

PARTS LIST

ULTIMAAX® Severe-duty Rear Rubber Suspension for Western Star Vehicles

LIT NO: SP-298

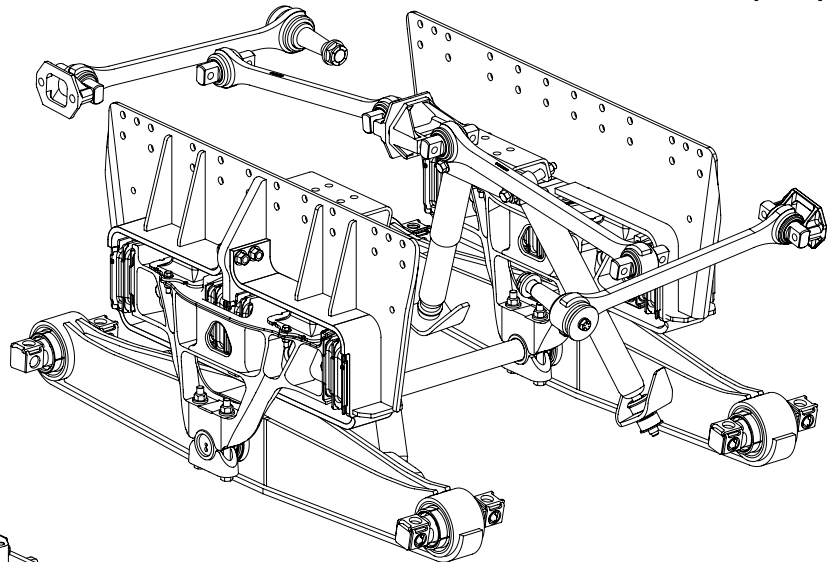
DATE: JULY 2024

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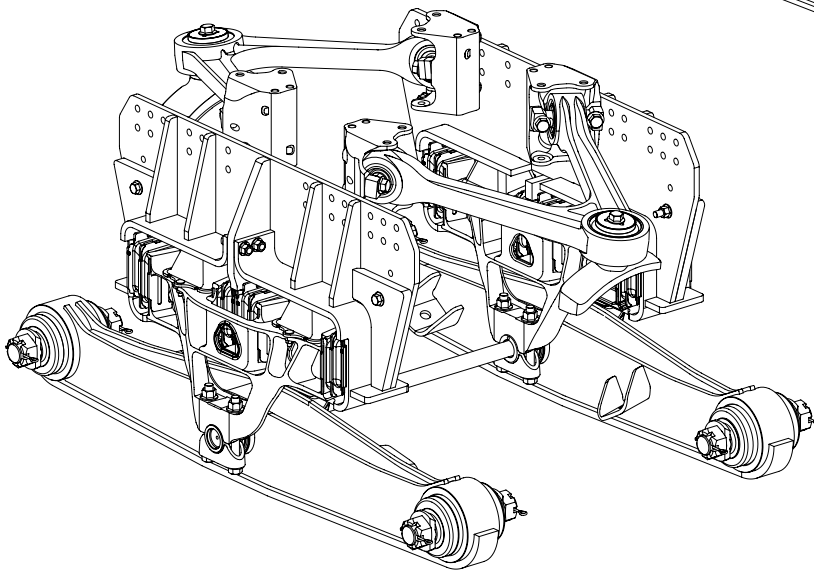
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ULTIMAAX 46K SD • 52K Capacity



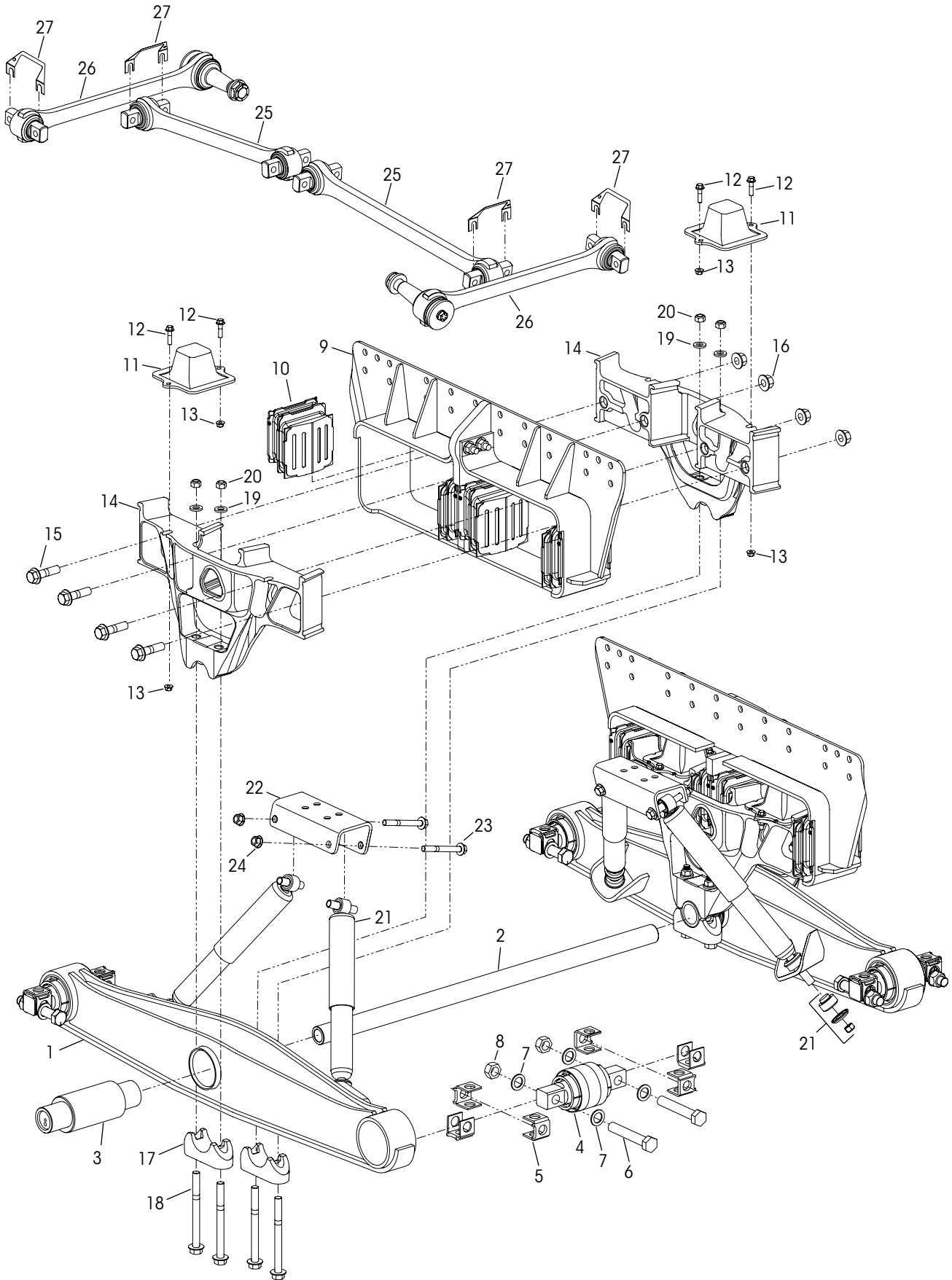
ULTIMAAX 60K • 70K Capacity





■ 46K SD • 52K Capacity

9½", 10½", 11½" Ride Height





ULTIMAAX® Rear Suspension for Western Star Vehicles

KEY NO.	PART NO.	DESCRIPTION	VEHICLE QTY.	KEY NO.	PART NO.	DESCRIPTION	VEHICLE QTY.
1		Equalizing Beam Assembly w/Shock Bracket Includes Key Nos. 3-5a	2		60961-750	Shear Spring Service Kit, One Side Includes Key Nos. 10, 15-16, 18-20, 28	
	78489-520	52" Beam Length		10		*Shear Spring	8
	78489-540	54" Beam Length			60961-751	Progressive Load Spring Service Kit, One Side Includes Key Nos. 11-13	
	78489-560	56" Beam Length		11		*Progressive Load Spring	4
	78489-600	60" Beam Length			34013-196	Progressive Load Spring Fasteners Service Kit, One Side , Includes Key Nos. 12-13	
	60961-759	Cross Tube Service Kit , Includes Key No. 2 and Weldable Loose Plug (Not Shown)		12		*M10 x 1.5 x 40 mm 6G Flange Bolt	8
2	44642-008	Cross Tube - 1140 mm	1	13		*M10 x 1.5 Flange Lock Nut	8
	60961-755	Equalizing Beam Bushing Service Kit, One Beam , Includes Key No. 3-4,6-8,18-20		14	70886-000	Saddle Assembly	4
3		Center Bushing	2		34013-197	Saddle Only Fastener Kit, One Side , Includes Key Nos. 15-16	
	60961-752	End Bushing Service Kit, One Wheel End , Includes Key Nos. 4-8		15		*M20 x 1.5 x 75 mm Flange Bolt	8
4		*Bar Pin End Bushing Assembly, Includes Key No. 5a		16		*M20 x 1.5 Flange Nut	8
5		Bar Pin Shim	8	17	77205-001	Saddle Cap, <i>Replaces 77374-001</i>	4
a	50130-000	0.19" / 0.19" Standard			60961-768	Saddle Cap Fastener Service Kit, One Side , Includes Key Nos. 18-20	
b	50131-000	0.25" / 0.12" Optional		18		*M16 x 2 x 6G x 180 mm Flange Bolt	8
c	57026-000	0.375" Optional flat shim		19		*M16 Flat Washer	8
		End Bushing Fasteners Service Kit , Includes Key Nos. 6-8		20		*M16 x 2 x 6H Nut	8
	56659-001	Tandem		21		Shock Absorber	4
	56659-005	One Beam			60680-015L	9½", 10½" Ride Height	
	34013-104	One Wheel End			60680-016L	10½", 11½" Ride Height	
6		*1"-8 UNC x 6" Bolt	8	22	77591-002	Upper Shock Bracket	2
7		*1" Hardened Washer	16		60961-818	Upper Shock Fasteners Service Kit, One Beam , Includes Key Nos. 23-24	
8		*1"-8 UNC Locknut	8	23		*M16 x 2 x 140 mm Flange Bolt	4
9		Frame Hanger, 34" Width	2	24		*M16 x 2 Flange Nut	4
		• 7" Axle Drop		25	8240-0000-XXX	**Longitudinal TRAAX ROD™ Assembly, Straddle/Straddle, Specify Length in mm <i>Replaces 92000-XXXS</i>	2
	78592-001	9½" Ride Height		26	8233-0099-XXX	*** Transverse TRAAX ROD Assembly, 625 mm, Straddle/Taper, <i>Replaces 92350-625S</i>	2
	78592-002	10½" Ride Height		27	49689-000L	Torque Rod Shim	As Req.
	78592-004	11½" Ride Height		28	70867-001	P-80 Lubricant - 10 ml (Not Shown)	As Req.
		• 7¾" Axle Drop					
	78592-003	10½" Ride Height					
	78592-005	11½" Ride Height					
	60961-749	Shear and Progressive Load Spring Service Kit, One Side , Includes Key Nos. 10-13,15-16, 18-20, 28					

NOTES: * Item included in service kit/assembly only, part not sold separately.

** Longitudinal and transverse TRAAX Rod bushings are non-serviceable, the entire torque rod assembly requires replacement. Visit TRAAX ROD website www.traaxrods.com for more information.

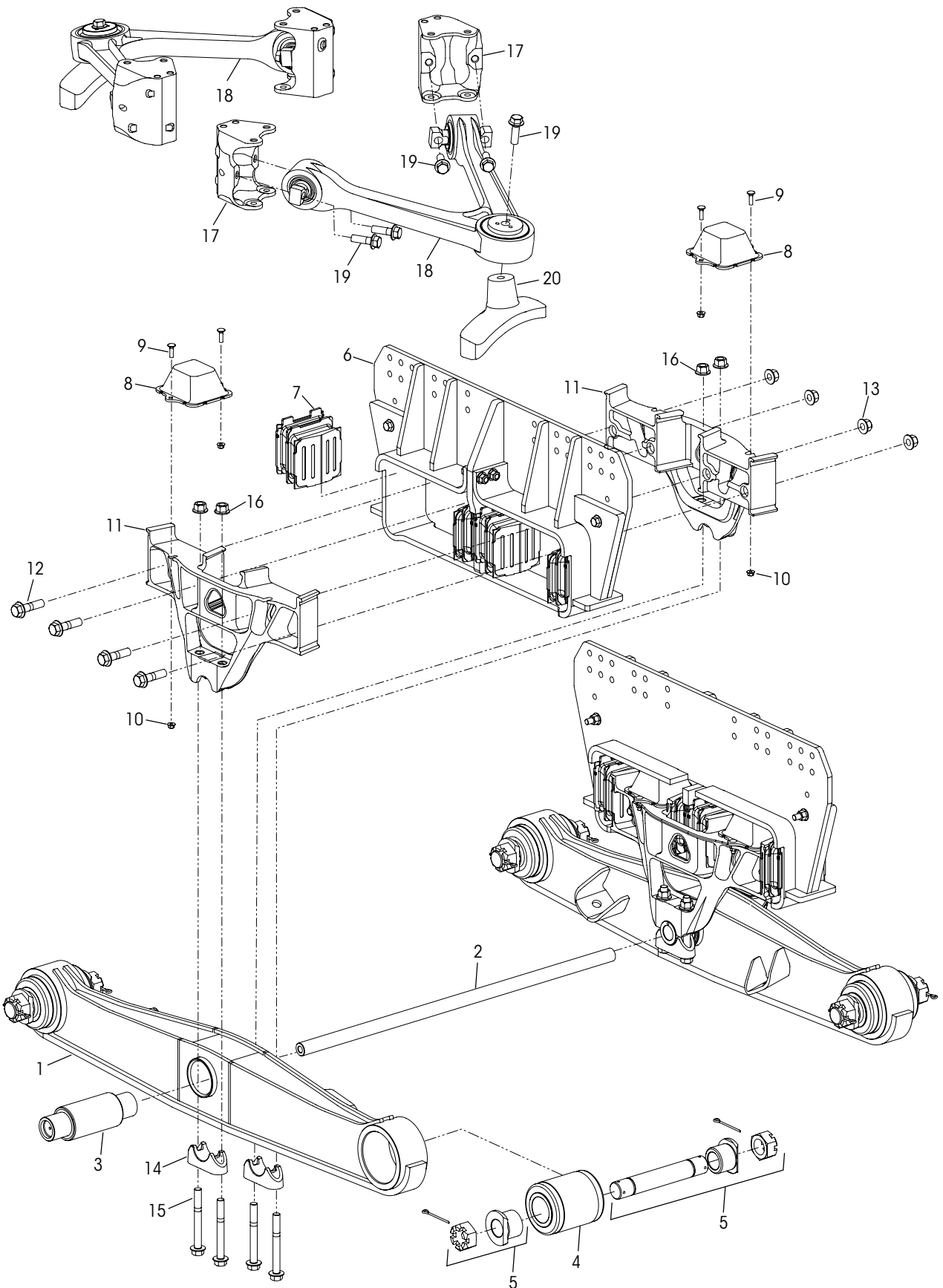
*** Transverse torque rods are mandatory for the ULTIMAAX rear suspension regardless of axle spacing.

Hendrickson Lit. No. 48422-592 –ULTIMAAX Gauge Card can be used to measure (1) the length of cut / split, (2) depth of separation and (3) the height of the progressive load spring (PLS) in unloaded condition.



■ 60K • 70K Capacity

***10½", 11½" Ride Height





ULTIMAAX® Rear Suspension for Western Star Vehicles

KEY NO.	PART NO.	DESCRIPTION	VEHICLE QTY.	KEY NO.	PART NO.	DESCRIPTION	VEHICLE QTY.
1		Equalizing Beam Assembly, Includes Key Nos. 3-4	2	6		Frame Hanger, 34" Width	2
	78634-560	60K, 56" Beam Length			91732-001	• 7¾" Axle Drop 60K, 10.15" Ride Height	
	78634-600	60K, 60" Beam Length			91732-002	60K, 11.33" Ride Height	
	80192-560	70K, 56" Beam Length, 6" Bushing			91732-005	65K•70K, 10.15" Ride Height	
	80291-560	70K, 56" Beam Length, 7" Bushing			91732-006	65K•70K, 11.33" Ride Height	
	80192-600	70K, 60" Beam Length, 6" Bushing				• 8¾" Axle Drop	
	80291-600	70K, 60" Beam Length, 7" Bushing			91732-003	70K, 10.15" Ride Height	
		Cross Tube Service Kit , Includes Weldable Loose End Plug (Not Shown)			91732-004	70K, 11.33" Ride Height	
	60961-759	60K, Includes Key No. 2a			60961-876	Shear and Progressive Load Spring Service Kit, One Side , Includes Key Nos. 7-8, 9-10, 12-13, 15-16, 21	
	60961-875	70K, Includes Key No. 2b & Circlip (Not Shown)			60961-877	Shear Spring Service Kit, One Side Includes Key Nos. 7, 12-13, 15-16, 21	
2		Cross Tube, 1140 mm	1	7		*Shear Spring	8
a	44642-008	60K			60961-822	Progressive Load Spring Service Kit, One Side Includes Key Nos. 8-10	
b	78962-001	70K		8		*Progressive Load Spring	4
		Equalizing Beam Bushings Service Kit, One Beam			60961-812	Progressive Load Spring Fasteners Service Kit, One Side , Includes Key Nos. 9-10	
	34013-290	60K, 6" Bushing, Includes Key No. 3a-5a, 15-16		9		*M10 x 1.5 x 35 mm 6g Flange Bolt	8
	34013-291	70K, 6" Bushing, Includes Key No. 3b, 4a-5a, 15-16		10		*M10 x 1.5 Flange Locknut	8
	34013-292	70K, 7" Bushing, Includes Key No. 3b-5b, 15-16		11	80964-001	Saddle Assembly	4
3		Center Bushing Assembly, includes End Plug	2		34013-197	Saddle Only Fasteners Service Kit, One Side , Includes Key Nos. 12-13	
a	69538-000L	60K		12		*M20 x 1.5 x 75 mm Flange Bolt	8
b	80539-001	70K, includes Circlip (Not Shown)		13		*M20 x 1.5 Flange Nut	8
		End Bushing and Adapter Service Kits,		14	80965-001	Saddle Cap	4
		• Tandem			60961-879	Saddle Cap Fasteners Service Kit, One Side , Includes Key Nos. 15-16	
	60872-010	60K-70K, 6" Bushing, Includes Key No. 4a-5a		15		*M20 x 1.5 x 175 mm Flange Bolt	8
	60872-011	70K, 7" Bushing, Includes Key No. 4b-5b		16		*M20 x 1.5 Flange Locknut	8
		• One Wheel End		17	78561-001	Corner Bracket	4
	34013-052	60K-70K, 6" Bushing, Includes Key No. 4a-5a		18	76847-000	**V-rod Assembly	2
	34013-110	70K, 7" Bushing, Includes Key No. 4b-5b		19	68754-065	M20 x 2.5 x 65 mm Flange Bolt	10
4		End Bushing	4	20		Axle Apex Bracket, <i>see Table below</i>	2
a	10363-000L	60K-70K, 6" Bushing		21	70867-001	P-80 Lubricant - 10 ml (Not Shown)	As Req.
b	10364-000L	70K, 7" Bushing					
5		End Bushing Adapter Assembly	4				
a	21140-007	60K-70K, 6" Bushing					
b	21140-004L	70K, 7" Bushing					

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

** V-rods are mandatory for the ULTIMAAX rear suspension regardless of axle spacing.

*** Ride Height will vary slightly depending on frame rail configuration

Hendrickson Lit. No. 48422-598 – ULTIMAAX Gauge Card can be used to measure (1) the height of the progressive load spring (PLS) and (2) the length of cut/split of the shear spring and PLS in unloaded condition.

Key No. 20			AXLE APEX BRACKET		
80913-XXX – RT58 Axle			93999-XXX – D60 Axle		
Pinion Angle	Front Drive	Rear Drive	Pinion Angle	Front Drive	Rear Drive
1.5°	80913-002	80913-101	3°	93999-003	—
3°	80913-003	—	8.5°	—	93999-110
11°	—	80913-110	9°	—	93999-110

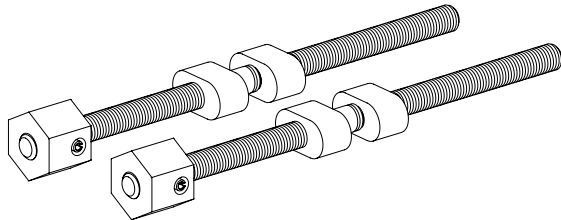


■ Special Tools

SADDLE ASSEMBLY TOOLS

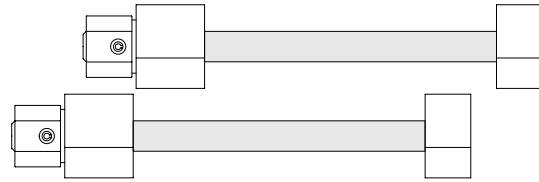
DISASSEMBLY TOOL

Hendrickson Part No. 66086-113L



ASSEMBLY TOOL

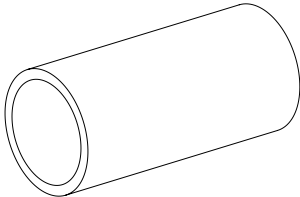
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CENTER BUSHING TOOLS

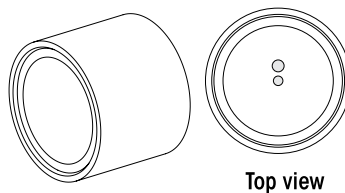
RECEIVING TOOL

Hendrickson Part No. 66086-112



INSTALLATION TOOL

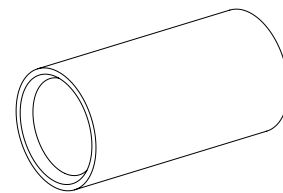
Hendrickson Part No. 66086-107



Top view

REMOVAL TOOL

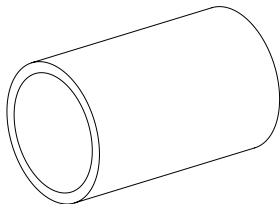
Hendrickson Part No. 66086-110



END BUSHING TOOLS

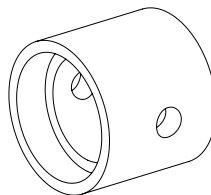
RECEIVING TOOL

Hendrickson Part No. 66086-111



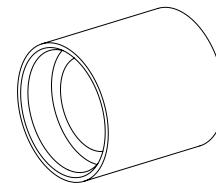
INSTALLATION TOOL

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



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.
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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