %: _____

Max. Grade Length: _____

Miles Km

No. of Passengers: _____

	Current Suspension (Make / Model / Series) on Vehicle	Initial Demand	Annual Demand
FRONT			
REAR			

EQUIPMENT INFORMATION

TIRE INFORMATION

Make: _____

Front Size: _____ Rear Size: _____

Front SLR: _____ Rear SLR: _____

ENGINE INFORMATION

 Front *or* Rear

Engine Model: _____ Transmission Model: _____

Engine Angle: 1° 2° 3° 4° 5° Steering Gear Model: _____

Peak HP: _____ hp kW @ _____ RPM

Peak Torque: _____ ft. lbs. Nm @ _____ RPM

DRIVELINE RETARDER

 Yes No

BRAKE INFORMATION

Air Brake *or* Hydraulic Brake

Disk Brake, Dia.: _____

or

Drum Brake, Dia.: _____ Width _____

Make _____ Model _____

CBA/BAF _____

FMSI No.: _____

AXLE INFORMATION

	Make	Model	Ratio
STEER			
DRIVE			

DRIVE AXLE DIMENSIONS

Dim. A	Dim. B	Dim. C	



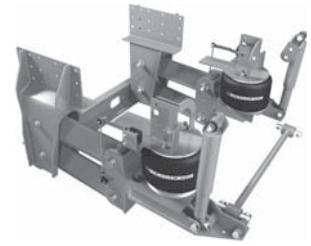
FRONT SYSTEM / STEER AXLE SYSTEM DESIRED – SELECT ONE



AIRTEK



SOFTEK



PARASTEER



IFS



STEERTEK NXT

OTHER

• For more information on Hendrickson suspensions visit www.hendrickson-intl.com

CURRENT DIMENSIONAL DIAGRAMS – FILL IN ALL APPLICABLE DIMENSIONS

DIAGRAM A – TOP VIEW Specify, measurements in inches millimeters

AXLE SEAT

A1 Seat Width _____

A2 Seat Length _____ (150 mm typical)

A3 Mounting Hole Y-Location _____

A4 Mounting Hole X-Location _____

A5 Mount Hole Diameter _____

A6 Axle Centerline to Spring Centerline _____
(Dowel Y Location)

A7 Dowel Hole Diameter _____

PITMAN ARM BALL JOINT

A8 Axle Centerline to Pitman Arm Ball Joint _____

STEERING ARM BALL JOINT

A9 Arm Length _____

A10 Arm Offset _____

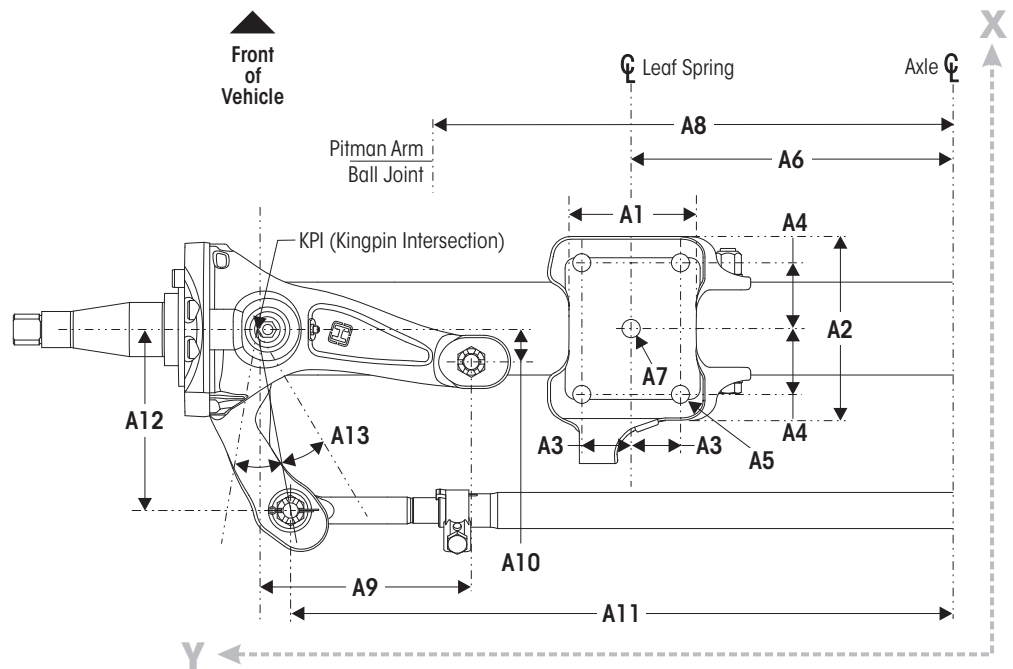
TIE ROD ARM

A11 Tie Rod Ball Y-Location _____

A12 Tie Rod Ball X-Location _____

WHEEL-CUT

A13 Full Left & Right Hand Turn Angle _____ °





CURRENT DIMENSIONAL DIAGRAMS (CONT.) – FILL IN ALL APPLICABLE DIMENSIONS

DIAGRAM B - FRONT VIEW

Specify measurements in inches millimeters

FRAME

B1 Frame Width _____

B2 Section _____

B3 Flange _____

B4 Thickness _____

B5 _____
(Top of Frame to Bus Floor)

B6 Floor Height _____
(Ground to Bus Floor)

STEERING ARM BALL JOINT

B7 Steering Arm Drop _____

TIRE

B8 Inside Walls _____

B9 Track _____

B10 Tire Radius _____

AXLE

B11 Kingpin Inclination _____ °

B12 KPI Distance _____
(Kingpin Intersection)

B13 Axle Drop _____

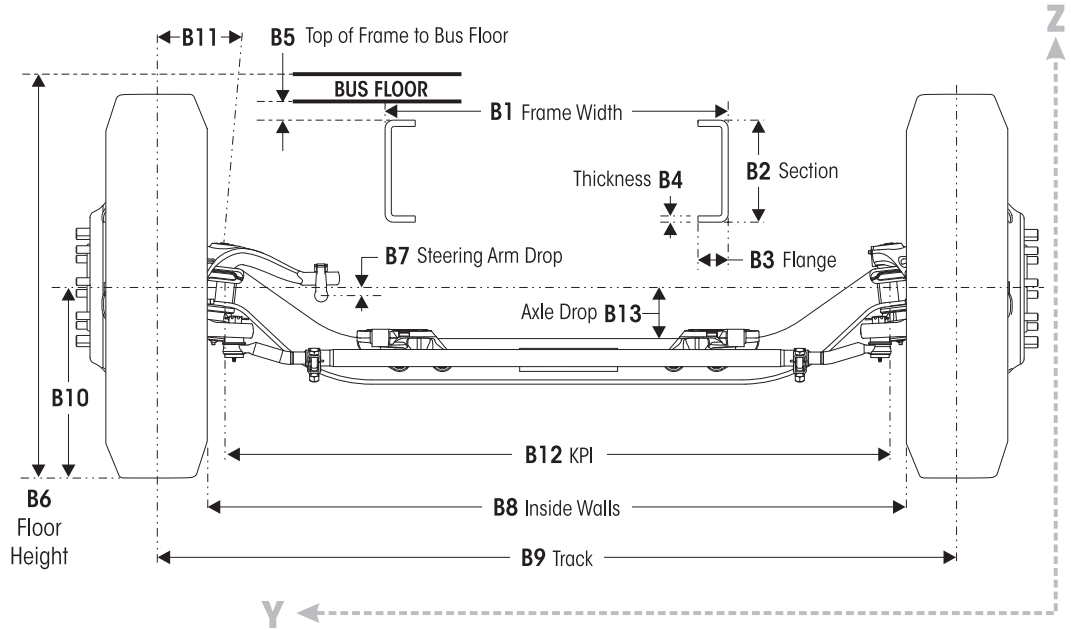


DIAGRAM C - SIDE VIEW

Specify measurements in inches millimeters

AXLE

C1 Caster Angle _____ °

FRAME

C2 Ride Height _____
(bottom of frame to centerline of the spindle)

C3 Kneel Height _____

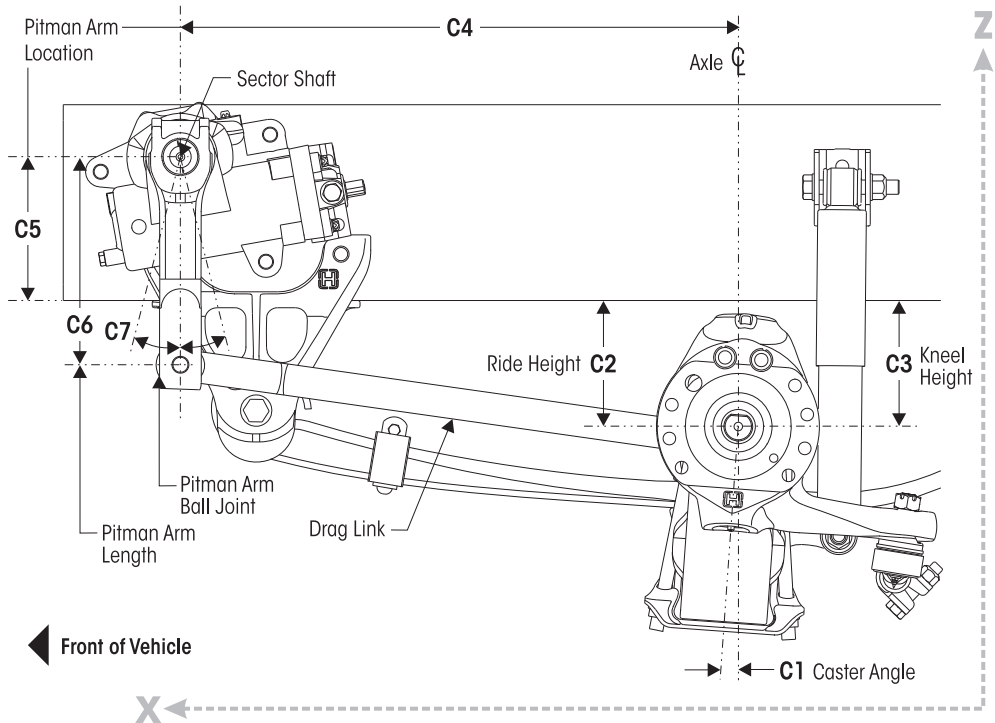
PITMAN ARM

C4 X-Location _____

C5 Z-Location _____

C6 Length _____

C7 Clocking _____ °





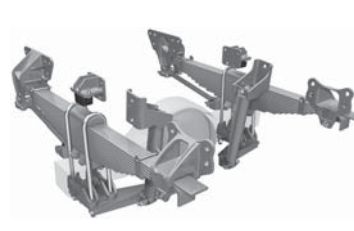
REAR SYSTEM DESIRED – SELECT ONE



PRIMAAX EX



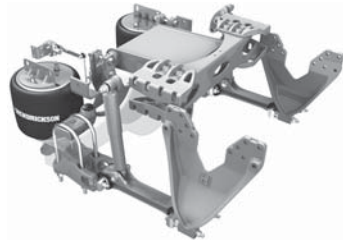
COMFORT AIR



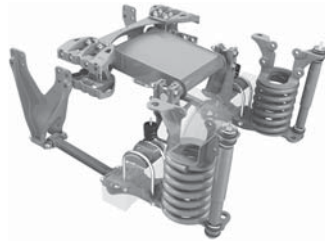
HTS



HAS



HTB



HTB Mechanical



HWS

Other

• For more information on Hendrickson suspensions visit www.hendrickson-intl.com

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 _____

Rear _____

FRAME BRACKET

Straddle Taper

AXLE BRACKET

Furnished by Axle Manufacturer

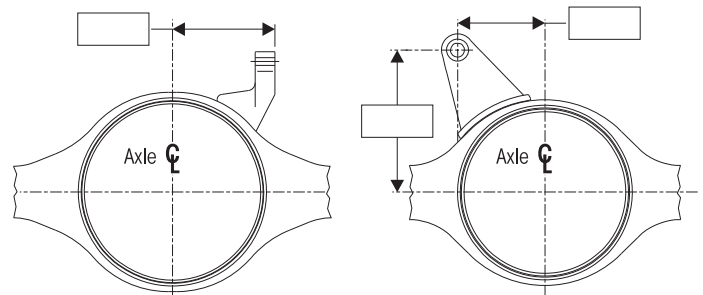
Part of Axle Yes No

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 are in inches millimeters



V-ROD* OPTIONS

SELECT ONE

Use existing V-Rod

TWO-PIECE

ONE-PIECE – Provide V-Rod length (center to center)

inches millimeters

Front _____

Rear _____

FRAME BRACKET

Straddle Taper

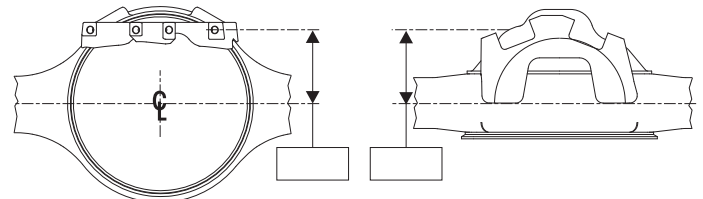
AXLE BRACKET

Furnished by Axle Manufacturer

Part of Axle Yes No

*Bracket Part No _____

NOTE: * If the V-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 are in inches millimeters



NOTE: *Transverse Torque Rods or V-Rods are required for all rear air suspensions.



CURRENT DIMENSIONAL DIAGRAMS – FILL IN ALL APPLICABLE DIMENSIONS

DIAGRAM D

Specify measurements in inches millimeters

D1 Frame Width _____

D2 Section _____

D3 Flange _____

D4 Thickness _____

D5 _____
(Centerline Web to Centerline Web)

D6 _____
(Beam Hanger or Dowel Pin Centers)

TIRE

D7 Inside Walls _____

D8 Track _____

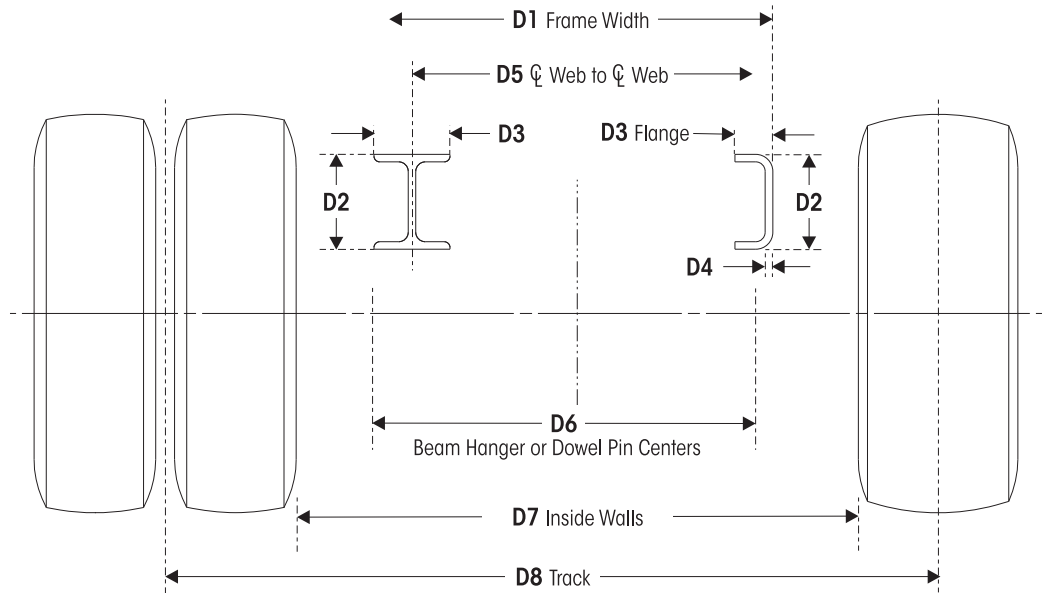


DIAGRAM E

Specify measurements in inches millimeters

E1 _____
(Top of Frame to Bus Floor)

E2 Floor Height _____
(Ground to Bus Floor)

E3 Recess _____

E4 Empty Height _____
(Bottom of Frame to Ground)

E5 Loaded Height _____
(Bottom of Frame to Ground)

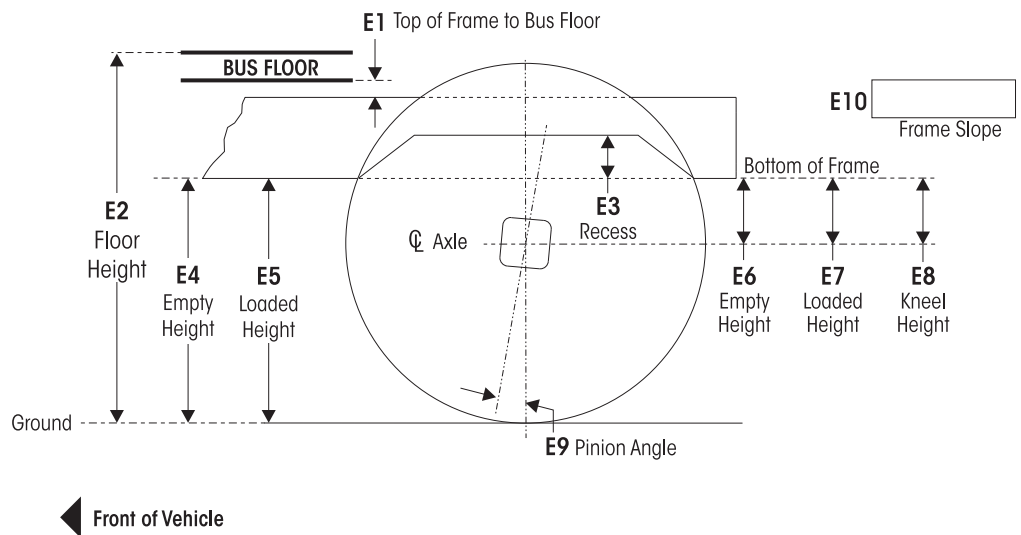
E6 Empty Height _____
(Bottom of Frame to Centerline of Axle)

E7 Loaded Height _____
(Bottom of Frame to Centerline of Axle)

E8 Kneel Height _____

E9 Pinion Angle _____ °

E10 Frame Slope _____





ADDITIONAL INFORMATION / CONCERNS PLEASE PRINT

Empty box for additional information or concerns.

TERMS AND CONDITIONS

This 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 products 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 system's form, fit or function of its products or any damage due to improper installation, operation, service or maintenance, unauthorized modification, neglect, accident, misuse, or operation beyond the written capacity ratings of the products or the vehicle to which such products and related 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 Hendrickson products 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 Hendrickson products.
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			Application No.
Suspension Recommended:		Bill of Material Number:	
Approved by:	Date:	Customer Number:	
Comments:		CN Number:	

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