



TECHNICAL BULLETIN

TRAILER SUSPENSION MAINTENANCE SCHEDULE

LIT NO: 97117-169

DATE: December 2021

REVISION: E





SUSPENSION MAINTENANCE SCHEDULE MATRIX

System		Technician					Driver	
		Pre-Delivery Inspection	15,000km First Inspection	15,000km (Monthly) Inspection	45,000km (3 Monthly) Inspection	180,000km (12 Monthly) Inspection	Daily Visual Inspection	
Time/mileage, whichever occurs first.								
Tyre Pressure Control Refer to T51002	Tyre Pressures							
	TIREMAAX™ PRO System Pressures							
	TIREMAAX PRO Hoses & Connections							
	TIREMAAX PRO System & Warning Lamp							
Wheel End Refer to 97117-250	Wheel Studs & Nuts							
	Inner Hub Seal Lubricant Leak Check							
	Hubcap Integrity & Leaks							
	Hub Smooth Rotation							
	Hub Temperature – Post Operation							
	Lubricant Level – Oil Filled Hubs							
	Conventional Hubs – Clean, Inspect, Lubricate & Set End Play							
	Wheel End Sensor/Monitor (where fitted)							
Hubodometer (where fitted)								
Fixture to Trailer Refer to 97117-135	Pivot Connection	QUIK-ALIGN® Pivot Bolt						
		TFB™ Pivot Bush						
		Wear Washers						
	Hangers							
Suspension System Refer to 97117-161	Fasteners & U-Bolts							
	Trailing Arms							
	Axle, Connections & Welds							
	Axle Breather Vent							
	Air Springs							
	Shock Absorbers							
	Shock Absorber Mounting & Fasteners							
	Axle Rebound Limiter/Straps (where fitted)							
	UBL Lift Kit (where fitted)	Fasteners						
		Welds						
Lift Bag/Leaks								
LACV & Pressure Regulator								

LEGEND

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---

NOTE: For further details refer to "Inspection" on page 5 & trailer torque bulletin [97117-251A](#). Refer to [97117-161](#) for a linked interactive version of this matrix.



Suspension Maintenance Schedule Matrix continued...

System			Technician					Driver
			Pre-Delivery Inspection	15,000km First Inspection	15,000km (Monthly) Inspection	45,000km (3 Monthly) Inspection	180,000km (12 Monthly) Inspection	Daily Visual Inspection
Time/mileage, whichever occurs first.								
Brakes Refer to 97117-161	Brakes General	Dust Shield						
		Air Line Routing & Leaks						
		ABS Sensor						
	Brake Chambers	Security & Fasteners						
		Surface Damage						
		Clamp Ring Security						
		Clevis Assembly						
	Drum Brake System	Drums						
		S-Cam						
		S-Cam Bushes & Tube						
		S-Cam Radial/End Play						
		Brake Adjuster						
		Brake Shoe Lining						
		Anchor Pin Bushes						
	Disc Brake System	Brake Shoe Springs						
		Rotor						
		Calliper & Fasteners						
		Brake Pads						
		Pad Retaining Springs						
		Running Clearances						
		Guide Pin Cap/Adjuster Boot						
Air System	Guide Pins & Piston Boots							
	Ride Height Check							
	Height Control Valve							
	All Air Line Fittings							
Self-Steer Axles Refer to 97117-273 Disc Brake 97117-296	Dump Valve (Where fitted)							
	Tie Rod Ends & Clamps							
	Drum Brake Kingpin Bushes & Arm Pivots							
	Disc Brake Kingpin Bushes							
	Lock Straight Assembly or Dampers							
Suspension	Lock Straight Air Spring & Chamber							
	Overall Axle & Suspension Condition							

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---



TABLE OF CONTENTS

SUSPENSION MAINTENANCE SCHEDULE MATRIX 2

SUSPENSION MAINTENANCE GUIDE 4

INTRODUCTION 4

PERIODIC INSPECTION SCHEDULE 4

REFERENCE DOCUMENTS 4

SAFETY 5

LUBRICATION POINTS 5

INSPECTION 5

PRE-DELIVERY INSPECTION 6

15,000KM FIRST INSPECTION 8

15,000KM (MONTHLY) INSPECTION 10

45,000KM (QUARTERLY) INSPECTION 12

180,000KM (YEARLY) INSPECTION 14

DRIVER DAILY VISUAL INSPECTION 16

AFTER IDLE TIME OR POST-FLOOD SERVICE 17

GENERAL SAFETY INSTRUCTIONS 18

SUSPENSION MAINTENANCE GUIDE

INTRODUCTION

This document recommends inspection areas and lubrication points on Hendrickson Trailer suspensions and components. The main reference is the complete [“Suspension Maintenance Schedule Matrix” on page 2](#). An interactive version of this matrix schedule is available in [97117-161](#).

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 minimal 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 [97117-161](#).

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 [97117-273](#)
- Hendrickson Steerable Disc Maintenance [97117-296](#)
- Hendrickson TIREMAAX™ PRO Service [T51002](#)
- Hendrickson Trailer Torque Specifications [97117-251A](#)
- 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 "Reference Documents" on page 4.

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 thorough 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.

Brake adjuster, 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, along with other checks such as thorough TIREMAX, brake and suspension systems inspection.



PRE-DELIVERY INSPECTION

System		Technician	Checked	Comments	
Tyre Pressure Control Refer to T51002	Tyre Pressures		<input type="checkbox"/>		
	TIREMAAX™ PRO Hoses & Connections		<input type="checkbox"/>		
	TIREMAAX PRO System & Warning Lamp		<input type="checkbox"/>		
Wheel End Refer to 97117-250	Wheel Studs & Nuts		<input type="checkbox"/>		
	Hubcap Integrity & Leaks		<input type="checkbox"/>		
	Lubricant Level – Oil Filled Hubs		<input type="checkbox"/>		
	Hubodometer (where fitted)		<input type="checkbox"/>		
Fixture to Trailer	Pivot Connection	QUIK-ALIGN® Pivot Bolt		<input type="checkbox"/>	
	Hangers			<input type="checkbox"/>	
Suspension System Refer to 97117-161	Fasteners & U-Bolts		<input type="checkbox"/>		
	Trailing Arms		<input type="checkbox"/>		
	Axle, Connections & Welds		<input type="checkbox"/>		
	Air Springs		<input type="checkbox"/>		
	Shock Absorbers		<input type="checkbox"/>		
	Shock Absorber Mounting & Fasteners		<input type="checkbox"/>		
	Axle Rebound Limiter/Straps (where fitted)		<input type="checkbox"/>		
	UBL Lift Kit (Where fitted)	Fasteners		<input type="checkbox"/>	
		Welds		<input type="checkbox"/>	
		Lift Bag/Leaks		<input type="checkbox"/>	
Pressure Regulator			<input type="checkbox"/>		

LEGEND

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---

NOTE: For further details refer to “Inspection” on page 5 and Hendrickson trailer torque bulletin [97117-251A](#).



Pre-Delivery Inspection continued...

System		Technician	Checked	Comments	
Brakes Refer to 97117-161	Brakes General	Dust Shield		<input type="checkbox"/>	
		Air Line Routing & Leaks		<input type="checkbox"/>	
		ABS Sensor		<input type="checkbox"/>	
	Brake Chambers	Security & Fasteners		<input type="checkbox"/>	
		Clamp Ring Security		<input type="checkbox"/>	
		Clevis Assembly		<input type="checkbox"/>	
	Drum Brake System	S-Cam		<input type="checkbox"/>	
		S-Cam Bushes & Tube		<input type="checkbox"/>	
		Brake Adjuster		<input type="checkbox"/>	
	Disc Brake System	Calliper & Fasteners		<input type="checkbox"/>	
Running Clearances			<input type="checkbox"/>		
Air System	Ride Height Check		<input type="checkbox"/>		
	Height Control Valve		<input type="checkbox"/>		
	All Air Line Fittings		<input type="checkbox"/>		
Self-Steer Axles Refer to Drum Brake 97117-273 Disc Brake 97117-296	Tie Rod Ends & Clamps		<input type="checkbox"/>		
	Kingpin Bushes & Centring Arm Pivots		<input type="checkbox"/>		
	Lock Straight Assembly or Dampers		<input type="checkbox"/>		
	Lock Straight Air Spring & Chamber		<input type="checkbox"/>		
Suspension	Overall Axle & Suspension Condition		<input type="checkbox"/>		

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---



15,000KM FIRST INSPECTION

To be carried out no later than 15,000km

System		Technician	Checked	Comments	
Tyre Pressure Control Refer to T51002	Tyre Pressures		<input type="checkbox"/>		
	TIREMAAX™ PRO Hoses & Connections		<input type="checkbox"/>		
	TIREMAAX PRO System & Warning Lamp		<input type="checkbox"/>		
Wheel End Refer to 97117-250	Wheel Studs & Nuts		<input type="checkbox"/>		
	Inner Hub Seal Lubricant Leak Check		<input type="checkbox"/>		
	Hubcap Integrity & Leaks		<input type="checkbox"/>		
	Hub Smooth Rotation		<input type="checkbox"/>		
	Hub Temperature – Post Operation		<input type="checkbox"/>		
	Lubricant Level – Oil Filled Hubs		<input type="checkbox"/>		
	Wheel End Sensor/Monitor (where fitted)		<input type="checkbox"/>		
	Hubodometer (where fitted)		<input type="checkbox"/>		
Fixture to Trailer	Pivot Connection	QUIK-ALIGN® Pivot Bolt		<input type="checkbox"/>	
	Hangers			<input type="checkbox"/>	
Suspension System Refer to 97117-161	Fasteners & U-Bolts			<input type="checkbox"/>	
	Trailing Arms			<input type="checkbox"/>	
	Axle, Connections & Welds			<input type="checkbox"/>	
	Axle Breather			<input type="checkbox"/>	
	Air Springs			<input type="checkbox"/>	
	Shock Absorbers			<input type="checkbox"/>	
	Shock Absorber Mounting & Fasteners		<input type="checkbox"/>		
	Axle Rebound Limiter/Straps (where fitted)			<input type="checkbox"/>	
	UBL Lift Kit (Where fitted)	Fasteners			<input type="checkbox"/>
		Welds			<input type="checkbox"/>
Lift Bag/Leaks				<input type="checkbox"/>	
Pressure Regulator				<input type="checkbox"/>	

LEGEND

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---

NOTE: For further details refer to “Inspection” on page 5 and Hendrickson trailer torque bulletin [97117-251A](#).



15,000km First Inspection continued...

System		Technician	Checked	Comments	
Brakes Refer to 97117-161	Brakes General	Dust Shield		<input type="checkbox"/>	
		Air Line Routing & Leaks		<input type="checkbox"/>	
		ABS Sensor Mounting, Brackets & Wiring		<input type="checkbox"/>	
	Brake Chambers	Security & Fasteners		<input type="checkbox"/>	
		Surface Damage		<input type="checkbox"/>	
		Clamp Ring Security		<input type="checkbox"/>	
		Clevis Assembly		<input type="checkbox"/>	
	Drum Brake System	S-Cam		<input type="checkbox"/>	
		S-Cam Bushes & Tube		<input type="checkbox"/>	
		Brake Adjuster		<input type="checkbox"/>	
	Disc Brake System	Rotor		<input type="checkbox"/>	
		Calliper & Fasteners		<input type="checkbox"/>	
		Pad Retaining Springs		<input type="checkbox"/>	
		Running Clearances		<input type="checkbox"/>	
		Guide Pin Cap/Adjuster Boot		<input type="checkbox"/>	
Air System	Ride Height Check		<input type="checkbox"/>		
	Height Control Valve		<input type="checkbox"/>		
	All Air Line Fittings		<input type="checkbox"/>		
Self-Steer Axles Refer to Drum Brake 97117-273 Disc Brake 97117-296	Tie Rod Ends & Clamps		<input type="checkbox"/>		
	Kingpin Bushes & Centring Arm Pivots		<input type="checkbox"/>		
	Lock Straight Assembly or Dampers		<input type="checkbox"/>		
	Lock Straight Air Spring & Chamber		<input type="checkbox"/>		
Suspension	Overall Axle & Suspension Condition		<input type="checkbox"/>		

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---



15,000KM (MONTHLY) INSPECTION

15,000km or Monthly, whichever occurs first

System		Technician	Checked	Comments	
Tyre Pressure Control Refer to T51002	Tyre Pressures		<input type="checkbox"/>		
	TIREMAAX™ PRO Hoses & Connections		<input type="checkbox"/>		
	TIREMAAX PRO System & Warning Lamp		<input type="checkbox"/>		
Wheel End Refer to 97117-250	Wheel Studs & Nuts		<input type="checkbox"/>		
	Inner Hub Seal Lubricant Leak Check		<input type="checkbox"/>		
	Hubcap Integrity & Leaks		<input type="checkbox"/>		
	Hub Temperature – Post Operation		<input type="checkbox"/>		
	Lubricant Level – Oil Filled Hubs		<input type="checkbox"/>		
	Wheel End Sensor/Monitor (where fitted)		<input type="checkbox"/>		
	Hubodometer (where fitted)		<input type="checkbox"/>		
Fixture to Trailer	Pivot Connection	QUIK-ALIGN® Pivot Bolt		<input type="checkbox"/>	
Suspension System	Fasteners & U-Bolts		<input type="checkbox"/>		
	Air Springs		<input type="checkbox"/>		
	Shock Absorbers		<input type="checkbox"/>		
	Shock Absorber Mounting & Fasteners		<input type="checkbox"/>		
	Axle Rebound Limiter/Straps (where fitted)		<input type="checkbox"/>		
	UBL Lift Kit (Where fitted)	Fasteners		<input type="checkbox"/>	
Brakes Refer to 97117-161	Brake General	Dust Shield		<input type="checkbox"/>	
		Air Line Routing & Leaks		<input type="checkbox"/>	
		ABS Sensor Mounting, Brackets & Wiring		<input type="checkbox"/>	
	Brake Chambers	Security & Fasteners		<input type="checkbox"/>	
		Surface Damage		<input type="checkbox"/>	
		Clamp Ring Security		<input type="checkbox"/>	
		Clevis Assembly		<input type="checkbox"/>	

LEGEND

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---

NOTE: For further details refer to "Inspection" on page 5 and Hendrickson trailer torque bulletin [97117-251A](#).



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

System		Technician	Checked	Comments	
Brakes continued...	Drum Brake System	Drums		<input type="checkbox"/>	
		S-Cam		<input type="checkbox"/>	
		S-Cam Bushes & Tube		<input type="checkbox"/>	
		Brake Adjuster		<input type="checkbox"/>	
		Brake Shoe Lining		<input type="checkbox"/>	
	Disc Brake System	Rotor		<input type="checkbox"/>	
		Calliper & Fasteners		<input type="checkbox"/>	
		Brake Pads		<input type="checkbox"/>	
		Pad Retaining Springs		<input type="checkbox"/>	
		Running Clearances		<input type="checkbox"/>	
		Guide Pin Cap/Adjuster Boot		<input type="checkbox"/>	
		Guide Pins & Piston Boots		<input type="checkbox"/>	
Air System	Height Control Valve		<input type="checkbox"/>		
	All Air Line Fittings		<input type="checkbox"/>		
Self-Steer Axles Refer to Drum Brake 97117-273 Disc Brake 97117-296	Tie Rod Ends & Clamps		<input type="checkbox"/>		
	Drum Brake Kingpin Bushes & Centring Arm Pivots		<input type="checkbox"/>		
	Disc Brake Kingpin Bushes		<input type="checkbox"/>		
	Lock Straight Assembly or Dampers		<input type="checkbox"/>		

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---



45,000KM (QUARTERLY) INSPECTION

45,000km or Quarterly, whichever occurs first

System		Technician	Checked	Comments	
Tyre Pressure Control Refer to T51002	Tyre Pressures		<input type="checkbox"/>		
	TIREMAAX™ PRO Hoses & Connections		<input type="checkbox"/>		
	TIREMAAX PRO System & Warning Lamp		<input type="checkbox"/>		
Wheel End Refer to 97117-250	Wheel Studs & Nuts		<input type="checkbox"/>		
	Inner Hub Seal Lubricant Leak Check		<input type="checkbox"/>		
	Hubcap Integrity & Leaks		<input type="checkbox"/>		
	Hub Smooth Rotation		<input type="checkbox"/>		
	Hub Temperature – Post Operation		<input type="checkbox"/>		
	Lubricant Level – Oil Filled Hubs		<input type="checkbox"/>		
	Wheel End Sensor/Monitor (where fitted)		<input type="checkbox"/>		
	Hubodometer (where fitted)		<input type="checkbox"/>		
Fixture to Trailer	Pivot Connection	QUIK-ALIGN® Pivot Bolt		<input type="checkbox"/>	
		TFB™ Pivot Bush		<input type="checkbox"/>	
		Wear Washers		<input type="checkbox"/>	
	Hangers		<input type="checkbox"/>		
Suspension System Refer to 97117-161	Fasteners & U-Bolts		<input type="checkbox"/>		
	Axle, Connections & Welds		<input type="checkbox"/>		
	Axle Breather		<input type="checkbox"/>		
	Air Springs		<input type="checkbox"/>		
	Shock Absorbers		<input type="checkbox"/>		
	Shock Absorber Mounting & Fasteners		<input type="checkbox"/>		
	Axle Rebound Limiter/Straps (where fitted)		<input type="checkbox"/>		
	UBL Lift Kit (Where fitted)	Fasteners		<input type="checkbox"/>	
		Welds		<input type="checkbox"/>	
		Lift Bag/Leaks		<input type="checkbox"/>	
Pressure Regulator			<input type="checkbox"/>		

LEGEND

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---

NOTE: For further details refer to “Inspection” on page 5 and Hendrickson trailer torque bulletin [97117-251A](#).



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

System		Technician	Checked	Comments	
Brakes Refer to 97117-161	Brakes General	Dust Shield		<input type="checkbox"/>	
		Air Line Routing & Leaks		<input type="checkbox"/>	
		ABS Sensor Mounting, Brackets & Wiring		<input type="checkbox"/>	
	Brake Chambers	Security & Fasteners		<input type="checkbox"/>	
		Surface Damage		<input type="checkbox"/>	
		Clamp Ring Security		<input type="checkbox"/>	
		Clevis Assembly		<input type="checkbox"/>	
	Drum Brake System	Drums		<input type="checkbox"/>	
		S-Cam		<input type="checkbox"/>	
		S-Cam Bushes & Tube		<input type="checkbox"/>	
		Brake Adjuster		<input type="checkbox"/>	
		Brake Shoe Lining		<input type="checkbox"/>	
	Disc Brake System	Rotor		<input type="checkbox"/>	
		Calliper & Fasteners		<input type="checkbox"/>	
		Brake Pads		<input type="checkbox"/>	
		Pad Retaining Springs		<input type="checkbox"/>	
		Running Clearances		<input type="checkbox"/>	
		Guide Pin Cap/Adjuster Boot		<input type="checkbox"/>	
		Guide Pins & Piston Boots		<input type="checkbox"/>	
	Air System	Ride Height Check		<input type="checkbox"/>	
Height Control Valve			<input type="checkbox"/>		
All Air Line Fittings			<input type="checkbox"/>		
Self-Steer Axles Refer to Drum Brake 97117-273 Disc Brake 97117-296	Tie Rod Ends & Clamps		<input type="checkbox"/>		
	Kingpin Bushes & Centring Arm Pivots		<input type="checkbox"/>		
	Lock Straight Assembly or Dampers		<input type="checkbox"/>		
	Lock Straight Air Spring & Chamber		<input type="checkbox"/>		

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---



180,000KM (YEARLY) INSPECTION

180,000km or Yearly, whichever occurs first

System		Technician	Checked	Comments	
Tyre Pressure Control Refer to T51002	Tyre Pressures		<input type="checkbox"/>		
	TIREMAAX™ PRO System Pressures		<input type="checkbox"/>		
	TIREMAAX PRO Hoses & Connections		<input type="checkbox"/>		
	TIREMAAX PRO System & Warning Lamp		<input type="checkbox"/>		
Wheel End Refer to 97117-250	Wheel Studs & Nuts		<input type="checkbox"/>		
	Inner Hub Seal Lubricant Leak Check		<input type="checkbox"/>		
	Hubcap Integrity & Leaks		<input type="checkbox"/>		
	Hub Smooth Rotation		<input type="checkbox"/>		
	Hub Temperature – Post Operation		<input type="checkbox"/>		
	Lubricant Level – Oil Filled Hubs		<input type="checkbox"/>		
	Conventional Hubs – Clean, Inspect, Lube & Set End Play		<input type="checkbox"/>		
	Wheel End Sensor/Monitor (where fitted)		<input type="checkbox"/>		
Hubodometer (where fitted)		<input type="checkbox"/>			
Fixture to Trailer Refer to 97117-135	Pivot Connection	QUIK-ALIGN® Pivot Bolt		<input type="checkbox"/>	
		TFB™ Pivot Bush		<input type="checkbox"/>	
		Wear Washers		<input type="checkbox"/>	
	Hangers		<input type="checkbox"/>		
Suspension System Refer to 97117-161	Fasteners & U-Bolts		<input type="checkbox"/>		
	Trailing Arms		<input type="checkbox"/>		
	Axle, Connections & Welds		<input type="checkbox"/>		
	Axle Breather		<input type="checkbox"/>		
	Air Springs		<input type="checkbox"/>		
	Shock Absorbers		<input type="checkbox"/>		
	Shock Absorber Mounting & Fasteners		<input type="checkbox"/>		
	Axle Rebound Limiter/Straps (where fitted)		<input type="checkbox"/>		
	UBL Lift Kit (Where fitted)	Fasteners		<input type="checkbox"/>	
		Welds		<input type="checkbox"/>	
Lift Bag/Leaks			<input type="checkbox"/>		
Pressure Regulator			<input type="checkbox"/>		

LEGEND

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---

NOTE: For further details refer to “Inspection” on page 5 and Hendrickson trailer torque bulletin [97117-251A](#).



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

System		Technician	Checked	Comments	
Brakes Refer to 97117-161	Brakes General	Dust Shield		<input type="checkbox"/>	
		Air Line Routing & Leaks		<input type="checkbox"/>	
		ABS Sensor Mounting, Brackets & Wiring		<input type="checkbox"/>	
	Brake Chambers	Security & Fasteners		<input type="checkbox"/>	
		Surface Damage		<input type="checkbox"/>	
		Clamp Ring Security		<input type="checkbox"/>	
		Clevis Assembly		<input type="checkbox"/>	
	Drum Brake System	Drums		<input type="checkbox"/>	
		S-Cam		<input type="checkbox"/>	
		S-Cam Bushes & Tube		<input type="checkbox"/>	
		S-Cam Radial/End Play		<input type="checkbox"/>	
		Brake Adjuster		<input type="checkbox"/>	
		Brake Shoe Lining		<input type="checkbox"/>	
		Anchor Pin Bushes		<input type="checkbox"/>	
		Brake Shoe Springs		<input type="checkbox"/>	
	Disc Brake System	Rotor		<input type="checkbox"/>	
		Calliper & Fasteners		<input type="checkbox"/>	
		Brake Pads		<input type="checkbox"/>	
		Pad Retaining Springs		<input type="checkbox"/>	
		Running Clearances		<input type="checkbox"/>	
		Guide Pin Cap/Adjuster Boot		<input type="checkbox"/>	
Guide Pins & Piston Boots			<input type="checkbox"/>		
Air System	Ride Height Check		<input type="checkbox"/>		
	Height Control Valve		<input type="checkbox"/>		
	All Air Line Fittings		<input type="checkbox"/>		
	Dump Valve (Where fitted)		<input type="checkbox"/>		
Self-Steer Axles Refer to Drum Brake 97117-273 Disc Brake 97117-296	Tie Rod Ends & Clamps		<input type="checkbox"/>		
	Kingpin Bushes & Centring Arm Pivots		<input type="checkbox"/>		
	Lock Straight Assembly or Dampers		<input type="checkbox"/>		
	Lock Straight Air Spring & Chamber		<input type="checkbox"/>		
Suspension	Overall Axle & Suspension Condition		<input type="checkbox"/>		

Visual Inspection	Lubrication Point	Physical Check / Adjustment / Torque / Operation / Leak Check
-------------------	-------------------	---



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

NOTE: Refer to "Reference Documents" on page 4 and to "Inspection" on page 5 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 lubrications 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 flood. Any waste such as water, tainted grease or sludge must also be managed and disposed of appropriately.

Recommended Checks	Idle Time	After Flood ^[2]	Comments
Air springs ^[2]			Inspect while aired up at ride height.
Drum Brakes ^{[1][2]}			
Air Disc Brakes ^{[1][2]}			If submerged, replace calliper assemblies, otherwise inspect for contamination and check function.
Brakes, Brake chamber actuator ^[2]			If submerged, replace brake chamber actuator.
Bush tubes			
Bush tube spacers			
Air line hoses, tubing, fittings, valves, etc... ^[2]			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			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]			Where critical, remove all contaminants.
Lubrication Points ^[3]			Ensure lubricant is fresh and moisture free at all grease fittings.
S-cam and cam tubes			
Smooth wheel bearing rotation			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.			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:

[1] If drum or ADB rotor contact surface is corroded following flood and being submerged 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.

LEGEND

	Visual Inspection
	Lubrication Point
	Physical Check / Adjustment / Torque / Operation / Leak Check

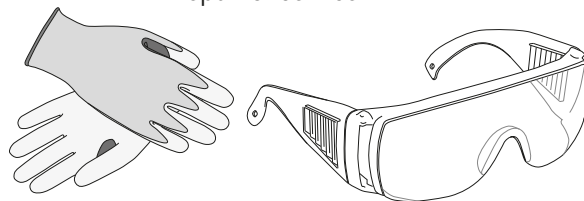


GENERAL SAFETY INSTRUCTIONS

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.

Disclaimer: This publication is distributed with the understanding that the authors, editors and publishers are not responsible for the results of any actions or works of whatsoever kind based on the information contained in this publication, nor for any errors or omissions contained herein. The publishers, authors and editors expressly disclaim all and any liability to any person whomsoever in respect of the consequences of anything done or omitted to be done by any such person in reliance, whether whole or partial upon the whole or any part of the contents of this publication.

*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.*

Need Help? Call 03 8792 3600 or Email customerservice@hendrickson.com.au



HENDRICKSON ASIA PACIFIC PTY LTD
 ABN 21 004 992 769
 32- 44 Letcon Drive, P.O. Box 1063
 Dandenong, Victoria, 3175
 61.3.8792.3600 • Fax 61.3.8792.3699

HENDRICKSON NEW ZEALAND
 Unit P, 24 Allright Place
 Mt Wellington, Auckland, 1060
 64.9.570.4721 • Fax 64.9.570.4816

www.hendrickson.com.au