H TECHNICAL BULLETIN TRAILER SUSPENSION MAINTENANCE SCHEDULE

LIT NO: 97117-169 DATE: October 2024

REVISION: G





SUSPENSION MAINTENANCE SCHEDULE MATRIX

System			Technician					Driver
Time/mileage	e, whichever oc	ccurs first.	Pre-Delivery Inspection	15,000km First Inspection	15,000km (Monthly) Inspection	45,000km (3 Monthly) Inspection	180,000km (12 Monthly) Inspection	Daily Visual Inspection
Tyre	Tyre Pressure	S	J.		©	J.	J.	
Pressure Control	TIREMAAX [™] P	RO System Pressures					×	
Refer to	TIREMAAX PRO) Hoses & Connections	J.				×	
<u>T51002</u>	TIREMAAX PRO) System & Warning Lamp	Ô		©		×	
	Wheel Studs	& Nuts		J.				
	Inner Hub Se	al Lubricant Leak Check					0	Ø
	Hubcap Integ	rity & Leaks	©		©			()
	Hub Smooth	Rotation		×		×	×	
Wheel End Refer to	Hub Tempera	ture – Post Operation		×	×	y	×	0
<u>97117-250</u>	Lubricant Lev	el – Oil Filled Hubs	Ô	Ô	Ô		O	
	Conventional Hubs – Clean, Inspect, Lubricate & Set End Play						×	
	Wheel End Sensor/Monitor (where fitted)						0	
	Hubodometer (where fitted)							
Fixture to	Pivot Connection	QUIK-ALIGN [®] Pivot Bolt	Ô			×	J.	
Trailer		TFB [™] Pivot Bush					×	
Refer to		Wear Washers				Ø	0	
<u>97117-135</u>	Hangers		Ô					
	Fasteners & l	J-Bolts	O	Ø	O	×	×	
	Trailing Arms		Ô	Ø			0	
	Axle, Connect	tions & Welds	Ô	O		Ô		0
	Axle Breather	Vent		Ô		0	0	
C	Air Springs		Ô	O	Ô	Ô	×	٩
Suspension System	Shock Absorb	pers	©	Ô	\odot			
Refer to <u>97117-161</u>	Shock Absorb	per Mounting & Fasteners	ø	×	Ø	×	×	0
	Aux. Rebound	Limiter/Straps (where fitted)	Ô	Ô		Ø	0	Ø
	UBL Lift Kit (where fitted)	Fasteners	ø	0	Ô	J	×	
		Welds	Ô	0		0	0	
		Lift Bag/Leaks	Ô	0		×	×	
		LACV & Pressure Regulator					×	

LEGEND

Visual Inspection

Lubrication Point

Physical Check / Adjustment / Torque / Operation / Leak Check

NOTE: For further details refer to <u>"Inspection" on page 5</u> & trailer torque bulletin <u>97117-251</u>. Refer to <u>97117-161</u> for a linked interactive version of this matrix. Suspension Maintenance Schedule Matrix continued...

System			Technician					
Time/mileage, whichever occurs first.			Pre-Delivery Inspection	15,000km First Inspection	15,000km (Monthly) Inspection	45,000km (3 Monthly) Inspection	180,000km (12 Monthly) Inspection	Daily Visual Inspectio
		Dust Shield			O			
	Brakes General	Air Line Routing & Leaks	Ø			J	×	٢
	Contortal	ABS Sensor	Ø					
		Security & Fasteners	J.		O		×	
	Brake	Surface Damage		Ô		Ø		
	Chambers	Clamp Ring Security		Ô	Ø		۲	
		Clevis Assembly	Ô		©)	۲		
		Drums			Ô	٩	Ø	
		S-Cam	Ø		Ô	Ò		
		S-Cam Bushes & Tube			O			
Brakes	Drum Brake	S-Cam Radial/End Play					×	
Refer to 97117-161	System	Brake Adjuster	/		J	J	<i>></i>	
		Brake Shoe Lining			O		×	
		Anchor Pin Bushes						
		Brake Shoe Springs						
		Rotor			O	J	×	
		Calliper & Fasteners	Q			ð	Ø	
		Brake Pads			O	Ju -	×	
	Disc Brake System	Pad Retaining Springs			O			
	System	Running Clearances	Ø					
		Guide Pin Cap/Adjuster Boot						
		Guide Pins & Piston Boots			C)		×	
	Ride Height C	Check	J.	J.		J	×	
	Height Contro	ol Valve	O				×	
Air System	All Air Line Fit	tings	Ø		O		×	Ô
	Dump Valve (Where fitted)					×	
Self-Steer Axles Refer to Drum Brake 97117-273	Tie Rod Ends	& Clamps			1	1	1	
	Drum Brake K	ingpin Bushes & Arm Pivots				1	1	
	Disc Brake Ki	ngpin Bushes				<i>y</i>	٠	
	Lock Straight	Assembly or Dampers						
Disc Brake 97117-296	Lock Straight	Air Spring & Chamber					×	
Suspension	Overall Axle 8	k Suspension Condition						

Visual Inspection

Lubrication Point

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SUSPENSION MAINTENANCE GUIDE

INTRODUCTION

This document recommends inspection areas and lubrication points on Hendrickson Trailer suspensions and components. The main reference is the complete <u>"Suspension Maintenance Schedule Matrix" on page 2</u>. An interactive version of this matrix schedule is available in <u>97117-161</u>.

Each of the individual recommended services is also separated on individual service inspections, which are listed on pages 6 to 16. Also included is a recommended checklist for trailers that have been subjected to flood waters or extended idle periods.

IMPORTANT: Workshops, transport businesses and drivers need to check or service more items than are listed in this suspension service schedule. This includes things like lights, reflectors, couplings, load doors and mudflaps.

> Items that need inspection will vary depending on application, such as reefer, grain tipper or live bottom. Therefore, each business is responsible to create its own suitable service and driver checklists.

PERIODIC INSPECTION SCHEDULE

IMPORTANT: This document includes minimum inspection requirements for normal on-highway applications. For trailers subjected to some off-road, abnormally rough or extreme conditions, inspection and lubrication should be adjusted to ensure maximum suspension performance and integrity. For more details refer to Hendrickson trailer suspension maintenance bulletin <u>97117-161</u>.

REFERENCE DOCUMENTS

The following documents should be referenced prior to carrying out service and maintenance procedures, along with supporting information provided by relevant OEMs.

- Hendrickson Wheel End Maintenance 97117-250
- Hendrickson Trailer Suspension Maintenance 97117-161
- Hendrickson CONNEX[™] ST Drum Maintenance <u>97117-273</u>
- Hendrickson Steerable Disc Maintenance 97117-296
- Hendrickson TIREMAAX[™] PRO Service <u>T51002</u>
- Hendrickson Trailer Torque Specifications 97117-251
- Australian National Heavy Vehicle Inspection Manual



SAFETY

Refer to "General Safety Instructions" on page 18.

LUBRICATION POINTS

There are few areas requiring lubrication for Hendrickson suspensions and axles. These areas include tie rod ends, kingpins (steer axle), brake adjusters, S-cam spider bushes and support bearing journal or cam tube. Each requires NLGI #2 EP chassis lubricant and should be replenished regularly.

Apply grease when components are unloaded; brakes must be released, and steer axles must be off the ground. Always apply grease until fresh lubricant appears at purge point.

INSPECTION

Recommended inspections should be conducted at periodic intervals and should also be carried out any time the suspension is damaged or otherwise functioning improperly. Refer also to <u>"Reference Documents" on page 4</u>.

This schedule is based on normal on-highway average annual trailer distance of 180,000 km. Inspection intervals will need to be adapted to suit trailer distance and operating conditions. Inspections should be carried out at the time or mileage intervals specified, whichever occurs first.

Areas to Inspect

A general inspection should include any point on the suspension where suspected wear or damage may occur.

Inspection/Lubrication Intervals

Periodic intervals listed in this bulletin for inspection and lubrication should be modified according to trailer use. Inspection and lubrication may be required more often if:

- Required by OEM
- Required by component vendor
- Trailer type and application demands are high
- Impact or other evidence of suspension damage

Inspection Depth

There are only four inspection and service levels mentioned in this schedule, but inspection depth will vary depending on who and when the inspection is conducted.

For example, the daily driver inspection requires briefly checking that there are no noticeable air leaks, no components are damaged or loose and the trailer appropriate for its next trip. At a monthly service inspection, the technician will need to have a closer look at the trailer systems and components to ensure that it can safely operate until the next service. Likewise, the three-monthly and 12-monthly services each require deeper and more though inspections to ensure trouble free and safe trailer operation.

Pre-Delivery

Pre-Delivery Inspections (PDI) are typically required by the trailer OE to be conducted prior to new trailer delivery to the customer. It includes testing suspension and vehicle for proper operation. This should also be performed by a repair facility after replacing a suspension or axle/beam weldment.

Daily

This pre-operation inspection can detect worn, broken or loose parts before any serious problems occur. During a walk-around, check for any obvious problems or abnormalities.

First Service (before 15,000km)

This inspection is to be carried out after the trailer has been in service, but no later than 15,000km.

15,000km (Monthly)

This inspection is more comprehensive than the daily inspection and covers more areas. Seals, hubcap and hubcap gaskets should be checked for condition and potential leaks. This is to be carried out at 15,000km or monthly intervals, whichever occurs first.

Brake adjusters should be checked for free stroke and applied stroke. Do not manually adjust auto brake adjusters.

Steer axle tie rod ends and should be lubricated monthly, as should kingpins for disc brake steerable suspensions.

45,000km (Quarterly)

Perform quarterly inspections listed. This is to be conducted at 45,000km or quarterly intervals, whichever occurs first. Along with other checks, hubs must be inspected for smooth rotation. If the bearings feel rough, sound noisy or do not rotate freely, do not place the suspension back into service.

Tie rods, kingpins, S-cam spider bush and support bearing journal or cam tubes should be greased at this time, and also during any other service when grease points are easily accessible.

180,000km (Yearly)

Perform yearly inspection as listed. This is to be carried out at 180,000km or yearly intervals, whichever occurs first.

The yearly service is similar to the 45,000km, but increases depth of service. It includes service of conventional bearings, lubricating brake adjusters, along with other checks such as thorough TIREMAAX, brake and suspension systems inspection.

PRE-DELIVERY INSPECTION

System				Technician	Checked	Comments
Tyre Pressure	Tyre Pressures			×		
Control	TIREMAAX [™] PRO Hoses & Connections			×		
Refer to <u>T51002</u>	TIREMAAX PRO) System & Warni	ing Lamp	0		
	Wheel Studs &	k Nuts		0		
Wheel End	Hubcap Integri	ity & Leaks		0		
Refer to <u>97117-250</u>	Lubricant Level	I – Oil Filled Hubs		0		
	Hubodometer	(where fitted)		0		
Fixture to	Pivot Connecti	on	QUIK-ALIGN [®] Pivot Bolt			
Trailer	Hangers			0		
	Fasteners & U-Bolts					
	Trailing Arms			0		
	Axle, Connections & Welds					
	Air Springs					
Suspension	Shock Absorbers					
System Refer to	Shock Absorber Mounting & Fasteners			×		
<u>97117-161</u>	Auxiliary Rebound Limiter/Straps (where fitted)					
		Fasteners		×		
	UBL Lift Kit (Where fitted)	Welds				
		Lift Bag/Leaks		٢		
		LACV & Pressure Regulator				

LEGEND

Visual Inspection

🔶 Lubrication Point 🔰 🌽 Ph

Physical Check / Adjustment / Torque / Operation / Leak Check

Pre-Delivery Inspection continued...

System			Technician	Checked	Comments
		Dust Shield			
	Brakes General	Air Line Routing & Leaks			
		ABS Sensor			
		Security & Fasteners	J.		
Brakes	Brake Chambers	Clamp Ring Security	0		
Refer to		Clevis Assembly			
<u>97117-161</u>		S-Cam			
	Drum Brake System	S-Cam Bushes & Tube			
		Brake Adjuster	ا الحر		
	Disc Brake	Calliper & Fasteners			
	System	Running Clearances			
	Ride Height Ch	neck	J.		
Air System	Height Control	Valve			
	All Air Line Fitt	ings			
Self-Steer Axles	Tie Rod Ends &	& Clamps	۵ ا		
Refer to	Kingpin Bushe	s & Centring Arm Pivots	۵ 🍐		
Drum Brake <u>97117-273</u>	Lock Straight Assembly or Dampers		()		
Disc Brake <u>97117-296</u>	Lock Straight A	Nir Spring & Chamber			
Suspension	Overall Axle &	Suspension Condition			

Visual Inspection

Lubrication Point

15,000KM FIRST INSPECTION

To be carried out no later than 15,000km

System				Technician	Checked	Comments
Tyre	Tyre Pressures			0		
Pressure Control	TIREMAAX [™] PR	O Hoses & Conn	ections	0		
Refer to <u>T51002</u>	TIREMAAX PRO	System & Warni	ng Lamp	0		
	Wheel Studs &	Nuts		×		
	Inner Hub Seal	Lubricant Leak (Check	O		
	Hubcap Integri	ty & Leaks		0		
Wheel End	Hub Smooth R	otation		×		
Refer to <u>97117-250</u>	Hub Temperatu	ıre — Post Operat	ion	×		
	Lubricant Level	Lubricant Level – Oil Filled Hubs				
	Wheel End Sensor/Monitor (where fitted)					
	Hubodometer (where fitted)					
Fixture to	Pivot Connection QUIK-AL		QUIK-ALIGN® Pivot Bolt			
Trailer	Hangers					
	Fasteners & U-	Bolts				
	Trailing Arms					
	Axle, Connections & Welds					
	Axle Breather					
	Air Springs					
Suspension System	Shock Absorbers			0		
Refer to <u>97117-161</u>	Shock Absorbe	r Mounting & Fa	steners	æ		
	Auxiliary Rebou	Auxiliary Rebound Limiter/Straps (where fitted)				
		Fasteners		۲		
	UBL Lift Kit	Welds		٢		
	(Where fitted)	Lift Bag/Leaks		۲		
		LACV & Pressur	re Regulator			

LEGEND

Visual Inspection

Lubrication Point

Physical Check / Adjustment / Torque / Operation / Leak Check

15,000km First Inspection continued...

System			Technician	Checked	Comments
		Dust Shield			
	Brakes General	Air Line Routing & Leaks			
		ABS Sensor Mounting, Brackets & Wiring			
		Security & Fasteners			
	Brake	Surface Damage			
	Chambers	Clamp Ring Security			
Brakes		Clevis Assembly	Ø		
Refer to		S-Cam			
<u>97117-161</u>	Drum Brake System	S-Cam Bushes & Tube	Ø		
		Brake Adjuster	Ø		
	Disc Brake System	Rotor			
		Calliper & Fasteners	Ø		
		Pad Retaining Springs			
		Running Clearances	Ø		
		Guide Pin Cap/Adjuster Boot			
	Ride Height Ch	eck	s		
Air System	Height Control	Valve			
	All Air Line Fitti	ngs			
Self-Steer Axles	Tie Rod Ends 8	Clamps	۲		
Refer to	Kingpin Bushe	s & Centring Arm Pivots	۲		
Drum Brake <u>97117-273</u>	Lock Straight A	ssembly or Dampers			
Disc Brake <u>97117-296</u>	Lock Straight A	ir Spring & Chamber	0		
Suspension	Overall Axle &	Suspension Condition	0		

15,000KM (MONTHLY) INSPECTION

15,000km or Monthly, whichever occurs first

System				Technician	Checked	Comments
Tyre Pressure	Tyre Pressures					
Control Refer to	TIREMAAX [™] PRO Hoses & Connections					
<u>T51002</u>	TIREMAAX PRO System & Warning Lamp					
	Wheel Studs &	Nuts				
	Inner Hub Seal	Lubricant Leak C	Check			
Wheel End	Hubcap Integri	ty & Leaks				
Refer to	Hub Temperatu	re – Post Operati	on	×		
<u>97117-250</u>	Lubricant Level	– Oil Filled Hubs	3			
	Wheel End Sen	sor/Monitor (whe	re fitted)			
	Hubodometer (ubodometer (where fitted)				
Fixture to Trailer	Pivot Connectio	nnection QUIK-ALIGN® Pivot Bolt		0		
	Fasteners & U-Bolts					
	Air Springs					
Suspension	Shock Absorbers					
System	Shock Absorber Mounting & Fasteners					
	Auxiliary Rebou	und Limiter/Strap	s (where fitted)			
	UBL Lift Kit (Wh	nere fitted)	Fasteners			
		Dust Shield				
	Brake General	Air Line Routing	y & Leaks			
Brakes		ABS Sensor Mo	unting, Brackets & Wiring			
Refer to	Security & Fasteners					
<u>97117-161</u>	Brake	Surface Damag	e			
	Chambers	Clamp Ring Sec	curity			
		Clevis Assembly	/			

LEGEND

Visual Inspection

Lubrication Point

Physical Check / Adjustment / Torque / Operation / Leak Check

15,000km (Monthly) Inspection continued...

System			Technician	Checked	Comments
		Drums			
		S-Cam	()		
	Drum Brake System	S-Cam Bushes & Tube	()		
	,	Brake Adjuster	J.		
		Brake Shoe Lining	()		
Brakes		Rotor	0		
continued		Calliper & Fasteners	0		
	Disc Brake System	Brake Pads	()		
		Pad Retaining Springs	()		
		Running Clearances	()		
		Guide Pin Cap/Adjuster Boot	()		
		Guide Pins & Piston Boots	0		
Air Sustam	Height Contro	I Valve	0		
Air System	All Air Line Fitt	ings	()		
Self-Steer Axles	Tie Rod Ends	& Clamps	• ۶		
Refer to	Drum Brake Ki	ngpin Bushes & Centring Arm Pivots	0		
Drum Brake <u>97117-273</u>	Disc Brake Kin	gpin Bushes	۵ ا		
Disc Brake <u>97117-296</u>	Lock Straight A	Assembly or Dampers	٩		

Visual Inspection

Lubrication Point

45,000KM (QUARTERLY) INSPECTION

45,000km or Quarterly, whichever occurs first

System			Technician	Checked	Comments
Tyre	Tyre Pressures		×		
Pressure Control	TIREMAAX™ PR	O Hoses & Connections	()		
Refer to <u>T51002</u>	TIREMAAX PRO	System & Warning Lamp	0		
	Wheel Studs 8	Nuts	<u>()</u>		
	Inner Hub Sea	I Lubricant Leak Check			
	Hubcap Integri	ity & Leaks	()		
Wheel End	Hub Smooth R	otation	J.		
Refer to <u>97117-250</u>	Hub Temperatu	ure – Post Operation	×		
	Lubricant Leve	I – Oil Filled Hubs	()		
	Wheel End Ser	nsor/Monitor (where fitted)	()		
	Hubodometer	(where fitted)	()		
	Pivot Connection	QUIK-ALIGN [®] Pivot Bolt	×		
Fixture to		TFB [™] Pivot Bush	()		
Trailer		Wear Washers	()		
	Hangers	•	0		
	Fasteners & U-	Bolts	×		
	Axle, Connectio	ons & Welds	0		
	Axle Breather		0		
	Air Springs		0		
Suspension	Shock Absorbe	ers	0		
System Refer to	Shock Absorbe	er Mounting & Fasteners	×		
<u>97117-161</u>	Auxiliary Rebo	und Limiter/Straps (where fitted)	()		
		Fasteners	J		
	UBL Lift Kit	Welds	()		
	(Where fitted)	Lift Bag/Leaks	J		
		LACV & Pressure Regulator			

LEGEND

Visual Inspection

Lubrication Point

Physical Check / Adjustment / Torque / Operation / Leak Check

45,000km (Quarterly) Inspection continued...

System			Technician	Checked	Comments
		Dust Shield	۲		
	Brakes General	Air Line Routing & Leaks	×		
		ABS Sensor Mounting, Brackets & Wiring	0		
		Security & Fasteners			
	Brake	Surface Damage			
	Chambers	Clamp Ring Security			
		Clevis Assembly			
		Drums			
Brakes		S-Cam			
Refer to	Drum Brake System	S-Cam Bushes & Tube			
<u>97117-161</u>		Brake Adjuster	J.		
		Brake Shoe Lining			
		Rotor	J.		
		Calliper & Fasteners			
		Brake Pads	J.		
	Disc Brake System	Pad Retaining Springs	Ø		
	,	Running Clearances	Ø		
		Guide Pin Cap/Adjuster Boot	Ø		
		Guide Pins & Piston Boots	Ø		
	Ride Height Ch	neck	J.		
Air System	Height Control	Valve	٥		
	All Air Line Fitti	ngs	Ø		
Self-Steer Axles	Tie Rod Ends 8	k Clamps	≁ ♦		
Refer to	Kingpin Bushe	Kingpin Bushes & Centring Arm Pivots			
Drum Brake <u>97117-273</u>	Lock Straight A	ssembly or Dampers			
Disc Brake <u>97117-296</u>	Lock Straight A	ir Spring & Chamber			

Visual Inspection

Lubrication Point

180,000KM (YEARLY) INSPECTION

180,000km or Yearly, whichever occurs first

System			Technician	Checked	Comments
Tyre	Tyre Pressures		×		
Pressure Control	TIREMAAX [™] PR	O System Pressures	×		
Refer to	TIREMAAX PRO	Hoses & Connections	×		
<u>T51002</u>	TIREMAAX PRO	System & Warning Lamp	×		
	Wheel Studs &	Nuts			
	Inner Hub Seal	Lubricant Leak Check	0		
	Hubcap Integri	ty & Leaks			
Wheel End	Hub Smooth R	otation	J.		
Refer to	Hub Temperatu	ire – Post Operation	J.		
<u>97117-250</u>	Lubricant Leve	I – Oil Filled Hubs	0		
	Conventional H	łubs – Clean, Inspect, Lube & Set End Play	×		
	Wheel End Ser	nsor/Monitor (where fitted)	0		
	Hubodometer	(where fitted)	0		
Firsture to	Pivot Connection	QUIK-ALIGN [®] Pivot Bolt	J		
Fixture to Trailer		TFB [™] Pivot Bush	×		
Refer to		Wear Washers	0		
<u>97117-135</u>	Hangers		0		
	Fasteners & U-	Bolts	×		
	Trailing Arms		0		
	Axle, Connectio	ons & Welds	()		
	Axle Breather		0		
0	Air Springs		×		
Suspension System	Shock Absorbe	rs			
Refer to	Shock Absorbe	r Mounting & Fasteners	×		
<u>97117-161</u>	Auxiliary Rebou	und Limiter/Straps (where fitted)	O		
		Fasteners	×		
	UBL Lift Kit	Welds	0		
	(Where fitted)	Lift Bag/Leaks	×		
		LACV & Pressure Regulator	×		

LEGEND

Visual Inspection

Lubrication Point

Physical Check / Adjustment / Torque / Operation / Leak Check

180,000km (Yearly) Inspection continued...

System			Technician	Checked	Comments
		Dust Shield	\bigcirc		
	Brakes General	Air Line Routing & Leaks	×		
		ABS Sensor Mounting, Brackets & Wiring	٨		
		Security & Fasteners	×		
	Brake Chambers	Surface Damage			
		Clamp Ring Security	0		
		Clevis Assembly			
		Drums			
		S-Cam			
		S-Cam Bushes & Tube			
Brakes	Drum Brake System	S-Cam Radial/End Play	J.		
Refer to <u>97117-161</u>		Brake Adjuster	/		
		Brake Shoe Lining	J.		
		Anchor Pin Bushes	٢		
		Brake Shoe Springs	۲		
	Disc Brake System	Rotor	×		
		Calliper & Fasteners			
		Brake Pads	×		
		Pad Retaining Springs			
		Running Clearances			
		Guide Pin Cap/Adjuster Boot			
		Guide Pins & Piston Boots	×		
	Ride Height Ch	neck	×		
Air System	Height Control	Valve	×		
	All Air Line Fitti	ngs	×		
	Dump Valve (V	Vhere fitted)	×		
Self-Steer Axles Refer to	Tie Rod Ends &	k Clamps	se 🖌 🖕		
	Kingpin Bushe	s & Centring Arm Pivots	• ۶		
Drum Brake <u>97117-273</u>	Lock Straight A	ssembly or Dampers	©		
Disc Brake <u>97117-296</u>	Lock Straight A	ir Spring & Chamber	J.		
Suspension	Overall Axle &	Suspension Condition	Ó		

Visual Inspection

Lubrication Point

DRIVER DAILY VISUAL INSPECTION

Quick visual inspections should be conducted by the vehicle operator before leaving the depot, yard or rest area ensuring vehicles are roadworthy and safe to drive.

System				Checked	Comments
Tyre Pressure	Tyre Pressures				
	TIREMAAX [™] PRO System Tyre Pressure (where fitted)				
Control	TIREMAAX PRO System & Warning Lamp (where fitted)				
	Wheel Studs & Nuts				
	Inner Hub Seal Lubricant Leak Check				
	Hubcap Integrity & Leaks				
Wheel End	Hub Temperature – Post Operation				
	Lubricant Level – Oil Filled Hubs				
	Wheel End Sensor/Monitor (where fitted)				
	Hubodometer (where fitted)				
Fixture to	Pivot Connection		QUIK-ALIGN [®] Pivot Bolt		
Trailer	Hangers				
	Axle, Connections & Welds				
	Air Springs				
Suspension	Shock Absorbers				
System	Shock Absorber Mounting & Fasteners				
	Steerable Suspension Tie Rod & Ends (where fitted)				
	Auxiliary Rebound Limiter/Straps (where fitted)				
	Brakes General	Dust Shield			
Brakes		Air Line Routing & Leaks			
	Brake Chambers	Security & Fasteners			
		Surface Damage			
	Clamp Ring Security				
Air System	Height Control Valve				
	All Air Line Fittings				

NOTE: Refer to <u>"Reference Documents" on page 4</u> and to <u>"Inspection" on page 5</u> for further clarification of inspection guidelines.

AFTER IDLE TIME OR POST-FLOOD SERVICE

If there is any doubt about the serviceability of any components, then it is best to disassemble, analyse and inspect to avoid costly breakdowns or component failure. Refer to Table 1.

Idle Time

Trailer suspensions not operated (idle) for prolonged periods of time must be inspected prior to renewed operation or production installation (e.g. Manufacturing outside storage, trailer used for storage at dock or in parking areas, etc.).

Normally, machined surfaces (bearing races, bearings, etc.) are protected by lubricant flowing onto, over and around during use. Lack of trailer motion causes lubricants to flow downward and away from these surfaces until it reaches a level pool in the hub. Metal surfaces are eventually unprotected and exposed to the environment. Seals and gaskets not exposed to lubricant can degrade in performance. Check and replace as needed.

Surface cracks on rubber components do not normally affect performance.

Flood

Oil and water do not mix. Lubricants continue to seek a level state, even while under water. All metal surfaces, wires and materials that are directly exposed to moisture, pollutants and other contaminants can lead to rust and corrosion.

▲ CAUTION: Flood waters are often contaminated with bacteria or other organisms that may be harmful to human health. Wear gloves and other necessary safety equipment when working on trucks or trailers that have been affected by floods. Any waste such as water, tainted grease or sludge must also be managed and disposed of appropriately.

Recommended Checks	ldle Time	After Flood [2]	Comments	
Air springs ^[2]		Ó	Inspect while aired up at ride height.	
Drum Brakes [1] [2]	×	×		
Air Disc Brakes [1] [2]	J	J	If submerged, replace calliper assemblies, otherwise inspect for contamination and check function.	
Brakes, Brake chamber actuator ^[2]	J.	J.	If submerged, replace brake chamber actuator.	
Bush tubes				
Bush tube spacers				
Air line hoses, tubing, fittings, valves, etc ^[2]	J.	×	Pests and insects will enter and nest in any small opening. Seals and gaskets can dry and become non-functional.	
Obvious signs of damage or wear				
Shock absorbers		Ó	Refer to Hendrickson shock inspection bulletin 97117-208.	
Wires, electrical connections and connectors		×	If submerged, disassemble, clean and apply dielectric grease during assembly.	
Contamination ^[3]		\bigcirc	Where critical, remove all contaminants.	
Lubrication Points ^[3]	• مر	<i>»</i>	Ensure lubricant is fresh and moisture free at all grease fitti	
S-cam and cam tubes	• مر	• ٦		
Smooth wheel bearing rotation	J		If submerged, bearings will need to be disassembled for inspection and replacement of lubricant, seals & gaskets.	
Clean, inspect & repack wheel bearings. Replace hub seals, gaskets and lubricant.		الم محر	Mandatory after flood, as needed after idle. Inspect axle interior and remove any existing moisture. If any moisture present, replace spindle filter and plugs with new.	

Table 1: After Idle Time & Post Flood Service Recommendations NOTES:

LEGEND

eing	Ø	Visual Inspection
	•	Lubrication Point
ricant	J	Physical Check / Adjustment / Torque / Operation / Leak Check

[1] If drum or ADB rotor contact surface is corroded following flood and being submersed for any length of time, they must be replaced.

[2] All systems should be operationally checked and tested.

[3] Replacing lubricant purges any collected moisture and/or degraded lubricant.

GENERAL SAFETY INSTRUCTIONS

NOTICE: Safety working advice is contained in Hendrickson Trailer Suspension Maintenance 97117-161. Further recommendations are further detailed by relevant truck and trailer OEM documentation.

> Please refer also to the recommendations of the workplace safety authority in your country, state, territory or municipality for detailed recommendations and advice on regulations that may also apply.

WARNING: Follow recommended safety practices when working on heavy vehicles and trailers. Always wear proper eye protection and other required PPE (personal protective equipment) when performing vehicle maintenance, repair or service.



Revisions Table

DATE	REV	PAGE	DESCRIPTION
Feb-2021	D	All	New expanded and updated format.
Dec-2021	E	All	Add disc steerable suspension.
Mar-2023	F	All	Amend slack lube interval to 12 months.
Oct-2024	G	2,14	Add LACV operational check at 12 months.

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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.

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