



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 wheel type (see Table 1 for more information).
- The 7th digit refers to desired system tire pressure setting (set in the factory).

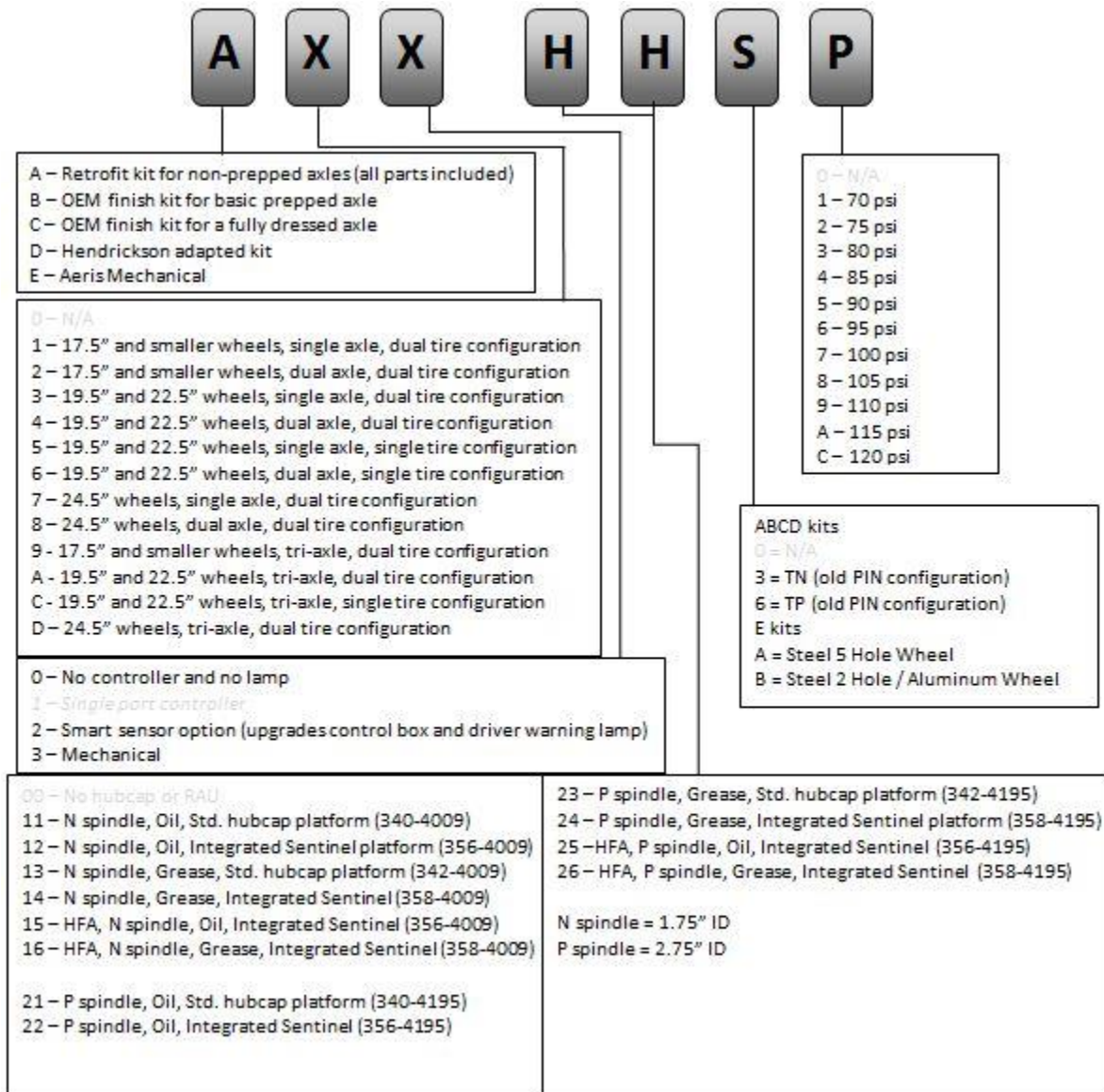











Table 1


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 and wheel type (steel/Aluminum) - 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 and wheel type (Steel/Aluminum) - 2 included with single-axle trailers - 6 included with triple-axle trailers
	4	Nylon convoluted sleeves (inside axle, protects tubing) <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 for Aeris Hendrickson Tiremaxx adaptation
	831-0412	Dual Tire, N-Spindle, Oil, 356-4009 Integrated Sentinel Hubcap Pkg for Aeris Hendrickson Tiremaxx adaptation
	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. for Aeris Hendrickson Tiremaxx adaptation
	831-0414	Dual Tire, N-Spindle, Grease, 358-4009 Integrated Sentinel Hubcap Pkg. for Aeris Hendrickson Tiremaxx adaptation
	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. for Aeris Hendrickson Tiremaxx adaptation
	831-0422	Dual Tire, P-Spindle, Oil, 356-4195 Integrated Sentinel Hubcap Pkg. for Aeris Hendrickson Tiremaxx adaptation
	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 Aeris Hendrickson Tiremaxx adaptation
	831-0424	Dual Tire, P-Spindle, Grease, 358-4195 Integrated Sentinel Hubcap Pkg. for Aeris Hendrickson Tiremaxx adaptation









Hubcap Installation Tools; for Aeris - Hendrickson Tiremaxx Only

Tools / Spindles	Part No.	Description
	831-0616	Magnetic Retainer
	831-0615	Torque Wrench Adapter
	831-0614	P-Spindle
	831-0613	N-Spindle

Aeris Replacement Part


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" 12" Straight hose for Aluminum for 2 (or 10) hand-hole steel wheel and WB singles
	831-0522	19.5"/22.5" 13" Straight hose for 5 hand-hole steel wheels and 24.5" wheels

Components	Part No.	Qty	Description
	831-0247	1	Control Box Assembly, Single Port
	831-0249	1	SmartSense 2 Port Control Box (Single Axle)
	831-0180	1	Power Harness Mechanical Control box
	831-0102	1	3 Pin Adapter Cable, AC4161
	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, SmartSense
	831-0011	1	Dual Axle Electrical Kit, Smart Sense
	831-0038	1	Incandescent Driver Warning Lamp
	831-6245	1	Mechanical: 95PSI setting
	831-7245	1	Mechanical: 100PSI setting
	831-8245	1	Mechanical: 105PSI setting
	831-9245	1	Mechanical: 110PSI setting
	831-A245	1	Mechanical: 115PSI setting
	831-0250	1	SmartSense Driver Warning Lamp, Dual Axle
	831-0251	1	SmartSense Driver Warning Lamp, Single Axle
	831-6248	1	SmartSense: 95PSI setting
	831-7248	1	SmartSense: 100PSI setting
	831-8248	1	SmartSense: 105PSI setting
	831-9248	1	SmartSense: 110PSI setting
	831-A248	1	SmartSense: 115PSI setting

	831-0179	1	Power Harness SmartSense
	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, Mechanical

		831-0511	1	Fitting Kit w/PPV for Dual Axle, Mechanical
		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
		831-0133	1	Driver Warning Lamp Bracket for Vanguard Trailer
		831-1115	1	Push-Lock, Coupling, DOT 1/4 Tube
		831-0140	1	45° Street Elbow with Straight thru: for Hendrickson axle

		831-0100	1	Spindle Bushings, 2.5"
		831-0141	1	Hex bushing Brass 1/2NPT x 1/4NPT
		831-2517	1	Tubing Insertion Tool