

# PARTS LIST

## ULTIMAAX® Rear Suspension for Kenworth Vehicles

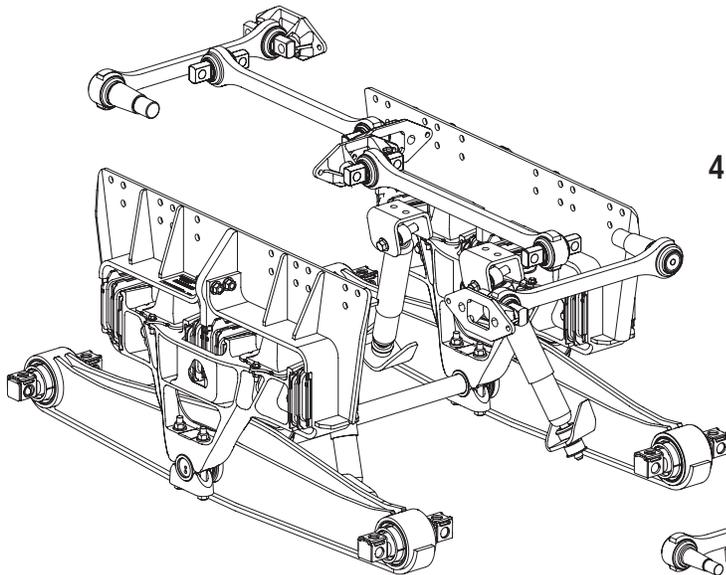
LIT NO: SP-301

DATE: January 2025

REVISION: D

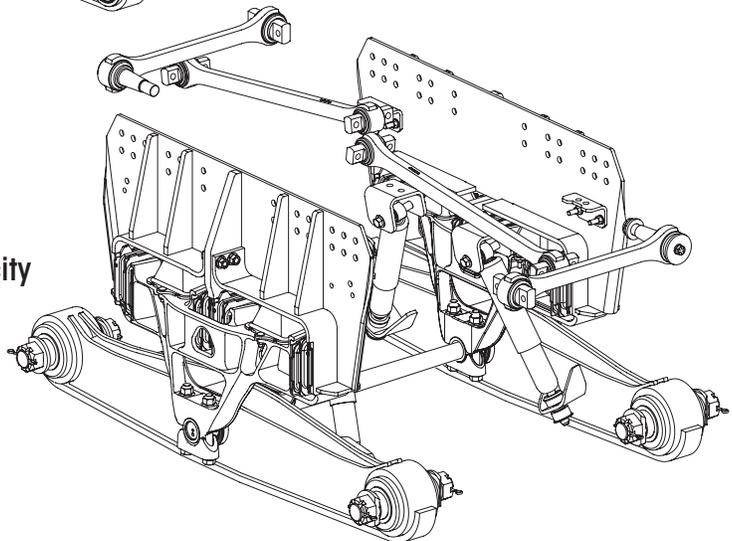
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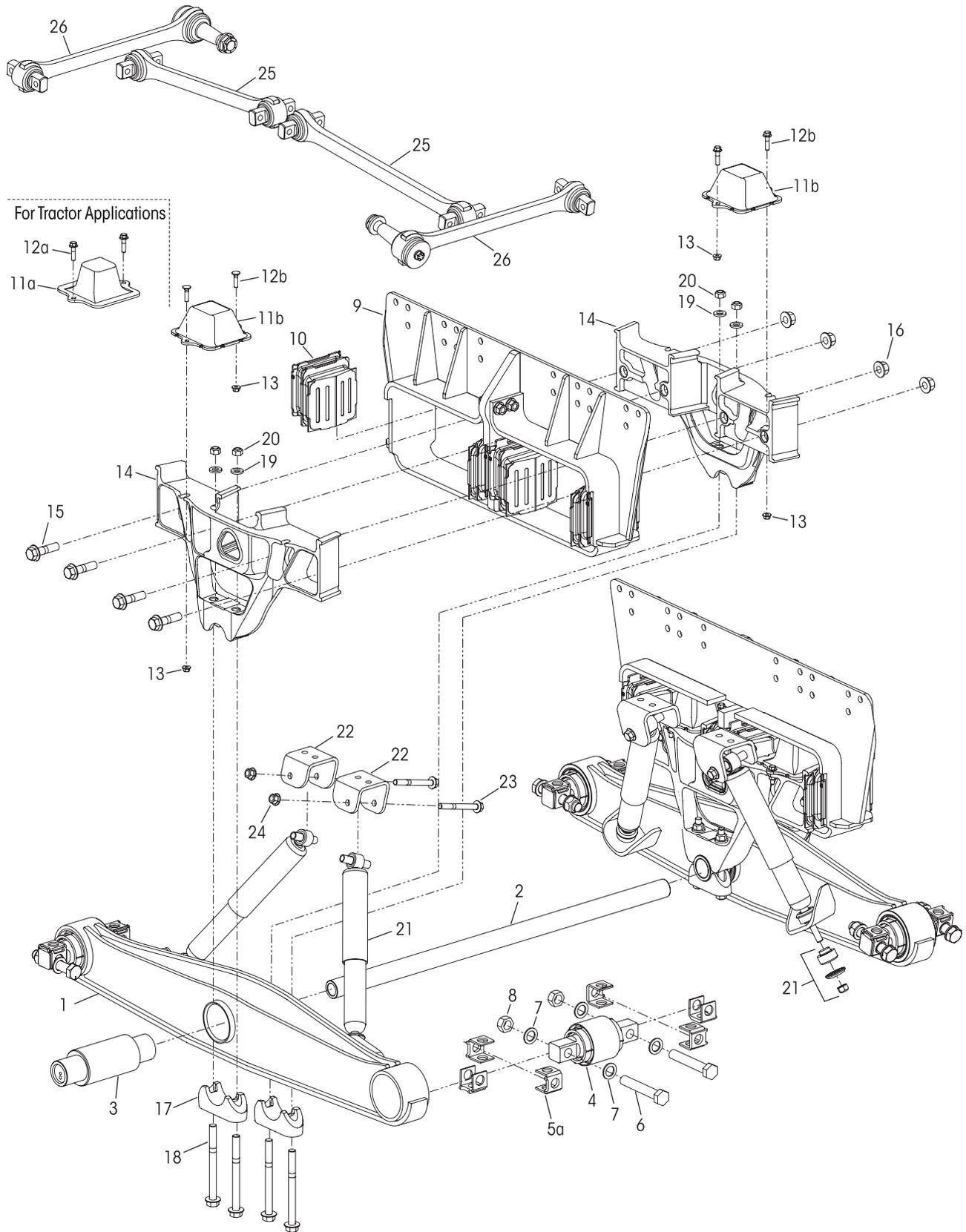
46K • 52K lbs. Capacity

60K • 70K lbs. Capacity





■ 46K • 52K lb. Capacity





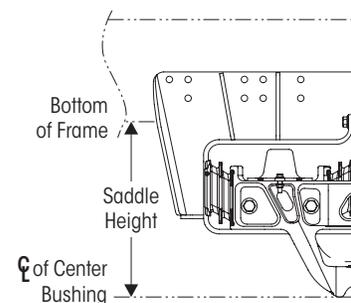
KEY NO.		PART NO.	DESCRIPTION	VEHICLE QTY.	KEY NO.		PART NO.	DESCRIPTION	VEHICLE QTY.
1			Equalizing Beam Assembly with Shock Bracket Includes Key Nos. 3-5	2	11			*Progressive Load Spring (PLS)	4
		78489-540	54" Beam Length		a			Tractor	
		78489-560	56" Beam Length		b			Truck	
		60961-759	<b>Cross Tube Service Kit</b> , Includes Key No. 2 and Weldable Loose Plug (Not Shown)					<b>Progressive Load Spring Fasteners Service Kit, One Side</b>	
2		44642-008	Cross Tube - 1140 mm	1		34013-196		Tractor, Includes Key Nos. 12a-13	
		60961-755	<b>Equalizing Beam Bushings Service Kit, One Beam</b> , Includes Key No. 3-4, 6-8, 18-20			60961-812		Truck, Includes Key Nos. 12b-13	
3		69538-000L	Center Bushing	2	12			*M10 x 1.5 x 6G Bolt	8
		60961-752	<b>End Bushing Service Kit, One Wheel End</b> , Includes Key Nos. 4-8		a			Tractor, Flange Bolt, 40 mm	
4			*Bar Pin End Bushing Assembly, Includes Key No. 5a		b			Truck, Round Head Square Neck Bolt, 35 mm	
5	a	50130-000	Bar Pin Shim, Standard 0.19" / 0.19"	8	13			*M10 x 1.5 Flange Locknut	8
	b	50131-000	Optional 0.25" / 0.12"		14	70886-000		Saddle Assembly	4
	c	57026-000	Optional flat shim 0.375"			34013-197		<b>Saddle Only Fasteners Service Kit, One Side</b> , Includes Key Nos. 15-16	
			<b>End Bushing Fasteners Service Kit</b> , Includes Key Nos. 6-8		15			*M20 x 1.5 x 75 mm Flange Bolt	8
		56659-001	Tandem		16			*M20 x 1.5 Flange Nut	8
		56659-005	One Beam		17	77205-001		Saddle Cap, <i>Replaces 77374-001</i>	4
		34013-104	One Wheel End			60961-768		<b>Saddle Cap Fasteners Service Kit, One Side</b> , Includes Key Nos. 18-20	
6			*1"-8 UNC x 6" Bolt	8	18			*M16 x 2 x 6g x 180 mm Flange Bolt	8
7			*1" Hardened Washer	16	19			*M16 Flat Washer	8
8			*1"-8 UNC Locknut	8	20			*M16 x 2 x 6h Nut	8
9		70912-XXX	Frame Hanger, <i>see Selection Guide below</i>	2	21	60680-015L		**Shock Absorber	4
			<b>Shear and Progressive Load Spring Service Kit, One Side</b>		22	78630-001		Upper Shock Bracket <i>Replaces 78630-002 (If equipped)</i>	4
		60961-749	Tractor, Includes Key Nos. 10, 11a, 12a, 13, 15-16, 18-20, 27			60961-818		<b>Upper Shock Fasteners Service Kit, One Beam</b> , Includes Key Nos. 23-24	
		60961-771	Truck, Includes Key Nos. 10, 11b, 12b, 13, 15-16, 18-20, 27		23			*M16 x 2 x 140 mm Flange Bolt	4
		60961-750	<b>Shear Spring Service Kit, One Side</b> Includes Key Nos. 10, 15-16, 18-20, 27		24			*M16 x 2 Flange Nut	4
10			*Shear Spring	8	25	8240-0000-XXX		***Longitudinal Heavy-duty TRAAX ROD™ Assembly, Straddle/Straddle, Specify Length in mm, <i>Replaces 92000-XXXS</i>	2
			<b>Progressive Load Spring Service Kit, One Side</b>		26	8233-0099-XXX		****Transverse Severe-duty TRAAX ROD Assembly, 2 Straddle/Taper, Specify Length in mm <i>Replaces 92350-605S</i>	2
		60961-751	Tractor, Includes Key Nos. 11a, 12a, 13		Not Shown	49689-000L		Torque Rod Shim	As Req.
		60961-822	Truck, Includes Key Nos. 11b, 12b, 13		27	70867-001		P-80 Lubricant - 10 ml (Not Shown)	As Req.

■ **Frame Hanger Selection Guide**

Key No. 9		46K lbs. • 52K lbs. Capacity			
Frame Width	♦Ride Height	♦♦Saddle Height	Axle Drop	Frame Hanger Part Number	
				Tractor	Truck
34"	11"	17.5"	7"	70912-204	70912-224
		18.25"	7¾"	70912-205	70912-225
	12"	18.5"	7"	70912-404	70912-424
		19.25"	7¾"	70912-405	70912-425

- ♦ For reference only.
- ♦♦ See Figure 1 for Saddle Height.

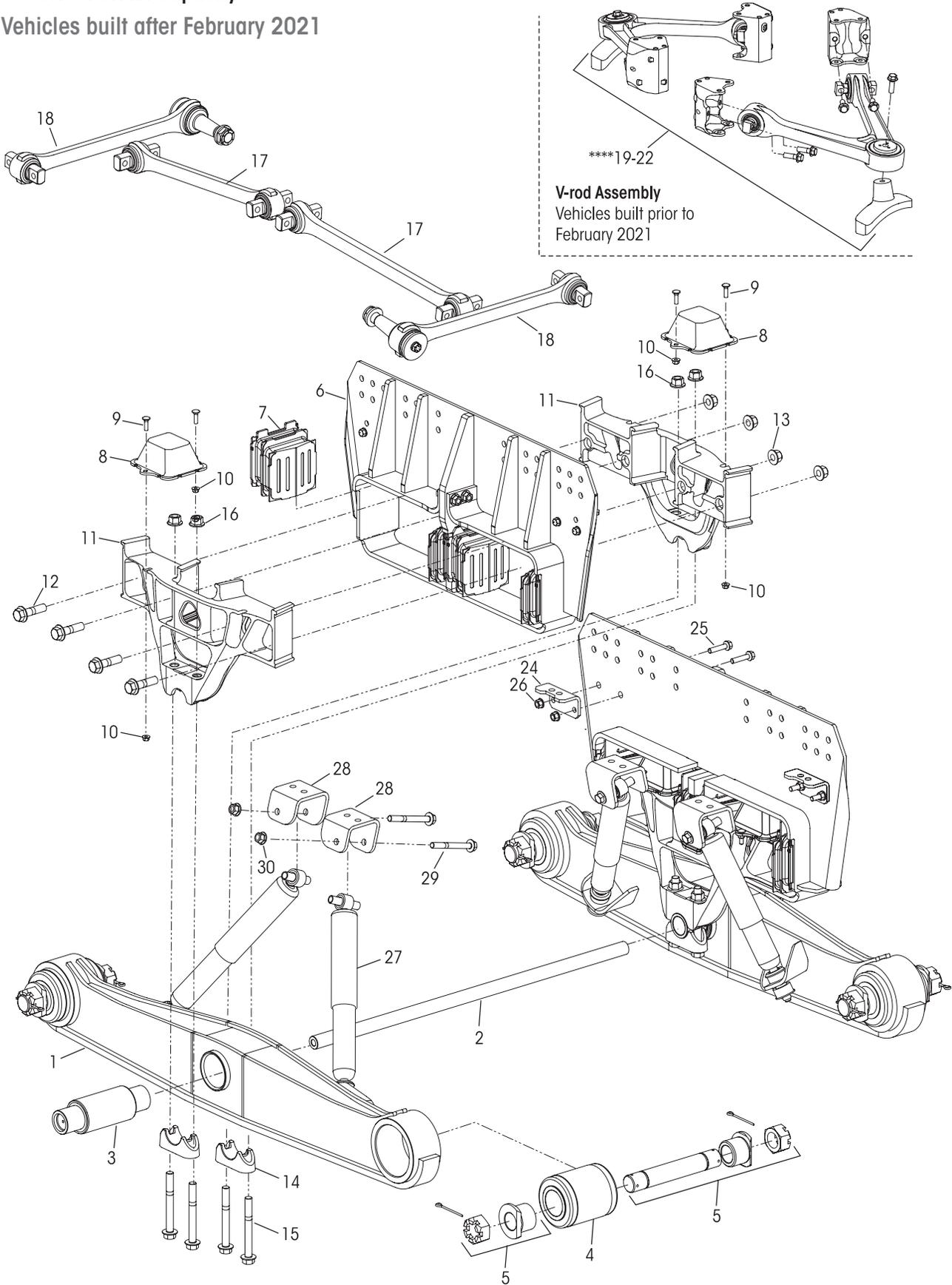
FIGURE 1





■ 60K • 70K lb. Capacity

Vehicles built after February 2021





# ULTIMAAX® for Kenworth Vehicles – 60K•70K lbs. Capacity

KEY NO.	PART NO.	DESCRIPTION	VEHICLE QTY.	KEY NO.	PART NO.	DESCRIPTION	VEHICLE QTY.
1		Equalizing Beam Assembly, Includes Key Nos. 3-4	2		60961-812	<b>Progressive Load Spring Fasteners Service Kit, One Side</b> , Includes Key Nos. 9-10	
	78634-560	60K, 56" Beam Length		9		*M10 x 1.5 x 35 mm 6g Flange Bolt	8
	78634-600	60K, 60" Beam Length		10		*M10 x 1.5 Flange Locknut	8
	80192-560	70K, 56" Beam Length		11	80964-001M	Saddle Assembly, <i>Replaces 80964-001</i>	4
	80192-600	70K, 60" Beam Length			34013-197	<b>Saddle Only Fasteners Service Kit, One Side</b> , Includes Key Nos. 12-13	
		<b>Cross Tube Service Kit</b> , Includes Weldable Loose End Plug (Not Shown)		12		*M20 x 1.5 x 75 mm Flange Bolt	8
	60961-759	60K, Includes Key No. 2a		13		*M20 x 1.5 Flange Nut	8
	60961-875	70K, Includes Key No. 2b & Circlip (Not Shown)		14	80965-001	Saddle Cap	4
2		Cross Tube, 1140 mm	1		60961-879	<b>Saddle Cap Fasteners Service Kit, One Side</b> , Includes Key Nos. 15-16	
a	44642-008	60K		15		*M20 x 1.5 x 175 mm Flange Bolt	8
b	78962-001	70K		16		*M20 x 1.5 Flange Locknut	8
		<b>Equalizing Beam Bushings Service Kit, One Beam</b> , 6" Bushing		17	8232-0000-XXX	***Longitudinal Severe-duty TRAAX ROD™ Assembly, Straddle/Straddle, Specify Length in mm, <i>Replaces V-rod Assembly</i>	2
	34013-290	60K, Includes Key No. 3a, 4-5, 15-16		18	8236-0099-XXX	****Transverse Severe-duty TRAAX ROD Assembly, 2 Straddle/Taper, Specify Length in mm <i>Replaces V-rod Assembly</i>	
	34013-291	70K, includes Key No. 3b, 4-5, 15-16		Not Shown	49689-000L	Torque Rod Shim	As Req.
3		Center Bushing Assembly, Includes End Plug	2	19		****V-rod Assembly	2
a	69538-000L	60K		20		****Corner Bracket	4
b	78676-001	70K, Includes Circlip, <i>Replaces 80539-001</i>		21		****M20 x 2.5 x 65 mm Flange Bolt	10
	34013-052	<b>End Bushing and Adapter Service Kits, One Wheel End</b> , 60K-70K, Includes Key No. 4-5		22		****Axle Apex Bracket	
4	10363-000L	End Bushing, 60K-70K, 6" Bushing	4			Front 2°	1
5	21140-007	End Bushing Adapter Assembly, 60K-70K	4			Rear 9°	1
6		Frame Hanger, 34" Frame Width, 12" Ride Height	2	23	70867-001	P-80 Lubricant - 10 ml (Not Shown)	As Req.
		For Saddle Height, see Figure 1 on page 3		24	60613-000	Rebound Support Angle	4
	80821-003	60K, 7.75" Axle Drop, 19.25" Saddle Height		25	60818-002	½" x 2¼" Flange Bolt	8
	80821-002	70K, 8.66" Axle Drop, 20" Saddle Height		26	60819-000	½" Flange Nut	8
	60961-876	<b>Shear and Progressive Load Spring Service Kit, One Side</b> , Includes Key Nos. 7-10, 12-13, 15-16, 23		27	60680-016L	**Shock Absorber	4
				28	78630-001	Upper Shock Bracket	4
	60961-877	<b>Shear Spring Service Kit, One Side</b> Includes Key Nos. 7, 12-13, 15-16, 23			60961-818	<b>Upper Shock Fasteners Service Kit, One Beam</b> , Includes Key Nos. 29-30	
7		*Shear Spring	8	29		*M16 x 2 x 140 mm Flange Bolt	4
	60961-822	<b>Progressive Load Spring Service Kit, One Side</b> Includes Key Nos. 8-10		30		*M16 x 2 Flange Nut	4
8		*Progressive Load Spring (PLS)	4				

**NOTES:** Quantities specified are for the vehicle. Quantities of service kit components may vary from amount shown in the list.

Longitudinal and Transverse TRAAX Rod bushings are non-serviceable, the entire torque rod assembly requires replacement. Visit TRAAX ROD website [www.traaxrods.com](http://www.traaxrods.com) for more information.

\* Item included in kit/assembly only, part not sold separately.

\*\* Shock absorbers are mandatory for the tractor applications and optional for truck applications.

\*\*\* Longitudinal torque rod length may vary depending on the desired pinion angles for the axles and vehicle configuration.

\*\*\*\* Transverse torque rods are mandatory for the ULTIMAAX rear suspension regardless of axle spacing. Transverse torque rod length may vary depending on the axle type and axle bracket.

\*\*\*\*\* V-rod assembly and parts are no longer available for production after February 2021, contact Hendrickson Truck Parts for options.

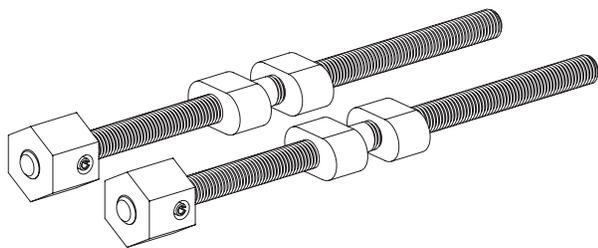
**Hendrickson Lit. Nos. 48422-592** (Tractor PLS 77382-001) and **48422-598** (Truck PLS 78897-001) – ULTIMAAX Gauge Card can be used to measure in unloaded condition (1) the height of the progressive load spring (PLS) and (2) the length of cut / split of the shear spring and PLS available online at [www.hendrickson-intl.com/Litform](http://www.hendrickson-intl.com/Litform).



■ Special Tools

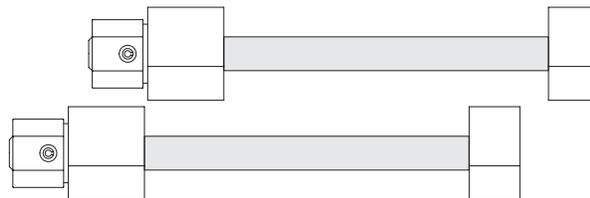
**SADDLE DISASSEMBLY TOOL**

Hendrickson Part No. 66086-113L



**SADDLE ASSEMBLY TOOL**

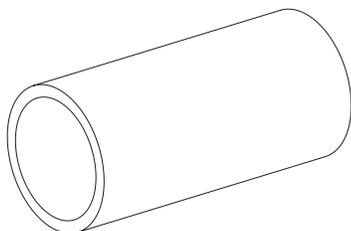
Hendrickson Part No. 66086-108L



**CENTER BUSHING TOOLS**

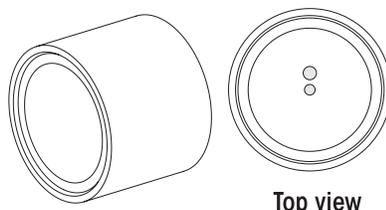
**RECEIVING TOOL**

Hendrickson Part No. 66086-112



**INSTALLATION TOOL**

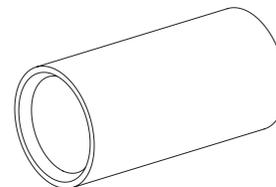
Hendrickson Part No. 66086-107



Top view

**REMOVAL TOOL**

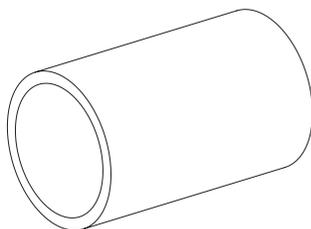
Hendrickson Part No. 66086-110



**BAR PIN STYLE END BUSHING TOOLS – 46K • 52K CAPACITY**

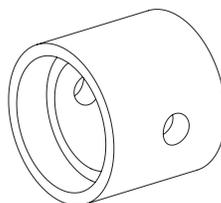
**RECEIVING TOOL**

Hendrickson Part No. 66086-111



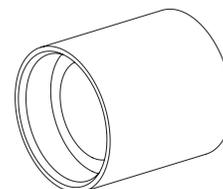
**INSTALLATION TOOL**

Hendrickson Part No. 66086-106



**REMOVAL TOOL**

Hendrickson Part No. 66086-109



**ADAPTER STYLE END BUSHING TOOLS – 60K • 70K CAPACITY**

OTC Part No. 1763

Visit [otctools.com](http://otctools.com)



This is a general parts list to provide directional information. Components may vary by model. Questions in regards to parts, contact Hendrickson Truck Parts at 1.866.755.5968 (Toll-free U.S. and Canada), 630.910.2800 (Outside U.S. and Canada) or email: [truckparts@hendrickson-intl.com](mailto:truckparts@hendrickson-intl.com).  
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.

Call Hendrickson at **1.866.755.5968** (toll-free) or **1.630.910.2800** for additional information.



[www.hendrickson-intl.com](http://www.hendrickson-intl.com)

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