

# **H** PARTS LIST

## PRIMAAX® EX • PRIMAAX® Rear Air Suspension for Mack Vehicles

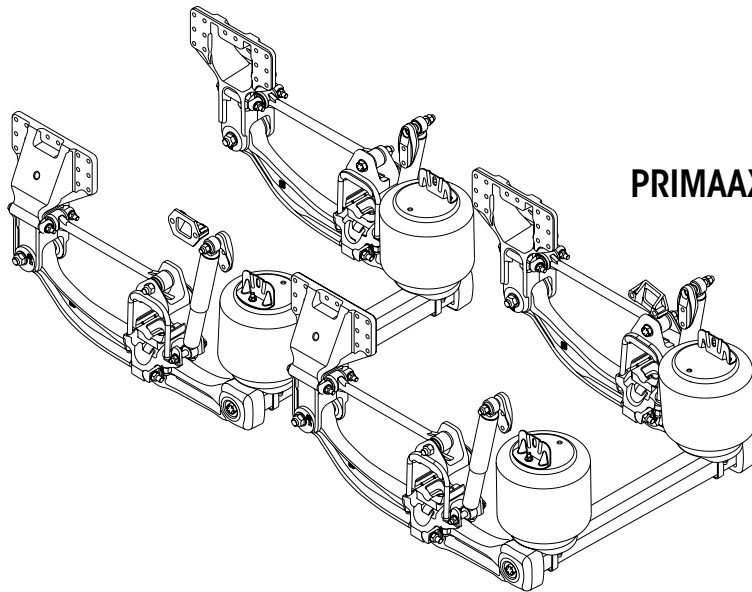
LIT NO: SP-231

DATE: February 2021

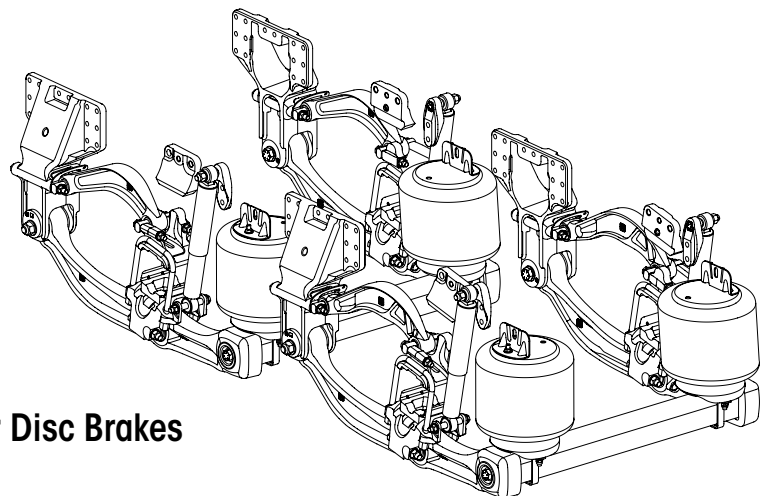
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**PRIMAAX® EX with Drum Brakes**

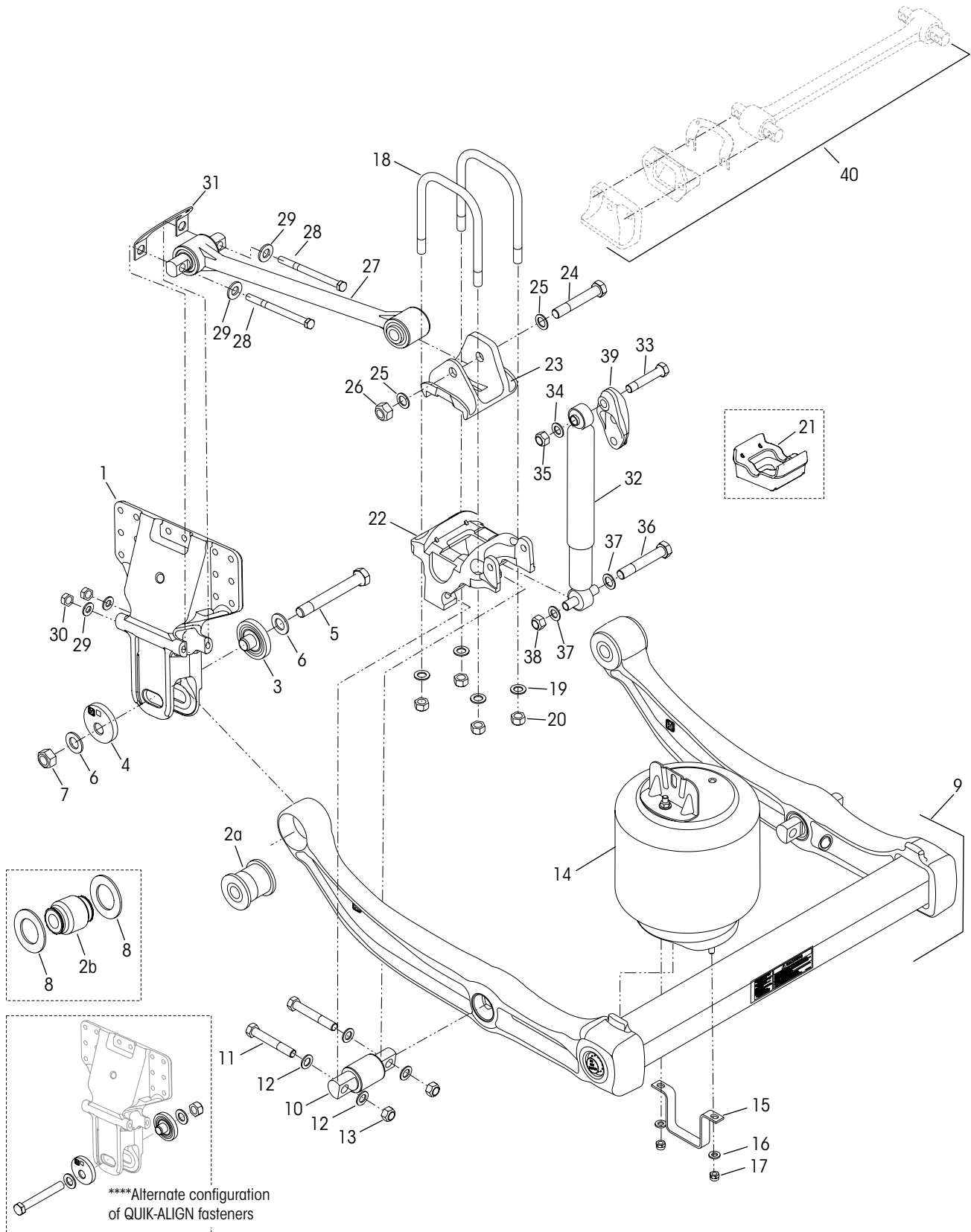


**PRIMAAX® EX with Air Disc Brakes**



8½" • 10" Ride Height  
 Equipped with Drum Brakes

23K • 46K • 69K





# PRIMAAX® EX for Mack Vehicles with Drum Brakes

KEY NO. PART NO.		DESCRIPTION	VEHICLE QTY.	KEY NO. PART NO.		DESCRIPTION	VEHICLE QTY.
1	67222-000	Frame Hanger	4	18		*3/4"-16 UNF Square U-bolt	8
		<b>Pivot Bushing Service Kit</b>		a		10 9/16" Length - 8 1/2" Ride Height	
	60961-720	One Wheel End, Includes Key Nos. 2a, 3-7, 41		b		9 7/8" Length - 10" Ride Height	
	60632-020	Axle Set, Includes Key Nos. 2a, 3-7, 41			48718-501	<b>U-bolt Fastener Kit, One Wheel End</b>	
	60632-043	Severe-duty, Axle Set, Includes, Key Nos. 2b, 3-8, 41				Includes Key Nos. 19-20	
		<b>QUIK-ALIGN Collar Service Kit</b>		19		*3/4" Flat Washer	16
	60632-019	One Wheel End, Includes Key Nos. 3-7		20		*3/4"-16 UNF U-bolt Locknut	16
	60632-021	Axle Set, Includes Key Nos. 3-7		21	65139-003	Axle Spacer, 8 1/2" Ride Height Only	4
	60632-018	<b>QUIK-ALIGN Fastener Service Kit, One Wheel End, Includes Key Nos. 5-7</b>		22	60556-XXX	Bottom Cap, <i>See Selection Guide below</i>	4
2	a	*Heavy-duty Pivot Bushing	4			<b>Longitudinal Torque Rod Fastener Service Kits, One Side</b>	
	b	*Severe-duty Pivot Bushing	4		58821-012	To Top Pad, Includes Key Nos. 24-26	
3		*QUIK-ALIGN Concentric Collar	4		58821-027	To Frame Hanger, Includes Key Nos. 28-30	
4		*QUIK-ALIGN Eccentric Collar	4	23	60877-001	Top Pad, 8 1/2" Ride Height	4
5		*1"-14 UNF x 7 1/2" Hendrickson Coated Hex Bolt	4		65641-000	Top Pad, 10" Ride Height	4
6		*1" Hendrickson Coated Flat Washer	8	24		*7/8"-14 UNF-2A x 5 1/2" Hex Bolt	4
7		*1"-14 UNF Hendrickson Coated Locknut	4	25		*7/8" Flat Washer	8
8		*Confinement Washer	4	26		*7/8"-14 UNF-2B Locknut	4
9		U-Beam Assembly, Includes Key Nos. 2, 10		27	67274-XXX	Longitudinal Torque Rod, <i>Replaces 64981-XXX</i>	4
	67249-003	Rear	1			<i>See Selection Guide below</i>	
	67249-004	Front	1	28		*5/8"-11 UNC x 8" Hex Bolt <b>or</b> **M16 x 2-6G Bolt	8
		<b>D-pin Bushing Service Kits, See Selection Guide</b>		29		*5/8" Flat Washer <b>or</b> **M16 Washer	16
	34013-XXX	Single, Includes Key Nos. 10-13		30		*5/8"-11 UNC Locknut <b>or</b> **M16 x 2-6H Locknut	8
	56659-XXX	Fasteners Only, Axle Set, Includes Key Nos. 11-13		31	70240-001	Torque Rod Shim, 3.0 mm	As Req.
10		*D-pin Bushing	4		70240-002	Torque Rod Shim, 1.5 mm	
11		*3/4"-16 UNF Bolt, <i>See Selection Guide below</i>	8	32	60657-007	Shock Absorber, 8 1/2" Ride Height	4
12		*3/4" Flat Washer	16		60657-003	Shock Absorber, 10" Ride Height	4
13		*3/4"-16 UNF Locknut	8		50754-030	<b>Single Shock Absorber Fastener Service Kit, Includes Key Nos. 33-38</b>	
		<b>Air Spring Service Kits</b>		33		*3/4"-10 UNC x 4 1/4" Upper Shock Bolt	4
	60961-230	One Wheel End, Includes Key Nos. 14-17		34		*3/4" Flat Washer	4
	49177-006	Single, Fasteners only, Includes Key Nos. 16-17		35		*3/4"-10 UNC Locknut	4
14	67043-002	Air Spring Assembly	4	36		*5/8"-11 UNC X 6" Lower Shock Bolt	4
15	60911-002	Lower Air Spring Mounting Bracket	4	37		*5/8" Flat Washer	8
16		*1/2" Flat Washer	8	38		*5/8"-11 UNC Locknut	4
17		*1/2"-13 UNC Locknut	8	39	67463-006	Upper Shock Frame Bracket	4
		<b>U-bolt Service Kit, One Wheel End, Includes Kit No. 48718-501</b>		40		**Transverse Torque Rod Assembly	2
	91430-041	8 1/2" Ride Height, Includes Key Nos. 18a		41	70867-001	P-80 Lubricant - 10 ml (Not Shown)	Per Bushing 1
	91430-044	10" Ride Height, Includes Key Nos. 18b				<b>**Height Control Valve and Linkage Assembly</b>	1
					Not Shown		

## ■ Selection Guide

	◆Pinion Angle		Key No. 11			Key No. 22	Key No. 27
	8 1/2" Ride Height	10" Ride Height	D-pin Bolt Length	D-pin Bushing Service Kit No.	D-pin Fasteners Service Kit No.	Bottom Cap Part No.	◆◆Longitudinal Torque Rod Part No.
FRONT	2.9°	2.9°	4 3/4"	34013-117	56659-012	60556-025	67274-530
	6.0°	6.1°	5 1/4"	34013-201	56659-014	60556-060	
	7.9°	8.2°	5"	34013-107	56659-009	60556-120	
REAR	10.3°	9.8°	4 3/4"	34013-117	56659-012	60556-100	67274-575
	10.7°	10.2°				60556-105	
	11.2°	10.7°				60556-110	
	11.6°	11.2°	60556-115				
	12.1°	11.6°	5"	34013-107	56659-009	60556-120	
	13.0°	12.6°	5 1/4"	34013-201	56659-014	60556-130	
13.4°	13.1°	60556-135					

◆ Measured with QUIK-ALIGN pinion set at neutral position (12 O'Clock)

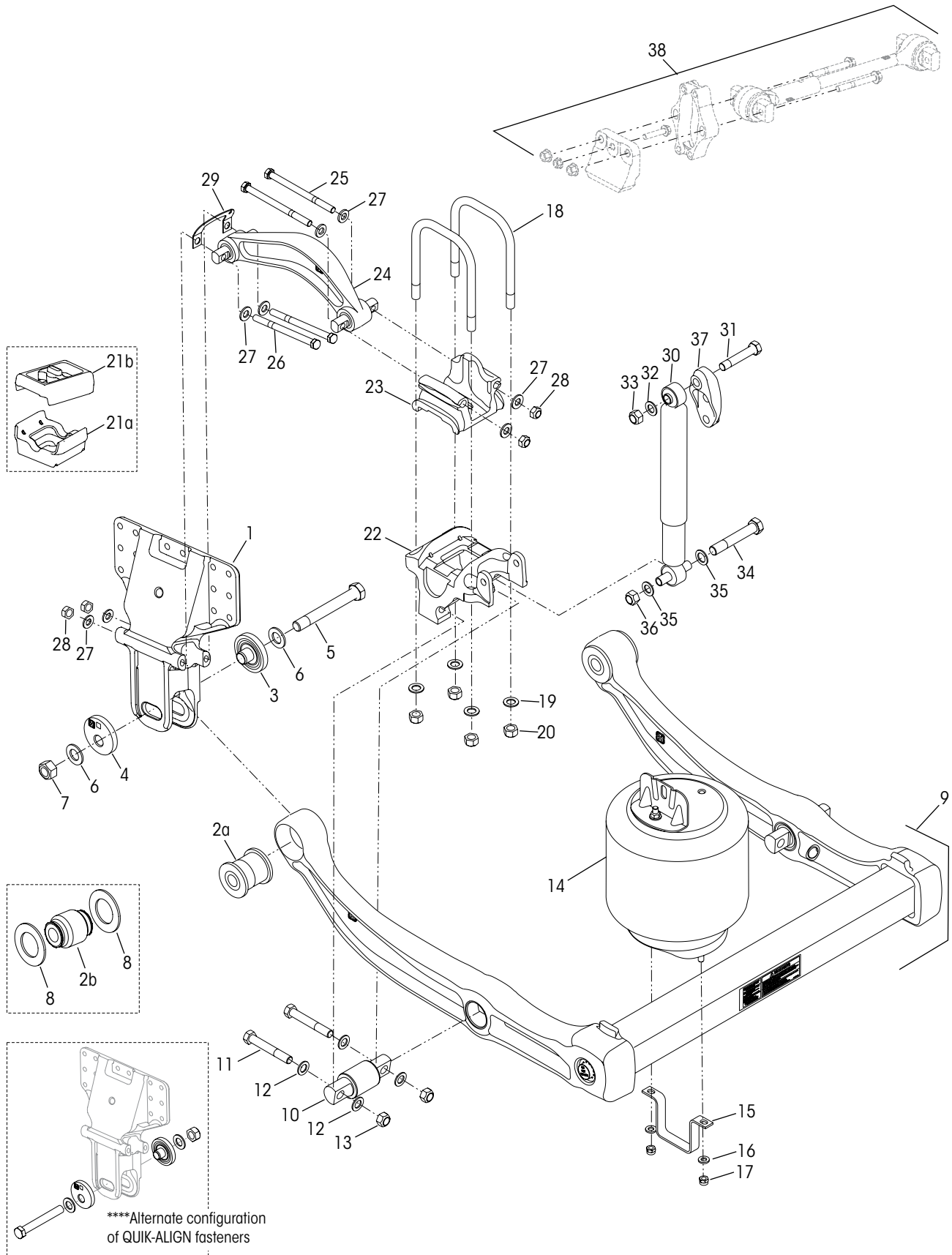
◆◆ Torque rod bushings are non-serviceable, replacement requires complete torque rod assembly with bushings.



8½" • 10" Ride Height

23K • 46K • 69K

Equipped with Air Disc Brakes





# PRIMAAX® EX for Mack Vehicles with Air Disc Brakes

KEY NO.		PART NO.	DESCRIPTION	VEHICLE QTY.	KEY NO.		PART NO.	DESCRIPTION	VEHICLE QTY.
1		67222-002	Frame Hanger	4	18			*3/4"-16 UNF Square U-bolt	8
			<b>Pivot Bushing Service Kit</b>		a			10 3/8" - 8 1/2" Ride Height	
		60961-720	One Wheel End, Includes Key Nos. 2a, 3-7, 39		b			9 7/8" - 10" Ride Height	
		60632-020	Axle Set, Includes Key Nos. 2a, 3-7, 39			48718-501		<b>U-bolt Fastener Kit, One Wheel End</b>	
		60632-043	Severe-duty, Axle Set, Includes Key Nos. 2b, 3-8, 39					Includes Key Nos. 19-20	
			<b>QUIK-ALIGN Collar Service Kit</b> , Includes Key Nos. 3-7		19			*3/4" Flat Washer	16
		60632-019	One Wheel End		20			*3/4"-16 UNF U-bolt Locknut	16
		60632-021	Axle Set		21			Axle Spacer	4
		60632-018	<b>QUIK-ALIGN Fastener Service Kit, One Wheel End</b> , Includes Key Nos. 5-7		a	65139-003		8 1/2" Ride Height, Lower	
2	a		*Heavy-duty Pivot Bushing	4	b	76960-001		10" Ride Height, Upper	
	b		*Severe-duty Pivot Bushing	4	22	60556-XXX		Bottom Cap, <i>See Selection Guide below</i>	4
3			*QUIK-ALIGN Concentric Collar	4	23	76961-000		Top Pad	4
4			*QUIK-ALIGN Eccentric Collar	4	24			Longitudinal Torque Rod, <i>See Selection Guide</i>	4
5			*1"-14 UNF x 7 1/2" Hendrickson Coated Hex Bolt	4				<b>Longitudinal Torque Rod Fastener Service Kits, One Side</b>	
6			*1" Hendrickson Coated Flat Washer	8		49176-060		To Top Pad, Includes Key Nos. 25, 27-28	
7			*1"-14 UNF Hendrickson Coated Locknut	4		49176-050		To Frame Hanger, Includes Key Nos. 26-28	
8			*Confinement Washer	4	25			*5/8"-11 UNC x 5 1/2" Hex Bolt	8
9			U-Beam Assembly, Includes Key Nos. 2, 10		26			*5/8"-11 UNC x 10 1/2" Hex Bolt	8
		67249-003	Rear	1				**M16 x 2-6G Bolt	
		67249-004	Front	1	27			*5/8" Flat Washer	32
			<b>D-pin Bushing Service Kits</b> , <i>See Selection Guide</i>					**M16 Washer	
		34013-XXX	Single, Includes Key Nos. 10-13		28			*5/8"-11 UNC Locknut	16
		56659-XXX	Fasteners Only, Axle Set, Includes Key Nos. 11-13					**M16 x 2-6H Locknut	
10			*D-pin Bushing	4	29	70240-001		Torque Rod Shim, 3.0 mm, <i>See Selection Guide</i>	
11			*3/4"-16 UNF Bolt, <i>See Selection Guide below</i>	8		70240-002		Torque Rod Shim, 1.5 mm	
12			*3/4" Flat Washer	16	30	60657-007		Shock Absorber	4
13			*3/4"-16 UNF Locknut	8		50754-030		<b>Single Shock Absorber Fastener Service Kit</b> , Includes Key Nos. 31-36	
			<b>Air Spring Service Kits</b>		31			*3/4"-10 UNC x 4 1/4" Upper Shock Bolt	4
		60961-230	<b>One Wheel End</b> , Includes Key Nos. 14-17		32			*3/4" Flat Washer	4
		49177-006	<b>Single</b> , Fasteners only, Includes Key Nos. 16-17		33			*3/4"-10 UNC Locknut	4
14		67043-002	Air Spring Assembly	4	34			*5/8"-11 UNC X 6" Lower Shock Bolt	4
15		60911-002	Lower Air Spring Mounting Bracket	4	35			*5/8" Flat Washer	8
16			*1/2" Flat Washer	8	36			*5/8"-11 UNC Locknut	4
17			*1/2"-13 UNC Locknut	8	37	67463-006		Upper Shock Frame Bracket	4
			<b>U-bolt Service Kit, One Wheel End</b> , Includes Kit No. 48718-501		38			**Transverse Torque Rod Assembly	2
		91430-048	8 1/2" Ride Height, Includes Key Nos. 18a		39	70867-001		P-80 Lubricant - 10 ml (Not Shown) Per Bushing	1
		91430-050	10" Ride Height, Includes Key Nos. 18b					Not Shown	**Height Control Valve and Linkage Assembly

## ■ Selection Guide

◆Pinion Angle	Brake Clocking		Key No. 11			Key No. 22	Key No. 24	Key No. 29	
	Ride Height	8 1/2"	D-pin Bolt Length	D-pin Bushing Service Kit No.	D-pin Fasteners Service Kit No.	Bottom Cap Part No.	◆◆Longitudinal Torque Rod Part No.	Torque Rod Shims Ride Height	
	10"							8 1/2"	10"
1.5°	92°	84°	4 3/4"	34013-117	56659-012	60556-025	67219-435	3 mm	3 mm
2.5°			5"	34013-107	56659-009	60556-035		4 mm	4 mm
4°			5 1/2"	34013-116	56659-013	60556-845	77128-435	6 mm	5 mm
6°	6"	34013-200	56659-024	60556-855	6 mm	6 mm			
7°	95°	90°	4 3/4"	34013-117	56659-012	60556-805	68801-205	5 mm	5 mm
9°			5"	34013-107	56659-009	60556-810		4 mm	
9.5°			5 1/4"	34013-201	56659-014	60556-820		5 mm	3.0 mm
10°			5 1/2"	34013-116	56659-013	60556-825		6 mm	
10.5°						60556-830			
11°						60556-835			
11.5°						60556-840			
12°				60556-845			4 mm		
12.5°									

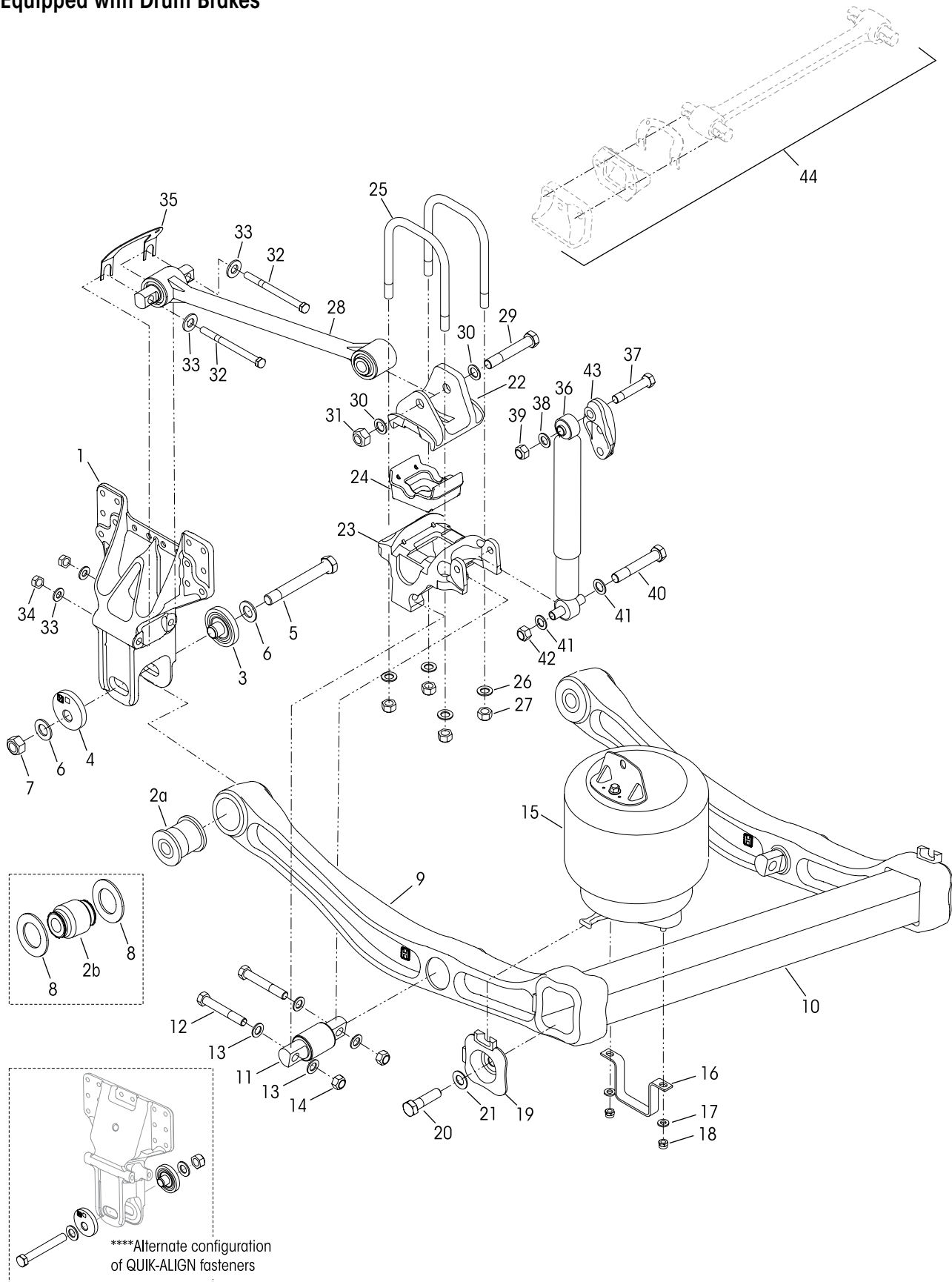
◆ Measured with QUIK-ALIGN pinion set at neutral position (12 O'Clock)

◆◆ Torque rod bushings are non-serviceable, replacement requires complete torque rod assembly with bushings.



8½" • 10" Ride Height  
Equipped with Drum Brakes

23K • 46K • 69K





# PRIMAAX® for Mack Vehicles with Drum Brakes

KEY NO.	PART NO.	DESCRIPTION	VEHICLE QTY.	KEY NO.	PART NO.	DESCRIPTION	VEHICLE QTY.
1	67222-000	Frame Hanger, <i>Replaces 65702-001</i>	4	21		*7/8" Flat Washer	4
		<b>Pivot Bushing Service Kit</b>		22	60877-001	Top Pad	4
	60961-720	One Wheel End, Includes Key Nos. 2a, 3-7, 45		23	60556-XXX	Bottom Cap, <i>See Selection Guide on Page 3</i>	4
	60632-020	Axle Set, Includes Key Nos. 2a, 3-7, 45		24	65139-003	Axle Spacer	4
	60632-043	Severe-duty, Axle Set, Includes Key Nos. 2b, 3-8, 45			91430-041	<b>U-bolt Service Kit, One Wheel End,</b> Includes Key No. 25 & Kit No. 48718-501	
		<b>QUIK-ALIGN Collar Service Kit,</b> Includes Key Nos. 3-7		25		*3/4"-16 UNF x 10 7/8" U-bolt	8
	60632-019	One Wheel End			48718-501	<b>U-bolt Fastener Kit, One Wheel End</b> Includes Key Nos. 26-27	
	60632-021	Axle Set		26		*3/4" Flat Washer	16
	60632-018	<b>QUIK-ALIGN Fastener Service Kit,</b> <b>One Wheel End,</b> Includes Key Nos. 5-7		27		*3/4"-16 UNF U-bolt Locknut	16
2 a		*Heavy-duty Pivot Bushing	4	28	67274-XXX	Longitudinal Torque Rod, <i>Replaces 64981-XXX</i> <i>See Selection Guide on Page 3</i>	4
b		*Severe-duty Pivot Bushing	4			<b>Longitudinal Rod Fastener Service Kits, One Side</b> To Top Pad, Includes Key Nos. 29-31	
3		*QUIK-ALIGN Concentric Collar	4		58821-012	To Frame Hanger, Includes Key Nos. 32-34	
4		*QUIK-ALIGN Eccentric Collar	4	29		*7/8"-14 UNF-2A x 5 1/2" Hex Bolt	4
5		*1"-14 UNF x 7 1/2" Hendrickson Coated Hex Bolt	4	30		*7/8" Flat Washer	8
6		*1" Hendrickson Coated Flat Washer	8	31		*7/8"-14 UNF-2B Locknut	4
7		*1"-14 UNF Hendrickson Coated Locknut	4	32		*5/8"-11 UNC x 8" Hex Bolt	8
8		*Confinement Washer	4			**M16 x 2-6G Bolt	
9		***Support Beam Assembly, <i>60831-</i> , <i>see Replacement Guide below</i>		33		*5/8" Flat Washer	16
10		***Cross Tube, <i>60912-005</i> , <i>see Replacement Guide below</i>				**M16 Washer	
	34013-107	<b>D-pin Service Kit, Single,</b> Includes Key Nos. 11-14		34		*5/8"-11 UNC Locknut	8
11		*D-pin Bushing	4			**M16 x 2-6H Locknut	
	56659-009	<b>D-pin Fastener Service Kit, Axle Set,</b> Includes Key Nos. 12-14		35		Torque Rod Shim	As Req.
12		*3/4"-16 UNF x 5" Bolt	8		70240-001	3.0 mm	
13		*3/4" Flat Washer	16		70240-002	1.5 mm	
14		*3/4"-16 UNF Locknut	8	36	60657-007	Shock Absorber	4
	60961-062	<b>Air Spring Assembly Service Kit,</b> <b>One Wheel End,</b> Includes Key Nos. 15-18			50754-030	<b>Single Shock Absorber Fastener Service Kit,</b> Includes Key Nos. 37-42	
15	60271-002	Air Spring Assembly	4	37		*3/4"-10 UNC x 4 1/4" Upper Shock Bolt	4
16	60911-000	Lower Air Spring Mounting Bracket	4	38		*3/4" Flat Washer	4
	49177-006	<b>Lower Air Spring Fastener Service Kit, Single,</b> Includes Key Nos. 17-18		39		*3/4"-10 UNC Locknut	4
17		*1/2" Flat Washer	8	40		*5/8"-11 UNC X 6" Lower Shock Bolt	4
18		*1/2"-13 UNC Locknut	8	41		*5/8" Flat Washer	8
	46772-001	<b>End Cap and Fastener Kit, Axle Set,</b> Includes Key Nos. 19-21		42		*5/8"-11 UNC-2B Locknut	4
19		*End Cap	4	43	67463-006	Upper Shock Frame Bracket, <i>Replaces 65000-006</i>	4
20		*7/8"-9 UNC x 3 1/2" Hex Bolt	4	44		**Transverse Torque Rod Assembly	2
				45	70867-001	P-80 Lubricant - 10 ml (Not Shown)	Per Bushing 1
				Not Shown		**Height Control Valve and Linkage Assembly	1

**NOTES:** Quantities shown are for a tandem configuration.

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

\*\* Item required, component supplied by Vehicle Manufacturer. Hendrickson is not responsible for components not supplied by Hendrickson, for assistance with maintenance and rebuild instructions on these components see vehicle manufacturer.

\*\*\* No longer available for service, see replacement guide below. For more information, refer to Hendrickson Technical Bulletin Literature No. SEU-0229 or contact Hendrickson Tech Services.

\*\*\*\* Alternate configuration of the QUIK-ALIGN fasteners. The locknuts located inboard will allow additional clearance for wider tires or tires with chains. Tightening is still required ONLY on the locknut.

## ■ Support Beam and Cross Tube Replacement Guide

Drive Axle	DISCONTINUED		Cross Tube Part No.	NEW	COMMENTS
	Support Beam Assembly Part No.	Right Hand		U-Beam Assembly Replacement Kit No.	
Forward	60831-003	60831-004	60912-005	<b>60961-237</b>	Each U-Beam assembly replacement kit is intended to service the associated suspension parts on one axle. It includes two new support beam assemblies, one cross tube, two air spring assemblies, air spring fasteners, QUIK-ALIGN fasteners and D-pin fasteners.
Rear	60831-001	60831-002		<b>60961-238</b>	

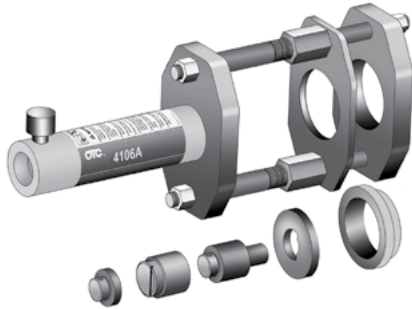


■ Special Tools

D-PIN / QUIK-ALIGN PIVOT BUSHING SERVICE TOOLS

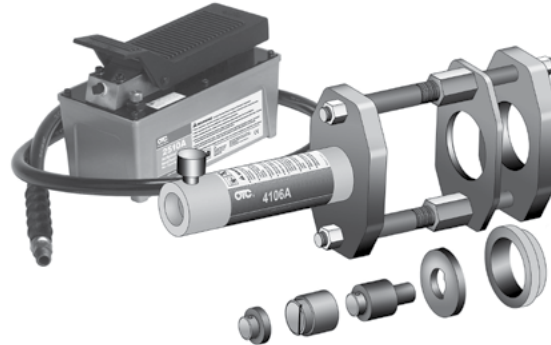
Hendrickson Part No. 66086-202

OTC Part No. 4246 Visit [otctools.com](http://otctools.com)



Hendrickson Part No. 66086-204

OTC Part No. 4247 Visit [otctools.com](http://otctools.com)



QUIK-ALIGN SOCKET TOOL

Hendrickson Part No. 66086-200

OTC Part No. 1767

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



QUIK-ALIGN PIVOT BUSHING SERVICE TOOL

Hendrickson Part No. 66086-203L



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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**TRUCK COMMERCIAL VEHICLE SYSTEMS**  
 800 South Frontage Road  
 Woodridge, IL 60517-4904 USA  
 1.866.755.5968 (Toll-free U.S. and Canada)  
 1.630.910.2800 (Outside U.S. and Canada)  
 Fax 1.630.910.2899

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