



Retrofit Kit and Replacement Component Guide

Aeris® Retrofit Kit Part Numbers

Aeris™ kits are designed to work with a broad range of trailers and wheel configurations and the 7-digit Stemco part numbers reflect this variety. To assist you with ordering the correct kit for your application, please use the following configuration chart for your convenience. Each digit in the part number specifies a particular part of the kit as shown below.

- The 1st digit is the letter “A.” All retrofit kits begin with an “A”.
- The 2nd digit refers to the wheel diameters, the number of axles and the number of tires.
- The 3rd digit refers to the type of control box included.
- The 4th and 5th digits together refer to the hubcap assembly required and the spindle type.
- The 6th digit refers to spindle inside diameter(see Table 1 for more information).
- The 7th digit refers to desired system tire pressure setting (set in the factory).



A – Retrofit kit for non-prepped axles (all parts included)
 B – OEM finish kit for basic prepped axle
 C – OEM finish kit for a fully dressed axle
 D – Hendrickson adapted kit

0 – N/A
 1 – 17.5” and smaller wheels, single axle, dual tire configuration
 2 – 17.5” and smaller wheels, dual axle, dual tire configuration
 3 – 19.5” and 22.5” wheels, single axle, dual tire configuration
 4 – 19.5” and 22.5” wheels, dual axle, dual tire configuration
 5 – 19.5” and 22.5” wheels, single axle, single tire configuration
 6 – 19.5” and 22.5” wheels, dual axle, single tire configuration
 7 – 24.5” wheels, single axle, dual tire configuration
 8 – 24.5” wheels, dual axle, dual tire configuration
 9 - 17.5” and smaller wheels, tri-axle, dual tire configuration
 A - 19.5” and 22.5” wheels, tri-axle, dual tire configuration
 C - 19.5” and 22.5” wheels, tri-axle, single tire configuration
 D – 24.5” wheels, tri-axle, dual tire configuration

0 – No controller and no lamp
 1 – Single port controller with amber incandescent driver warning lamp
 2 – Smart sensor option (upgrades control box and driver warning lamp)



00 – No hubcap or RAU
 11 – N spindle, Oil, Std. hubcap platform (340-4009)
 12 – N spindle, Oil, Integrated Sentinel platform (356-4009)
 13 – N spindle, Grease, Std. hubcap platform (342-4009)
 14 – N spindle, Grease, Integrated Sentinel (358-4009)
 21 – P spindle, Oil, Std. hubcap platform (340-4195)
 22 – P spindle, Oil, Integrated Sentinel (356-4195)
 23 – P spindle, Grease, Std. hubcap platform (342-4195)
 24 – P spindle, Grease, Integrated Sentinel platform (358-4195)

0 – N/A
 1 – 70 psi
 2 – 75 psi
 3 – 80 psi
 4 – 85 psi
 5 – 90 psi
 6 – 95 psi
 7 – 100 psi
 8 – 105 psi
 9 – 110 psi
 A – 115 psi
 C – 120 psi








0 – N/A
 1 – Spindle ID = 1.44”
 2 – Spindle ID = 1.50”
 3 – Spindle ID = 1.75”
 4 – Spindle ID = 2.25”
 5 – Spindle ID = 2.50”
 6 – Spindle ID = 2.75”
 H – Hendrickson Intraax,
 Vantraax axles
 M – Meritor PG prepped
 axles


Retrofit Kit Contents

Everything you need to retrofit your trailer with an Aeris® Tire Inflation System is packaged together. The chart below shows what you can expect to receive in your kit. For illustrative purposes, a dual-axle dual-tire configuration is shown. Notations are given where a single-axle, tri-axle, or single-tire configuration changes the contents of your kit.



Aeris Retrofit Kit	Qty	Description
	1	Control Box
	1	Installation Instruction Booklet (not shown)
	4	Rotary Air Union (RAU) / Hubcap Assemblies <ul style="list-style-type: none"> - 2 assemblies with single-axle trailers - 6 assemblies with triple-axle trailers - 1 air fitting for single-tire configurations - Hubcap varies for spindle type and for either oil or grease applications - Window varies for oil or grease - Plug varies for standard or Sentinel™ applications
	1	Control box mounting bracket
	1	Electrical connector kit (w/amber lamp)
	1	Fastener hardware kit
	70'	16 AWG 3-conductor stranded cable
	1	Pack of cable ties
	44'	¼-inch OD nylon tubing (22' if single axle)
	1	Tandem axle tubing connector kit (w/pressure protection valve) <ul style="list-style-type: none"> - Single-axle kit also available - Triple-axle trailers will receive additional connectors
	2	37" Length, 3/8-inch axle vent tube assembly
	4	Hubcap gaskets <ul style="list-style-type: none"> - Size corresponds to spindle type - 2 included with single-axle trailers - 6 included with triple-axle trailers
	4	Axle plugs <ul style="list-style-type: none"> - Size corresponds to spindle type - 2 included with single-axle trailers - 6 included with triple-axle trailers
	4	Heavy duty air hoses w/straight fitting (for inside tire) <ul style="list-style-type: none"> - Length depends on wheel diameter - 2 included with single-axle trailers - 6 included with triple-axle trailers
	4	Heavy duty air hoses w/180° fitting (for outside tire) <ul style="list-style-type: none"> - Length depends on wheel diameter - 2 included with single-axle trailers - 6 included with triple-axle trailers
	4	Nylon convoluted sleeves <ul style="list-style-type: none"> - 2 included with single-axle trailers - 6 included with triple-axle trailers

Aeris Replacement Parts


Hubcap RAU Assembly	Part No.	Description
	831-0111	Single Tire, N-Spindle, Oil, 340-4009 Hubcap Pkg.
	831-0211	Dual Tire, N-Spindle, Oil, 340-4009 Hubcap Pkg.
	831-0112	Single Tire, N-Spindle, Oil, 356-4009 Integrated Sentinel Hubcap Pkg.
	831-0212	Dual Tire, N-Spindle, Oil, 356-4009 Integrated Sentinel Hubcap Pkg.
	831-0312	Single Tire, N-Spindle, Oil, 356-4009 Integrated Sentinel Hubcap Pkg <i>for Aeris Hendrickson Tiremaxx adaptation</i>
	831-0412	Dual Tire, N-Spindle, Oil, 356-4009 Integrated Sentinel Hubcap Pkg <i>for Aeris Hendrickson Tiremaxx adaptation</i>
	831-0113	Single Tire, N-Spindle, Grease, 342-4009 Hubcap Pkg.
	831-0213	Dual Tire, N-Spindle, Grease, 342-4009 Hubcap Pkg.
	831-0114	Single Tire, N-Spindle, Grease, 358-4009 Integrated Sentinel Hubcap Pkg.
	831-0214	Dual Tire, N-Spindle, Grease, 358-4009 Integrated Sentinel Hubcap Pkg.
	831-0314	Single Tire, N-Spindle, Grease, 358-4009 Integrated Sentinel Hubcap Pkg. <i>for Aeris Hendrickson Tiremaxx adaptation</i>
	831-0414	Dual Tire, N-Spindle, Grease, 358-4009 Integrated Sentinel Hubcap Pkg. <i>for Aeris Hendrickson Tiremaxx adaptation</i>
	831-0121	Single Tire, P-Spindle, Oil, 340-4195 Hubcap Pkg.
	831-0221	Dual Tire, P-Spindle, Oil, 340-4195 Hubcap Pkg.
	831-0122	Single Tire, P-Spindle, Oil, 356-4195 Integrated Sentinel Hubcap Pkg.
	831-0222	Dual Tire, P-Spindle, Oil, 356-4195 Integrated Sentinel Hubcap Pkg.
	831-0322	Single Tire, P-Spindle, Oil, 356-4195 Integrated Sentinel Hubcap Pkg. <i>for Aeris Hendrickson Tiremaxx adaptation</i>
	831-0422	Dual Tire, P-Spindle, Oil, 356-4195 Integrated Sentinel Hubcap Pkg. <i>for Aeris Hendrickson Tiremaxx adaptation</i>
	831-0123	Single Tire, P-Spindle, Grease, 342-4195 Hubcap Pkg.
	831-0223	Dual Tire, P-Spindle, Grease, 342-4195 Hubcap Pkg.

	831-0124	Single Tire, P-Spindle, Grease, 358-4195 Integrated Sentinel Hubcap Pkg.
	831-0224	Dual Tire, P-Spindle, Grease, 358-4195 Integrated Sentinel Hubcap Pkg.
	831-0324	Single Tire, P-Spindle, Grease, 358-4195 Integrated Sentinel Hubcap Pkg. for <i>Aeris Hendrickson Tiremaxx adaptation</i>
	831-0424	Dual Tire, P-Spindle, Grease, 358-4195 Integrated Sentinel Hubcap Pkg. for <i>Aeris Hendrickson Tiremaxx adaptation</i>

Aeris Replacement Parts

Aeris Replacement Hoses	Part No.	Description
	831-0500	17.5" and Smaller Wheels, 180° Fitting (Outer Wheel)
	831-0512	19.5"/22.5" Wheels, 180° Fitting (Outer Wheel)
	831-0514	24.5" Wheels, 180° Fitting (Outer Wheel)
	831-0516	17.5" and Smaller Wheels, Straight Fitting (Inner Wheel)
	831-0520	19.5"/22.5" Wheels, Straight Fitting (Inner Wheel & WB Singles)
	831-0522	24.5" Wheels, Straight Fitting (Inner Wheel)

Components	Part No	Qty	Description
	831-0245	1	Mechanical Control Box
	831-0247	1	Control Box Assembly, Single Port
	831-0248	1	SmartSense 4 Port Control Box
	831-0249	1	SmartSense 2 Port Control Box
	831-0032	1	1/4 Turn Ball Valve, 1/8 NPT
	831-0055	1	Control Box Mounting Bracket with Fasteners
	810-0050	1 bag	Replacement Valve Gaskets (24) - Fits Valve Stem End of Hose
	330-3309	25	Hubcap Gasket (N-spindle)
	330-3318	25	Hubcap Gasket (P-spindle)
	831-0049	2	Axle Plug (N-spindle, 1.75" ID)

		831-0048	2	Axle Plug (P-spindle, 2.75" ID)
		831-0009	1	Incandescent Driver Warning Lamp Kit
		831-0010	1	Single Axle Electrical Kit
		831-0011	1	Dual Axle Electrical Kit
		831-0038	1	Incandescent Driver Warning Lamp
		831-0250	1	SmartSense Driver Warning Lamp Dual Axle
		831-0251	1	SmartSense Driver Warning Lamp Single Axle
		831-0260	1	ABS Connector
		831-0027	35 ft.	DOT 1/4" Air Tubing
		831-0013	70 ft.	16 AWG, 3-conductor Wire
		831-0035	1	Pressure Protection Valve

	831-0007	1	Tee Union, 1/4" Push Connect
	831-0012	1	Axle Vent Assembly Kit
	831-0034	2	Pass-through Fitting, 1/4" NPT x 1/4" Tube
	831-0024	1	RAU Hose Adapter Fitting
	831-0031	1	Fitting for Axle Vent Assy.
	831-0510	1	Fitting Kit w/PPV for Single Axle
	831-0511	1	Fitting Kit w/PPV for Dual Axle
	831-0001	1	O-Ring Aeris RAU Fittings 24 EA.
	831-0058	1	Nylon Convoluted Sleeving, 3/8 ID
	831-0033	1	Air Line Filter, 1/8 NPTF x 1/8 NPTF
	831-0077	1	Cable Gland
	831-0067	1	RAU Plug

			831-0115	1	Hose protection wrap = 8 pieces, 6" Long
			555-8300	1	Axle Plug Installation Tool
			831-0132	1	Driver Warning Lamp Bracket for Vangaurd Trailer
			831-1115	1	Push-Lock, Coupling, DOT ¼ Tube