H TECHNICAL BULLETIN STANDARD REPAIR TIMES GUIDE AUSTRALIA & NEW ZEALAND

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TABLE OF CONTENTS

STANDARD REPAIR TIMES

TRAILER SUSPENSION REPAIR TIMES

Air Controls	2
Air Reservoir	
Air Springs	
Alignment	
Axle	
Beam (non-integrated trailer axle)	3
Brakes, ADB	
Brakes, Drum	
Bushes	5
CONNEX [™] ST & Disc Steerable	5
Frame Brackets	6
Pivot Bolts	
Shocks	
Tyre Inflation Systems	
UBL [™] UNDER BEAM LIFT [™]	6
Wheel-end	7

TRUCK SUSPENSION REPAIR TIMES

AIRTEK [™] / STEERTEK [™]	8
COMFORT AIR [™]	8
HAS	8
HAULMAAX™	8
HN [®]	9
PRIMAAX® EX	
RT [™] / RTE [™]	9
ULTIMAAX®	

AUXILIARY SUSPENSION REPAIR TIMES

COMPOSILITE [™] EXS	10
TOUGHLIFT™ FMT	10
CONTACTING HENDRICKSON & WARRANTY	12
SUPPORT DOCUMENTATION	12

STANDARD REPAIR TIMES

The Standard Repair Times outlined in this document are considered typical and include the components specified in the detailed breakdown. These times are inclusive but not limited to the items listed in the description.

In certain instances, it may be necessary to remove and install additional parts not included in the basic descriptions to complete the warranty repair. When this occurs, a comprehensive report substantiating the need for extra time must be attached to the warranty claim form.

If a warranty claim is submitted with a repair time exceeding the established standard repair times, then a detailed description explaining the reason for the extra time is required.

The following labour allowances have been based upon work conducted by various repair facilities using approved Hendrickson procedures and include technician set-up time, diagnostic time, and consideration of applicable supervisory and administration requirements.

NOTE: This repair times guide has been created specifically for the Asia Pacific region. It replaces all previous documents on this subject, including the former 97117-124 repair times guide.



TRAILER SUSPENSION REPAIR TIMES

COMPONENT DESCRIPTION	HOURS
AIR CONTROLS	
Air control kit, with enclosure (LACV)	1.0
Air gauge	0.5
Axle vent	0.7
Brake protection valve	1.0
Hand control valve	1.0
Height control valve	1.0
Includes:	
Ride height adjustment	0.5
Height control valve linkage	0.5
Lift axle control valve/kit	1.0
Manual exhaust valve	1.0
Pressure protection valve	1.0
Quick release valve Solenoid valve	1.0
Solenoid valve	1.0
AIR RESERVOIR	
Air reservoir	1.0
AIR SPRINGS	
Air spring/piston	
Each air spring (up to three)	1.0
Each additional air spring	0.5
Air spring pedestal (bolt-on)	
INTRAAX®	0.5
Includes:	
Removal and installation of: Air spring lower mounting put	
 Air spring lower mounting nut Pedestal mounting hardware 	
 Tighten all fasteners to torque 	
Air spring pedestal (weld-on)	
INTRAAX	1.0
Includes:	
Removal and installation of:	
 Air spring lower mounting nut 	
 Pedestal mounting welds 	

COMPONENT DESCRIPTION	HOURS
ALIGNMENT	
Axle alignment	
Non-steer dual axles with QUIK-ALIGN®	1.0
Each additional axle	0.5
Includes:	
 Removal and replacement of: QUIK-ALIGN pivot connection hardway 	nro
Non-steer dual axles with welded collars	1.5
Each additional axle	0.8
Includes:	0.0
Removal and replacement of:	
 Pivot connection hardware 	
CONNEX [™] ST steer axle	1.5
Includes:	
Toe adjustment	
 Removal and replacement of: – Pivot connection hardware 	
	0.5
Toe adjustment only	0.5
NON-INTEGRATED TRLAXLE [™] TRAILER AXLE	
Axle Only, with U-bolt attachment	5.5
Includes:Removal and replacement of:	
 Pivot connection hardware 	
 Axle from beam 	
 Redressing (grinding) axle seats 	
Axle alignment	
Removal and installation of:	
 Tyre/wheel assembly Hubs and drums 	
 Springs, air or mechanical 	
 Shocks and shock mounting hardway 	ire
 Height control valve, if equipped 	
 ABS valves and sensor wiring 	
Brake chambers	
 Slack adjusters S-cams & S-cam bearings 	
 Brake shoes with linings and hardway 	ire.
if required	-,
U-bolts (per axle seat)	
One U-bolt	0.8
Both	1.4



	HOURS	COMPON
INTEGRATED AXLE INTRAAX® HALFTRAAX (axle/beam weldment) Equipped with ADB/Drum Includes: • Removal and replacement of: – Pivot connection hardware • Axle alignment • Removal and installation of: – Tyre/wheel assembly – Hubs/Rotors – Air springs – Shocks and shock mounting hardwa – Height control valve – ABS valves and sensor wiring – CONNEX ST lift components – Drum Brakes (all that apply) » Drums » Brake chambers » Slack adjusters » S-cams & S-cam bearings	8.0 re	BEAM (NC Beam a HT (b Inclu • Re - • Ax • Re - - - - -
 » S-cams & S-cam bearings » Brake shoes/pads and hardware CONNEX[™] ST (includes liff) 	10.0	
Includes: • Removal and replacement of: • Pivot connection hardware • Axle alignment • Removal and installation of: • Tyre/wheel assembly • Air springs • Shocks and shock mounting hardwa • ABS valves and sensor wiring • CONNEX ST lift components	re	BRAKES, A Brake ch Calliper Inclu • Re Pads (w INTR/ TRLA Inclu • Re • Br NOTE: Rotor Inboo Inclu • Re - - - - Tighten (per

DMPONENT DESCRIPTION	HOURS
AM (NON-INTEGRATED TRAILER AXLE)	
Beam and axle seat assembly for	
HT (beam only)	4.0
Includes:	
 Removal and replacement of: Pivot connection hardware 	
Axle alignment	
Removal and installation of:	
 Tyre/wheel assembly 	
 Hubs/Rotors for ADB 	
 Air springs Shocks and shock mounting hardway 	۱r۵
 Height control valve 	
– ABS valves and sensor wiring	
 Calliper for ADB 	
 Drum Brakes (all that apply) 	
» Drums » Brake chambers	
» Slack adjusters	
» S-cams & S-cam bearings	
» Brake shoes/pads and hardware	
AKES, ADB Brake chamber	0.5
Calliper	2.1
Includes:	2.1
Removal and installation of:	
 Tyre/wheel assembly 	
Pads (with linings, per axle)	
INTRAAX®	1.0
TRLAXLE [®] , CONNEX [™] ST	1.0
Includes:	
 Removal and installation of: Tyre/wheel assembly 	
 Removal and replacement of: 	
 ADB brake pad with lining 	
Brake adjustment	
NOTE: Does not require calliper, hub or roto	r removal.
Rotor	
Inboard mounted	4.0
Includes:	
Removal and installation of: Type/whool assembly	
 Tyre/wheel assembly Calliper assembly 	
– Hub	
 Inner wheel seal 	
Tighten calliner mounting screws to specifier	1 toraue

ghten calliper mounting screws to specified torque (per trailer, 6 screws for ea. of 4 wheel-ends) 0.8

BRAKES, DRUM Brake camshaft (requires hub removal) CONNEX™ ST (with Hendrickson cam tube) 3.0 INTRAAX® models "A", "B" (prior to 5/2001) 3.0 TRLAXLE® (no cam tube) 3.5 TRLAXLE (with Hendrickson cam tube) 4.0 Includes: • • Removal and replacement of: • S-cam bushes replacement (no cam tube) • Cam tube (if equipped) • Removal and installation of: • Tyre/wheel assembly • Slack adjuster • Hub and drum • Brake adjustment Brake camshaft (does not require hub removal) INTRAAX model "C" (No cam tube) 1.6 INTRAAX model "C" (No cam tube) 1.6 (INTRAAX model "C" (No cam tube) 1.6 INTRAAX model "C" (No cam tube) 1.6 (INTRAAX model "C" (No cam tube) 1.6 INTRAAX model "C" (No cam tube) 1.6 (INTRAAX model "C" (No cam tube) 1.6 INTRAAX model "C" (No cam tube) 1.6 (INTRAAX model "C" (No cam tube) 1.6 INTRAAX model installation of: - Stack adjuster Stack adjuster 1.0	COMPONENT DESCRIPTION	HOURS
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TRLAXLE1.0Includes:• Removal and installation of slack adjuster• Brake adjustmentAdditional labour time is required for:	·	0.8
 Includes: Removal and installation of slack adjuster Brake adjustment Additional labour time is required for: 		
 Removal and installation of slack adjuster Brake adjustment Additional labour time is required for: 		1.0
 Brake adjustment Additional labour time is required for: 		for
Additional labour time is required for:		
I I	,	
	Weld according to procedure	0.3
Brake chamber 0.8	Brake chamber	0.8

COMPONENT DESCRIPTION	HOURS
Brake Chamber Bracket (BCB)	
INTRAAX (each)	1.8
TRLAXLE (each)	1.8
Includes:	
 Remove and replace (weld attachment):
– Weld prep	
– Position – Weld	
 Removal and installation of: 	
 Brake chamber and hoses 	
Check slack adjuster stroke adjustment	
Brake drum (outboard)	0.5
Includes:	
 Removal and installation of: 	
 Tyre/wheel assembly 	
Brake adjustment	
Brake dust shield (clamp and bolt-on)	
Each (up to two)	0.5
Each additional	0.25
Brake shoes with linings (per axle)	
INTRAAX	2.5
(Does not require hub removal.)	0.5
TRLAXLE	2.5
Includes:Removal and installation of:	
 Tyre/wheel assembly 	
– Drum	
 Hub (Inboard mounted drum only) 	
Removal and replacement of:	
 Brake shoe with lining 	

• Brake adjustment

COMPONENT DESCRIPTION

S-cam bush kit (each)

Applies to Hendrickson axles without cam tube **Includes**:

- Removal and installation of:
 - Tyre/wheel assembly
 - Drum
 - Brake shoes with lining
 - Hub
 - S-cam
- Brake adjustment
- Additional labour time is required for:
- Hub removal (refer to hub hours)

S-cam support bracket (each)

Applies to Hendrickson axles without cam tube

Includes:

- Remove and replace (weld attachment):
 - Weld prep
 - Position
 - Weld
- Removal and replacement of:
- S-cam support bracket assembly
- Removal and installation of:
 - Tyre/wheel assembly
 - Hub and drum
 - Slack adjuster
 - Air chamber
 - S-cam
- Brake adjustment

Slack adjuster

- Includes:
- Troubleshooting

0.7

HOURS

1.6

3.0

COMPONENT DESCRIPTION BUSHES	HOURS
Bush tube spacers (per axle)	2.0
Equipped with UBL™	2.0
Equipped with UBL (Bolt-on front plate)	2.5
Includes:	
Removal and replacement of:	
 Bush tube spacers Pivot connection hardware 	
 Axle alignment 	
Pivot Bushes (per axle)	4.0
Equipped with UBL	4.5
Includes:	
Removal and replacement of:	
 Pivot Bushes 	
 Bush tube spacers Pivot connection hardware 	
Axle alignment	
J. J	
CONNEX™ ST & DISC STEERABLE	
Lock-straight assembly	
Air actuator	0.5
Lock-straight air chamber	0.5
Arm assembly (each)	0.5
Steering knuckle (each)	8.0
Additional labour time is required for:	0.0
Kingpin and Bush (per steering knuckle) Includes:	2.0
Removal and installation of:	
 Tyre / wheel assembly 	
 Brake components 	
 Wheel-end components 	
 Wheel-cut stop bolts 	
 Kingpin Steering knuckle/kingpin 	
Tie rod	1.5
Includes:	
Toe adjustment:	
Tie rod end (each)	0.8
Tie rod end (both)	1.5
Includes:	

• Toe adjustment:

COMPONENT DESCRIPTION FRAME BRACKETS	HOURS	COMPONENT DESCRIPTION HOURS TYRE INFLATION SYSTEMS
 Frame bracket (welded) Includes: Removal and replacement of Pivot connection hardware Axle alignment Hanger wing 	4.0	TIREMAAX [™] TIREMAAX kit complete installation Tandem • TIREMAAX Prepped Hendrickson axle 6.0 • Non-TIREMAAX prepped Hendrickson axle 12.0 Each additional axle
 – One only – Additional hanger 	3.0 1.5	TIREMAAX Prepped Hendrickson axle 1.0 Non-TIREMAAX prepped Hendrickson axle 2.0 TIREMAAX axle hose 1.2 Includes:
 PIVOT BOLTS Pivot connection hardware (per axle) Includes: Removal and replacement of: Existing pivot connection hardware Axle alignment 	1.0	Removal and Replacement Internal axle hose Slack adjuster TIREMAAX axle vent O.7 Includes: Removal, Replacement & Adjust Slack adjuster
<pre>SHOCKS Shock absorber ZMD[™] Down stop (Chain or Bumper) Shock bracket (upper) Weld-on Shock mount (lower) INTRAAX®, HT250US Includes: • Removal and replacement of</pre>	0.5 0.5 1.5 1.3	TIREMAAX controller assembly (All models)1.0TIREMAAX PRO & -LB adjust target pressure0.5TIREMAAX indicator lamp (All models)0.5TIREMAAX tyre hoses (All models)0.5First wheel-end (one or two hoses)0.3Each additional wheel-end (per trailer)0.2TIREMAAX PRO-LB damping air tank0.3Tyre inflation system wiring harness0.5
or – Modification / repair per <u>L635</u> Shock strap Options: Rear-mount shock bracket (lower) AAL, EDT and EDL	0.5 1.0	UBL™ UNDER BEAM LIFT™UBL air spring (each)1.0UBL kit



COMPONENT DESCRIPTION	HOURS
WHEEL-END	1.0
ABS wheel sensor (one) Includes:	1.0
 Removal and installation of: 	
 Tyre/wheel assembly 	
– Brake drum	
ABS wheel sensor bracket (one)	0.6
Additional labour time may be required	for these
items:	
 Hub removal (refer to hub hours) 	
Adjust ABS wheel sensors	0.5
(without dust shields, up to four sensors)	
Axle filter	1.0
(Tyre/wheel removal not required)	
Includes:	
 Removal and installation of: Hubcap - replace gasket 	
 Spindle end plug - replace 	
Axle vent	0.7
Includes:	017
Removal, Replacement & Adjust	
 Slack adjuster 	
Hub, drum brake	
(Removal and Replacement)	1.4
Includes:	
Removal and installation of:	
 Tyre / wheel assembly 	
 Brake drum Additional labour times is required for the 	an Home.
Additional labour time is required for the • Air disc brake, remove and install	se liems: 1.7
 ABS wheel sensor bracket, replace 	0.6
Hubcap/gasket	0.0
(tyre / wheel removal not required)	
Èach	0.5
Inner wheel seal	
Drum brake	1.4
Air disc brake	3.1
Includes:	
Removal and installation of:	
 Calliper Assembly Torque calliper to carrier bolto 	
 Torque calliper to carrier bolts Additional labour time is required for the 	na itama:
Additional labour time is required for theBearing cone and cup (in hub) replace	
(inner, outer or both)	0.9
ABS wheel sensor bracket	0.6

COMPONENT DESCRIPTION	HOURS
Wheel-end Play (each wheel-end)	1.0
Adjustment and lube (if necessary)	
Includes:	
 Removal and installation of: 	
 Tyre/wheel assembly 	
– Hubcap	
Wheel studs (up to three)	1.7
 More than three (one hub) 	2.2

TRUCK SUSPENSION REPAIR TIMES

COMPONENT DESCRIPTION HOURS

AIRTEK[™] / STEERTEK[™]

Integrated Front Suspension and Steer Axle

Axle Assembly (including Knuckles)	3.2
Knuckle Assembly (per knuckle)	2.7
Leaf Spring Assembly (per side)	1.8
Air Springs (per side)	0.6
Kingpin Bushes (per side)	3.2
Tie Rod Assembly or Tie Rod End	1.5
Includes:	
Toe adjustment:	
Height Control Valve	0.8
Includes:	
 Ride Height adjustment: 	
Shock Absorber (per shock)	0.5
Clamp Group (U-bolts or straight bolts)	1.0

COMFORT AIR[™]

Rear Air Suspension System

Main Support Member Assembly (per member)	1.5
Cross Channel	1.0
Frame Hanger (per hanger)	1.0
Clamp Group (per set)	
Top pad and/or bottom cap	1.5
U-bolt (per set)	1.0
Air Spring (per air spring)	1.0
Height Control Valve	0.8
Includes:	
 Ride Height adjustment: 	
Shock absorber (per shock)	0.5
Transverse Torque Rod	1.5

COMPONENT DESCRIPTION HOURS

HAS

Heavy Duty Rear Air Suspension System

Frame Hanger (per hanger)	1.0
Main Support Member (per side)	1.5
Cross Channel	1.0
Clamp Group (per side)	
Top pad and/or bottom cap	1.5
U-bolts (per set)	1.0
Air Spring (per air spring)	1.0
Height Control Valve	0.8
Includes:	
 Ride Height adjustment: 	
Radius/Tension Leaf (per side)	1.5
Rebound Roller (per axle)	0.5
Shock absorber (per shock absorber)	0.5
Slipper Pad (per axle)	1.0
Transverse Torque Rod (per rod)	1.5
Longitudinal Torque Rod (per rod)	1.0

HAULMAAX™

Heavy-duty Lightweight Rubber Suspension System

Progressive or Auxiliary Load Spring (per side)	0.8
Bar Pin End Bushes (per beam)	4.5
Bolster Springs (including wear plate)	
4 Bolsters on one Beam	1.5
Inboard Frame Bracket	1.0
Outboard Frame Bracket	1.5
Saddle	
1 Saddle	4.5
2 Saddles	6.0
Equalising Beams	3.0
Shock Absorbers (per shock)	0.5
Transverse Torque Rod (per rod)	1.5
Longitudinal Torque Rod (per rod)	1.5

HN®

HOURS

COMPONENT DESCRIPTION

VariRate[™] Spring Suspension System

Auxiliary Load Spring (per side)	0.8
Bar pin End Bushes (per beam)	4.5
Bolster Springs	
2 Bolsters on one Beam	1.0
Saddle Assembly (per saddle)	3.5
Equalising Beam (per beam)	3.0
Shock Absorbers (per shock)	0.5
Transverse Torque Rod (per rod)	1.5
Longitudinal Torque Rod (per rod)	1.5

PRIMAAX® EX

Severe-Duty Vocational Rear Air Suspension System

U-beam Assembly per Assembly Includes: – Axle alignment	2.5
Frame Hanger per Hanger	2.0
Clamp Group (per side)	
Top pad and/or bottom cap	1.5
U-bolt (per set)	1.0
D-pin Bushes (per axle)	4.5
Add for pivot bushes	2.0
Includes:	
Axle alignment	
QUIK-ALIGN [®] Pivot Bushes (per axle)	4.5
Add for D-pin bushes	2.0
Includes:	
Axle alignment	
Air Spring (per air spring)	1.0
Height Control Valve	0.8
Includes:	
 Ride Height adjustment: 	
Shock Absorber (per shock)	0.5
Transverse Torque Rod (per rod)	1.5
Longitudinal Torque Rod (per rod)	1.0

COMPONENT DESCRIPTION

RT[™] / RTE[™]

Steel Leaf Spring Rear Suspension System

Equalising Beam (per beam)	3.5
Equalising beam (per beam)	0.0
Saddle Assembly (per saddle)	3.5
Frame Hanger/Outboard bracket (per hanger)	1.5
Bar Pin End Bushes (per beam)	1.0
Bolster/Spring/Shear (per spring)	3.5
Centre Bush (per bush only)	0.8
Cross Tube	1.5
Top Pad (per top pad)	1.5
Shock Absorbers (per shock)	0.5
Transverse Torque Rod (per rod)	1.5
Longitudinal Torque Rod (per rod)	1.0

ULTIMAAX®

Advanced Severe-Duty Rear Rubber Suspension System

Progressive Load Spring (per load spring)	0.8
Bar Pin End Bushes (per beam)	4.5
Shear Springs	
4 Shear Springs on one Hanger	3.0
Outboard Frame Bracket	1.5
Saddle	
1 Saddle	4.5
2 Saddles	6.0
Equalising Beams	3.0
Shock Absorbers (per shock)	0.5
Transverse Torque Rod (per rod)	1.5
Longitudinal Torque Rod (per rod)	1.5

HOURS

HOURS

AUXILIARY SUSPENSION REPAIR TIMES

COMPONENT DESCRIPTION	

COMPOSILITE[™] EXS Next Generation Truck

Air control kit, with enclosure (LACV) Air spring (per air spring) Axle, Hendrickson fabricated axle Axle seats, bolt-on (per side) Beam assembly set (per axle) Brake calliper, air disc brake (per wheel end) Brake chamber	1.0 1.0 5.0 2.0 2.0 2.0
Air disc brake (per wheel end) Drum brake (per wheel end) Brake shoe/pad replacement	1.0 1.0
Bolt-on brakes (per wheel end) Integrated brakes (per wheel end) Brake slack adjuster, drum brake (per wheel end) Kingpins (per axle) Knuckle, backbone (per side) Lock-straight (per wheel end) Pivot bush set (per axle) Side rail assemblies, bolted (per axle) Stabilizers or reverse lockout shocks (per axle) Upper air spring brackets, bolted (per side)	1.0 1.0 6.0 3.0 1.0 2.0 3.0 1.0 1.0
Wheel end Air disc brake (per wheel end) Drum brake (per wheel end) Wheel end inner seal	3.0 1.5
Air disc brake (per wheel end) Drum brake (per wheel end)	2.5 1.5

COMPONENT DESCRIPTION

TOUGHLIFT[™] FMT

Non-Steerable Axle Suspension System (formerly HLM)

Air control kit, with enclosure (LACV)	1.0
Air spring (per air spring)	1.0
Air spring upper brackets, bolted (per side)	1.0
Axle assembly, pusher or tag	4.0
Brake calliper, air disc brake (per wheel end)	2.1
Brake chamber	
Air disc brake (per wheel end)	0.5
Drum brake (per wheel end)	0.8
Brake slack adjuster, drum brake (per wheel end)	0.7
Frame brackets, bolted (per axle)	3.0
Pivot bush (per axle)	4.0
Wheel end	
Air disc brake (per wheel end)	3.1
Drum brake (per wheel end)	1.4
Wheel end inner seal	
Air disc brake (per wheel end)	3.1
Drum brake (per wheel end)	1.4

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CONTACTING HENDRICKSON & WARRANTY

Contact Hendrickson customer service before performing any warranty related repairs. Refer to the latest applicable warranty statements for more details regarding Hendrickson warranty, which are available www.hendrickson.com.au.

Contact Hendrickson customer service for technical assistance as needed. To do so, several options are available. Prior to contacting Hendrickson, it will be best to have the following information about your Hendrickson suspension available (all that apply):

- Suspension ID Tag information. Get the suspension model number, suspension serial number and approximate number of suspension kilometres.
- Vehicle VIN number. (Refer to truck or trailer OEM manual for VIN plate location.) Get the truck or trailer type (van, refrigerated, flat bed, etc...), manufacturer, VIN (vehicle identification number) and in-service or manufacture date.
- If applicable, description of the system problem, part number and/or part description of the reported nonfunctioning part.
- What troubleshooting and/or measurements have been performed?
- What service data literature do you have or need?
- Digital photos of suspension and damaged areas.

Detailed contacts for Hendrickson are available on the www.hendrickson.com.au website.

Hendrickson Customer Service may be contacted using the contact details shown below.



Figure 1: Typical Trailer Suspension ID Plate

The Figure 1 shows a typical Trailer Suspension ID plate. If claiming warranty the most important details are the Model Number and the Serial Number. For more details regarding trailer suspension identification refer to Trailer Suspension Identification manual, 97117-151. Refer our website for Truck or Auxiliary suspensions.

SUPPORT DOCUMENTATION

The following documents may be useful in identifying suspensions or providing relevant service procedures.

Other supporting documentation and service manuals may be found on the Hendrickson Asia Pacific website, www.hendrickson.com.au.

97117-151 – Trailer Suspension Identification 97117-161 – Trailer Suspension Maintenance 97117-250 – Wheel End Maintenance

L427 – TFB[™] Pivot Bush Replacement Procedure

Revisions Table

DATE	REV	PAGE	DESCRIPTION
Feb-2024	А	All	Create new comprehensive document to replace 97117-214.

Actual product performance may vary depending upon vehicle configuration, operation, service and other factors.

All applications must comply with applicable Hendrickson specifications and must be approved by the respective vehicle manufacturer with the vehicle in its original, as-built configuration. Contact Hendrickson for additional details regarding specifications, applications, capacities, and operation, service and maintenance instructions.

Australia Call +61 3 8792 3600 or Email customerservice@hendrickson.com.au Need Help? New Zealand Call +64 9 570 4721 or Email nz-customerservice@hendrickson.co.nz



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