

Spicer® Steer Axles



SPICER®
Drivetrain Products

Illustrated Parts List

AXIP0090

November 2005

I Family

D Family

Table of Contents

Introduction	2	I Family Tie Rod Arms	19
About this Parts Book	2	I-160, through I-200 Tie Rod Arms	19
Abbreviations	2	I-100W, I-120W and I-140W Tie Rod Arms	20
Genuine Spicer Parts	2	I-160W, I-180W, I-200W and I-220W Tie Rod Arms	20
Ordering Spicer Parts	2	I Family Knuckles	21
Spicer Parts Kits	2	I & D Family King Pin Kits	23
Identification	3	I Family Steer Arms	24
Axle Assembly Tag	3	I Family Stop Bolts	25
Model Identification Numbering System	3	I Family Tie Rod Assemblies / Kits	26
Component Part Number Location	4	I-80 and I-100 Tie Rod Assemblies / Kits	26
Model Coverage	5	I-120 through I-140 Tie Rod Assemblies / Kits	26
I Family Steer Axle Components	6	I-160 through I-200 Tie Rod Assemblies / Kits	27
I-60 and I-80 Parts Explode	6	I-100W through I-220W Tie Rod Assemblies / Kits	27
I-60 and I-80 Parts List	7	D Family Steer Axle Components	28
I-100, I-120, I-132 and I-140 Parts Explode	8	D-600N and D-700N Parts Explode	28
I-100, I-120, I-132 and I-140 Parts List	9	D-600N and D-700N Parts List	29
I-100W, I-120W and I-140W Parts Explode	10	D-600F, D-800F and D-850F Parts Explode	30
I-100W, I-120W and I-140W Parts List	11	D-600F, D-800F and D-850F Parts List	31
I-160, I-180, and I-200 Parts Explode	12	D-2000F and D-2200F Parts Explode	32
I-160, I-180 and I-200 Parts List	13	D-2000F and D-2200F Parts List	33
I-160W, I-180W, I-200W and I-220W Parts List	14	D Family I-Beams	34
I-160W, I-180W, I-200W and I-220W Parts List	15	D Family Tie Rod Arms	35
I Family I-Beams	16	D Family Knuckles	36
I-60 and I-80 I-Beams	16	D Family Stop Bolts	36
I-100, I-120, I-132 and I-140 I-Beams	16	D Family Tie Rod Assemblies / Kits	37
I-160, I-180 and I-200 I-Beams	17	D Family Steer Arms	38
I-100W, I-120W and I-140W I-Beams	18		
I-160W I-Beams	18		
I-180W, I-200W and I-220W I-Beams	18		

Introduction

About this Parts Book

This Spicer parts book is presented as an aid in the identification and procurement of replacement parts for Spicer steer axles. The information included covers the most commonly used parts.

Parts have been grouped by category such as beams and centers, knuckles and cross rods; however, Spicer recommends using kits. Whether you are using kits or individual parts, the model serviced is prominently identified in each group.

This book covers I and D axles separately; determine your axle type and work from the appropriate table of contents.

Abbreviations

A/R-As Required: Parts that vary in quantity with each axle.
Example: shims.

NSS-Not Serviced Separately: Items which can only be purchased in sets, kit form, or service assemblies.

Genuine Spicer Parts

When you buy genuine Spicer replacement parts, you receive the same high quality and exacting tolerances you find in the original steer axle components.

Only genuine Spicer parts have the latest Spicer engineering improvements and assure equal or better performance than the original parts.

And Spicer backs you up with a responsive and capable service organization strategically located to provide you with emergency parts and service when you need them.

Insist on Spicer quality. Use genuine Spicer replacement parts.

Ordering Spicer Parts

Place all your parts orders through your truck dealer or manufacturer (OEM). Do not order parts directly from Spicer.

Spicer Parts Kits

Spicer Parts Kits give you an economical, convenient way to stock Spicer replacement parts. They contain all the parts you need to do a complete, professional job of overhauling or repairing your Spicer steer axle. And you have only one part number in one easily stored package to order, stock, identify, and satisfy your customer's needs.

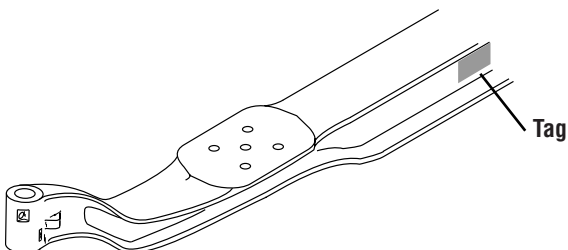
Identification

The Spicer front non-drive steering axles are identified with a tag located between the spring pads, on the front side of the center beam section.

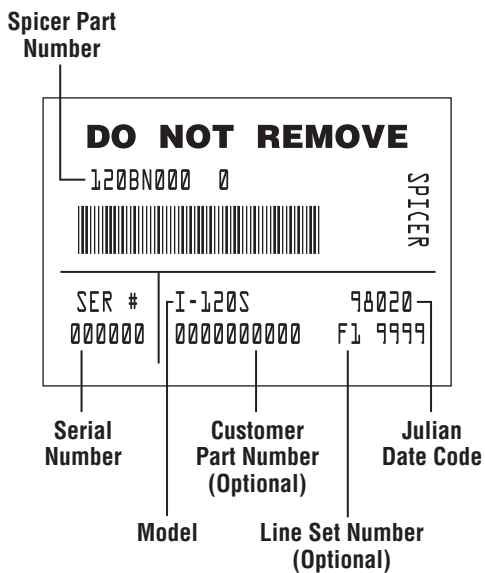
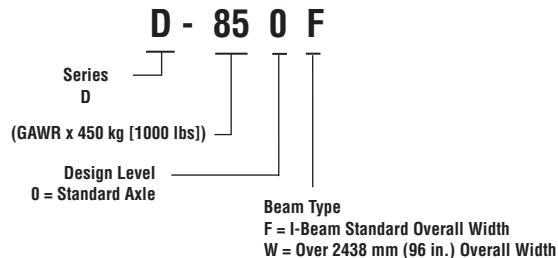
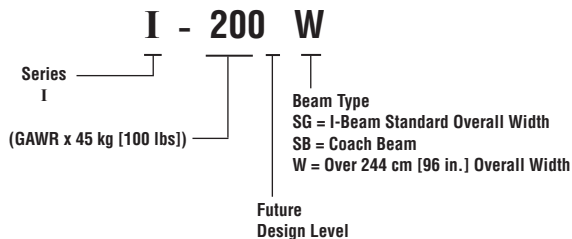
The axle tag contains the serial number, the model number, and the assembly number.

The Spicer model numbering system provides pertinent information about the axle for easy identification.

Axle Assembly Tag



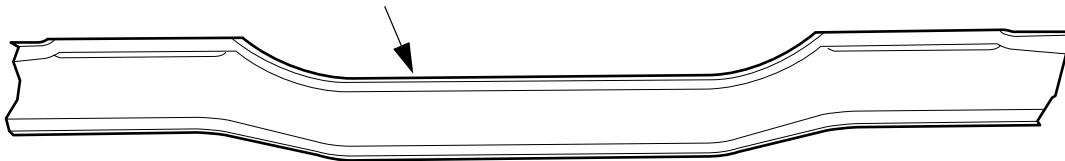
Model Identification Numbering System



Component Part Number Location

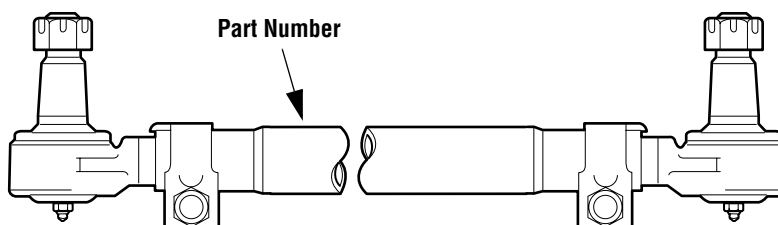
I-Beam

I-Beam forgings have the finished P/N forged in .38" high letters. The dash portion and the last digit are stamped in .38" high letters on the front side of the axle.



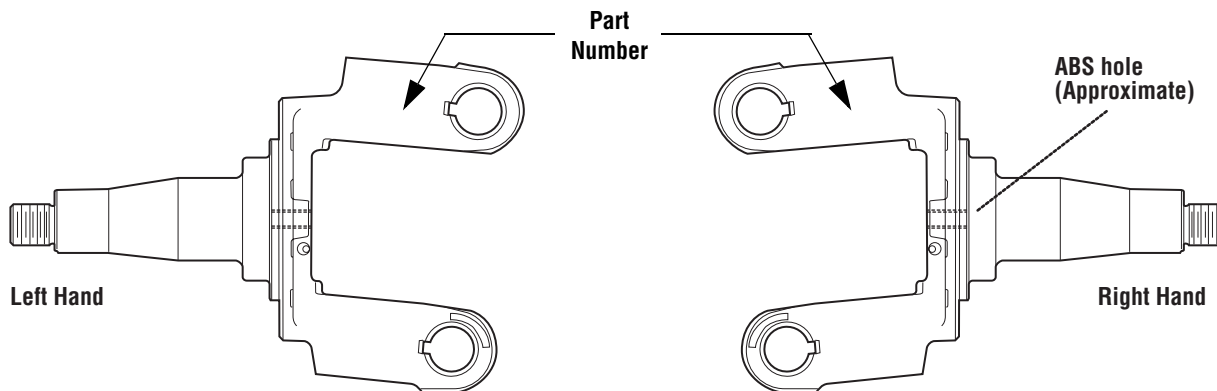
Tie Rod

Tie Rod assembly number is stamped in .125" high letters close to the end with LH threads. This also serves as an identifier to the LH side of the tube.



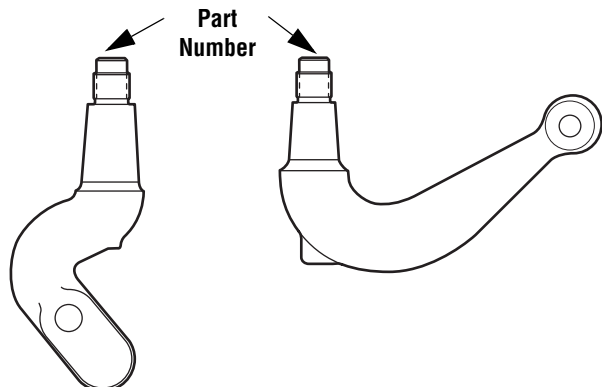
Knuckle Assembly

Knuckle assemblies have the part number stamped in two locations.



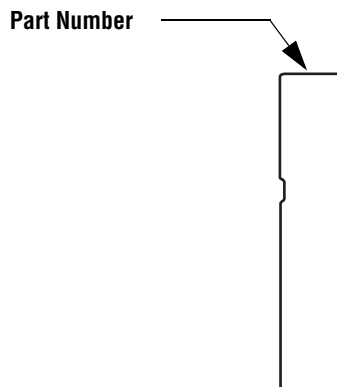
Steering Arm

Both the steering arms and tie rod arms will have the Spicer part number and induction hardening code stamped in this area.



King Pin

The king pin part number is stamped in this area. Included is the manufacturing I.D. and julian date code or lot number.



Model Coverage

I Family

Spicer Steer Axle Model No.	Nominal Ratings
I60	6,000 lbs.
I80	8,000 lbs.
I00S, W	10,000 lbs.
I120S, SG, SGL, W	12,000 lbs.
I132SG	13,200 lbs.
I140S, W	14,000 lbs.
I160S, W	16,000 lbs.
I180S, W	18,000 lbs.
I200S, W	20,000 lbs.
I220W	22,800 lbs.

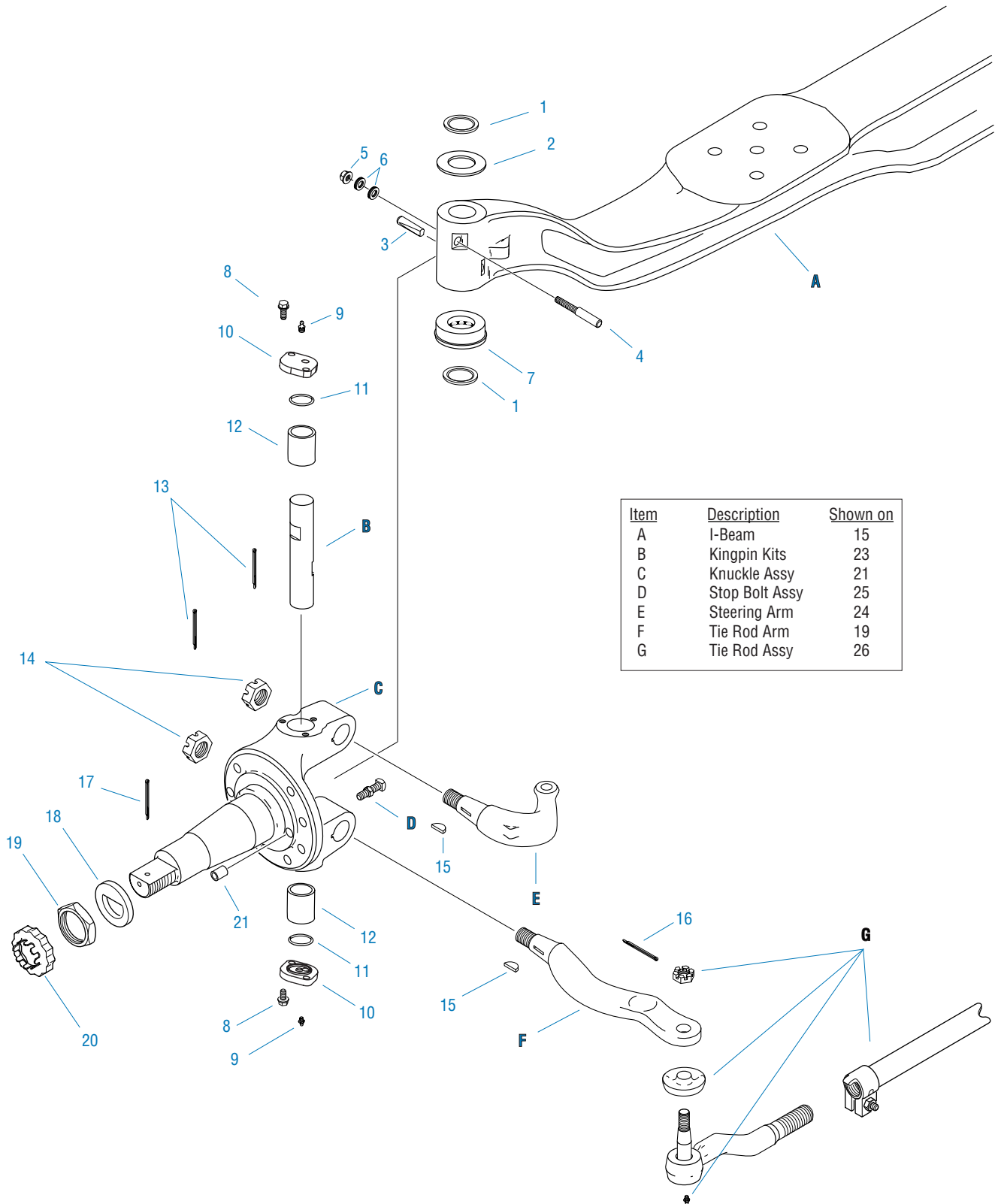
D Family

Model Number	Axle Capacity
D-600N	6,000 lbs. [2,722 kg]{
D-700N	7,000 lbs. [3175 kg]
D-700F	
D800F	8000 lbs. [3,629 kg]
D800W	
D850F	8500 lbs. [3,856 kg]
D850W	
D2000F	20,000 lbs. [9,072 kg]
D2000F (5" Drop)	
D2200F	22,800 lbs. [10,342 kg]

Note: These nominal ratings are general guidelines. Actual load rating varies with application and duty cycle. Applications require Spicer engineering approval.

I Family Steer Axle Components

I-60 and I-80 Parts Explode



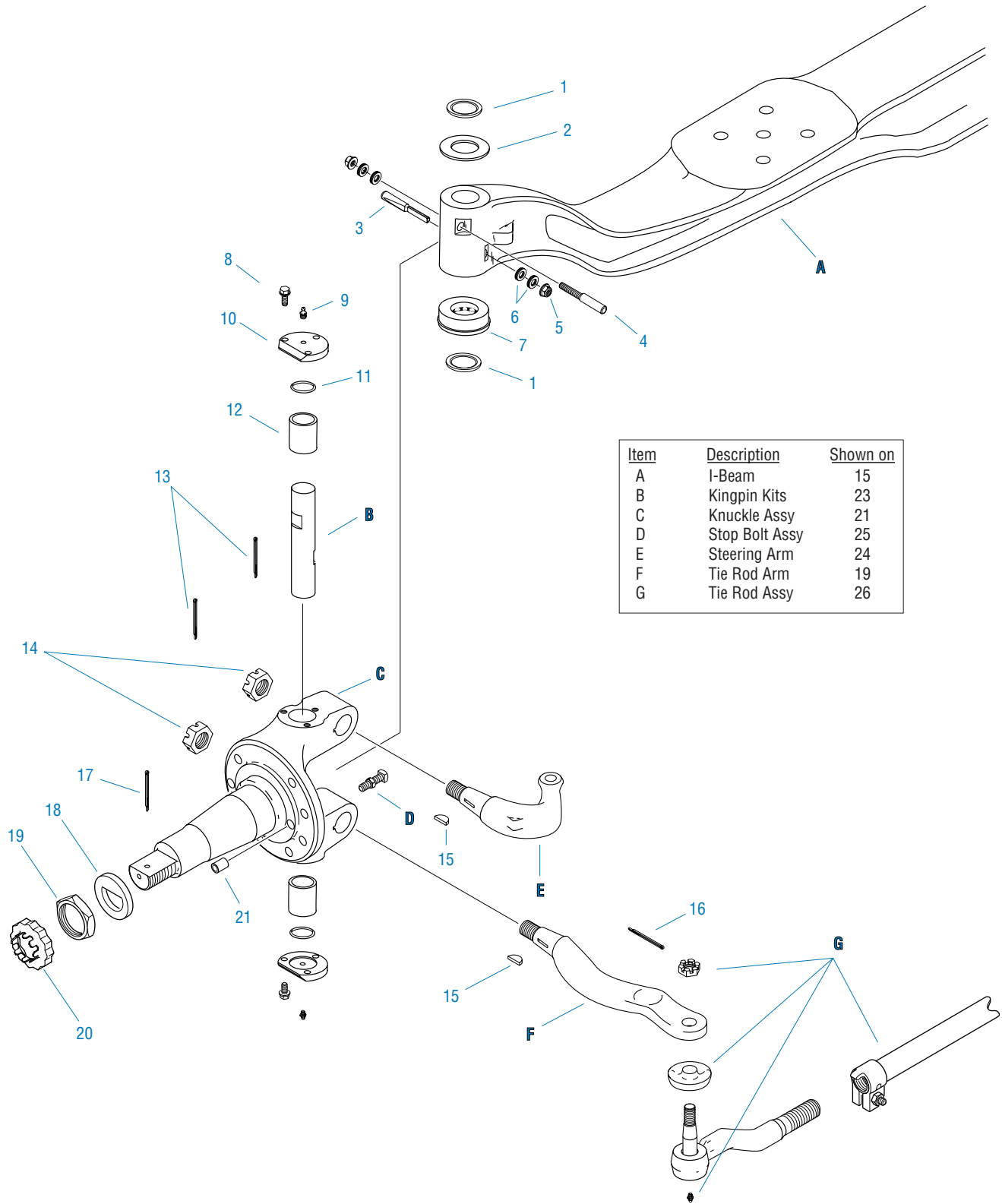
Item	Description	Shown on
A	I-Beam	15
B	Kingpin Kits	23
C	Knuckle Assy	21
D	Stop Bolt Assy	25
E	Steering Arm	24
F	Tie Rod Arm	19
G	Tie Rod Assy	26

I-60 and I-80 Parts List

Item	Part Name	Qty.	I-60, I-80	Remarks
1*	Seal, King Pin Oil			
	Upper	2	101HH101	
	Lower	2	101HH101	
2*	Shim			
	.005" Thick	A/R	HS111	
	.010" Thick	A/R	HS112	
3*	Draw Key, Outer	2		
	1.505" Taper Length	A/R	HP119-3	
	1.630" Taper Length	A/R	HP119-2	
	1.755" Taper Length	A/R	HP119-5	
	1.880" Taper Length	A/R	HP119-1	
	1.880" Taper Length	A/R	HP119-4	
4*	Draw Key, Inner	2	071HP101	
5*	Nut, Draw Key	2	220HN103	
6*	Washer, Belleville	4	1460HN100	Replaces 220HN102
7*	Bearing Assembly, Thrust	2	080HC100	
8	Bolt, King Pin Cap	8	HM241	Replaces 101HM101
9*	Grease Fitting	4	819790	Replaces HN144
10	Cap, King Pin	4	085SC101	Replaces 071SC102
11*	O-Ring	4	HH103	
12*	Bushing, King Pin	4	101HD101	
13	Pin, Cotter	3	220HP101	Length: 2.25
14	Nut, Slotted	2	HN146	
15	Key, Woodruff	3	HP103	
16	Pin, Cotter	2	HP102	Length: 1.75
17	Pin, Cotter	2	HP118	Length: 1.50
18	Washer, Bearing Retainer	2	HN167	
19	Nut, Spindle	2	HN147	
20	Lock, Spindle Nut	2	HN168	
21	Sleeve, ABS Mounting (ABS Only)	2	120RT100	

*Item included in Kingpin kit. Refer to P. 23 for kit information.

I-100, I-120, I-132 and I-140 Parts Explode



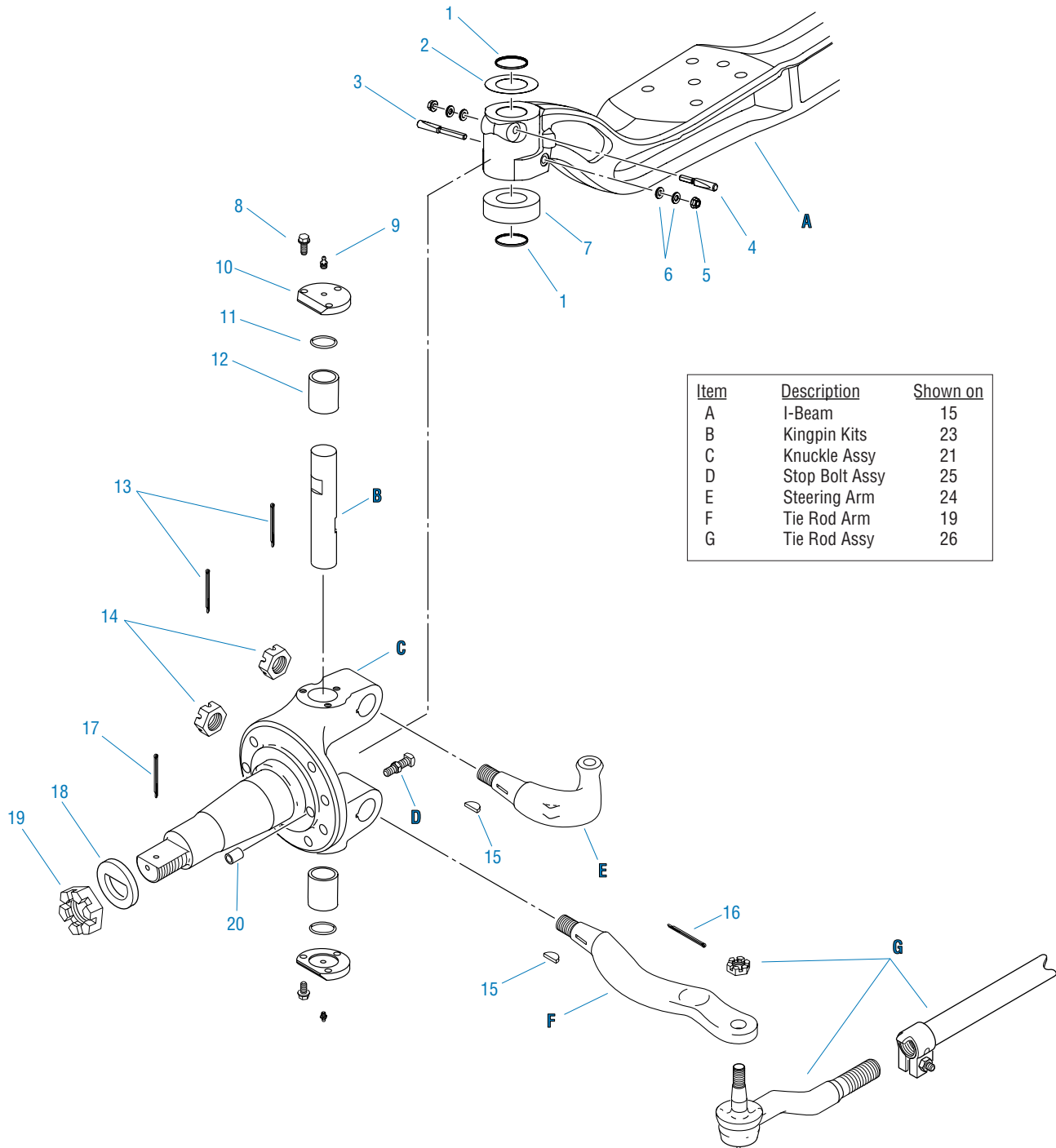
Item	Description	Shown on
A	I-Beam	15
B	Kingpin Kits	23
C	Knuckle Assy	21
D	Stop Bolt Assy	25
E	Steering Arm	24
F	Tie Rod Arm	19
G	Tie Rod Assy	26

I-100, I-120, I-132 and I-140 Parts List

Item	Part Name		Qty.	I-100	I-120	I-132 - I-140	Remarks
1*	Seal, King Pin Oil	Upper	2	120HH100	120HH100	160HH100	
		Lower	2	120HH100	120HH100	160HH100	
2*	Shim	.005" Thick	A/R	160HS100-1	160HS100-1	160HS100-1	
		.010" Thick	A/R	160HS100-2	160HS100-2	160HS100-2	
		.020" Thick	A/R	160HS100-3	160HS100-3	160HS100-3	
3*	Draw Key, Outer		2	071HP101	071HP101	071HP101	
4*	Draw Key, Inner		2	160HP102-2	160HP102-2	160HP102-3	
5*	Nut, Draw Key		4	220HN103	220HN103	220HN103	
6*	Washer, Belleville		8	1460HN100	1460HN100	1460HN100	Replaces 220HN102
7*	Bearing Assembly, Thrust		2	120HC100	120HC100	220HC100	
8	Bolt, King Pin Cap		12	HM241	HM241	HM241	
9*	Grease Fitting		4	819790	819790	819790	Replaces HN145
10	Cap, King Pin		4	120SC105	120SC105	120SC105	Replaces 120SC104
11*	O-Ring		4	220HH102	220HH102	220HH102	
12*	Bushing, King Pin		4	120HD102	120HD102	160HD102	
13	Pin, Cotter		3	220HP101	220HP101	220HP101	Length: 2.25
14	Nut, Slotted (Grade 5)		3	HN146	HN146	HN146	
	Nut, Slotted (Grade 8)		3	161HN101	161HN101	161HN101	
15	Key, Woodruff		3	HP103	HP103	HP103	
16	Pin, Cotter		2	HP102	HP102	HP102	Length: 1.75
17	Pin, Cotter		2	HP115	HP115	HP115	Length: 2.25
18	Washer, Bearing Retainer		2	140HN103	140HN103	140HN103	
19	Nut, Spindle		2	140HN104	140HN104	140HN104	
20	Lock, Spindle Nut		2	140HN105	140HN105	140HN105	
21	Sleeve, ABS Mounting (ABS Only)		2	120RT100	120RT100	120RT100	

*Item included in Kingpin kit. Refer to P. 23 for kit information.

I-100W, I-120W and I-140W Parts Explode

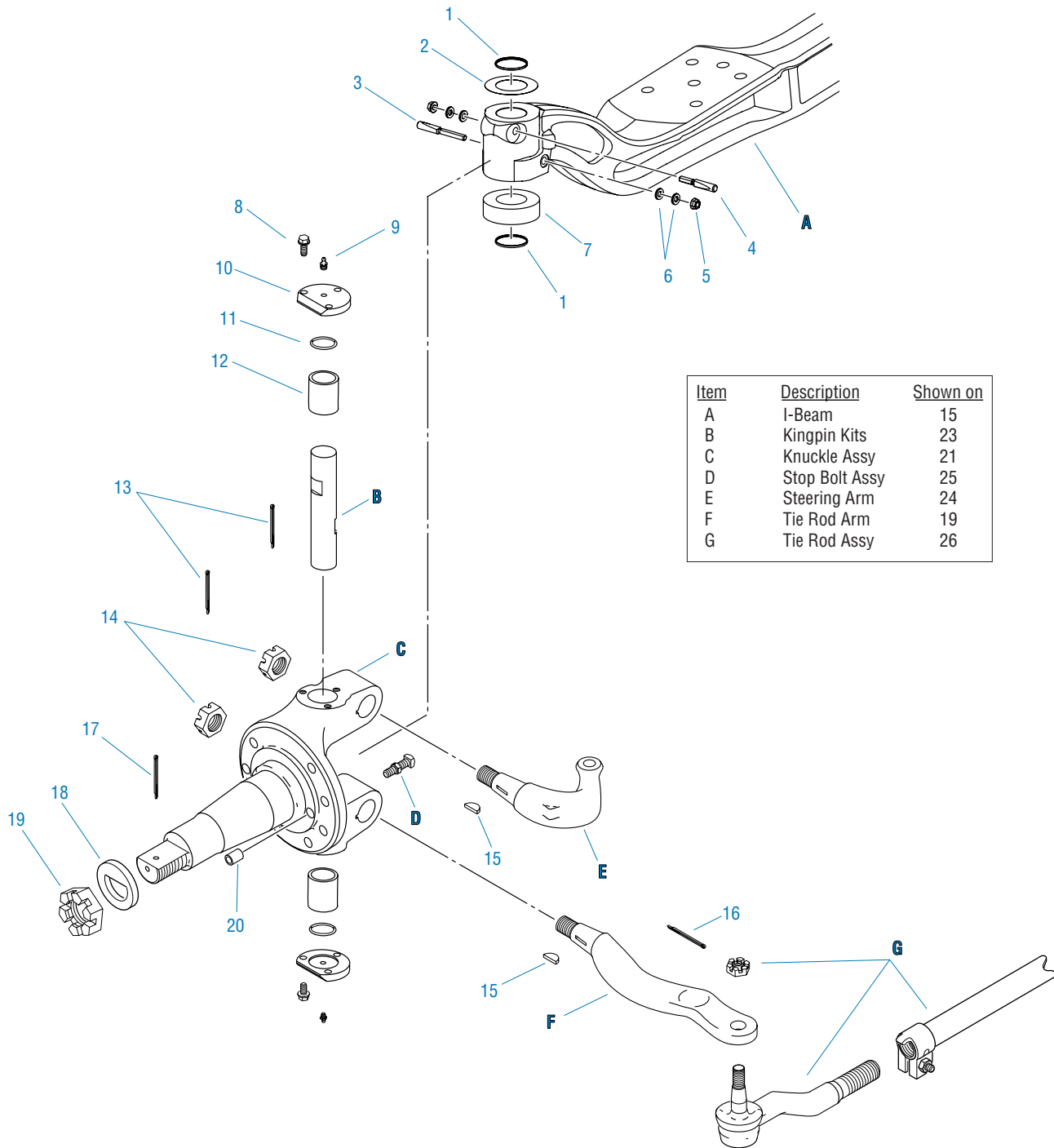


I-100W, I-120W and I-140W Parts List

Item	Part Name		Qty.	I-100W - I-140W	Remarks
1*	Seal, King Pin Oil	Upper	2	160HH100	
		Lower	2	160HH100	
2*	Shim	.005" Thick	A/R	160HS100-1	
		.010" Thick	A/R	160HS100-2	
		.020" Thick	A/R	160HS100-3	
3*	Draw Key, Outer		2	071HP101	
4*	Draw Key, Inner		2	160HP102-3	
5*	Nut, Draw Key		4	220HN103	
6*	Washer, Belleville		8	1460HN100	Replaces 220HN102
7*	Bearing Assembly, Thrust		2	220HC100	
8	Bolt, King Pin Cap		12	HM241	
9*	Grease Fitting		2	819790	Replaces HN145
10	Cap, King Pin		4	120SC105	Replaces 120SC104
11*	O-Ring		4	220HH102	
12*	Bushing, King Pin		4	160HD102	
13	Pin, Cotter		4	220HP101	Length: 2.25
14	Nut, Slotted (Grade 8)		4	161HN101	
15	Key, Woodruff		3	HP103	
16	Pin, Cotter		2	HP102	Length: 1.75
17	Pin, Cotter		2	HP115	Length: 2.25
18	Washer, Bearing Retainer		2	140HN103	
19	Nut, Spindle		2	140HN104	
20	Lock, Spindle Nut		2	140HN105	
21	Sleeve, ABS Mounting (ABS Only)		2	120RT100	

*Item included in Kingpin kit. Refer to P. 23 for kit information.

I-160, I-180, and I-200 Parts Explode

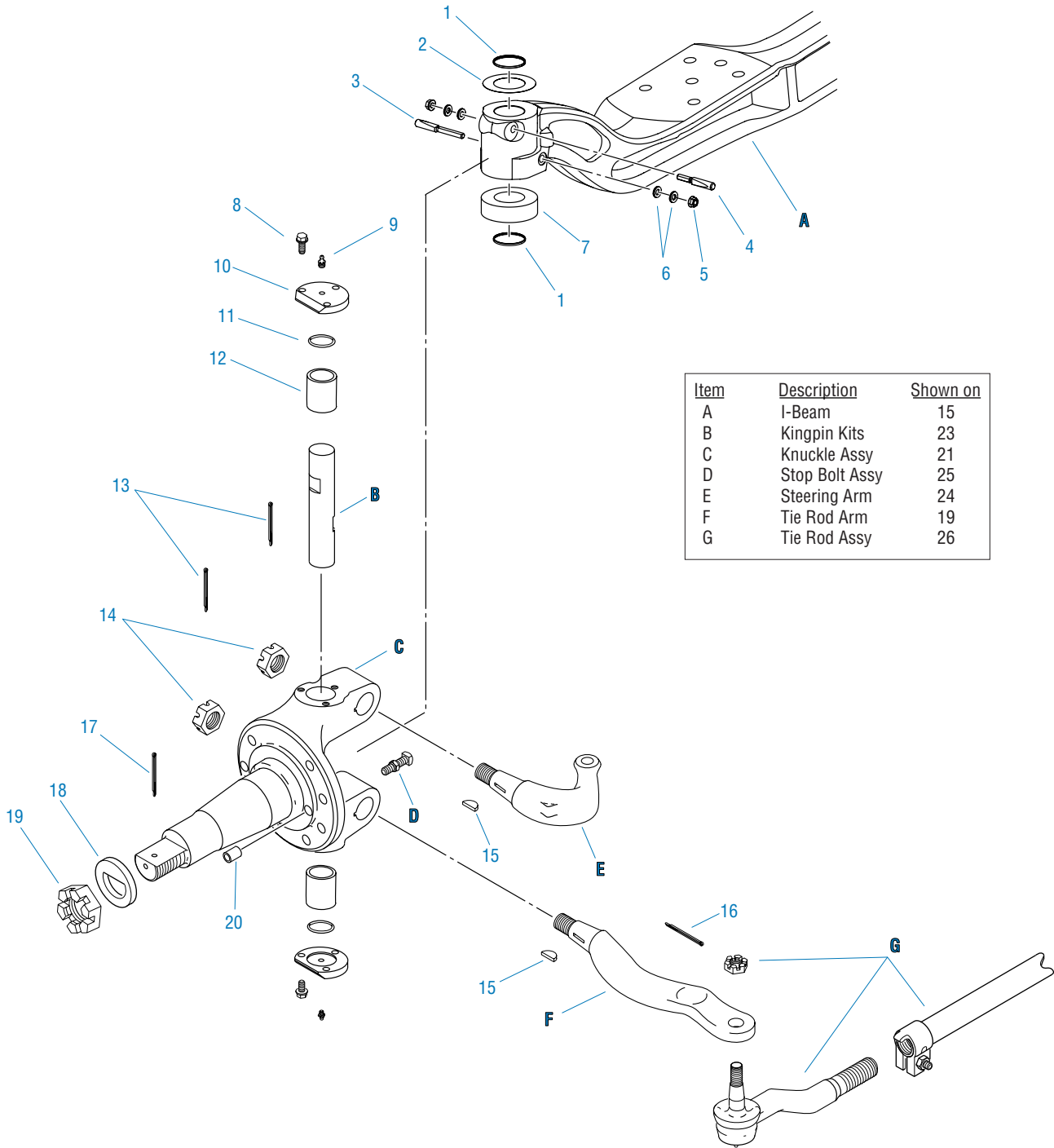


I-160, I-180 and I-200 Parts List

Item	Part Name		Qty.	I-160	I-180	I-200	Remarks
1*	Seal, King Pin Oil	Upper	2	160HH100	160HH100	160HH100	
		Lower	2	160HH100	160HH100	160HH100	
2*	Shim	.005" Thick	A/R	160HS100-1	160HS100-1	160HS100-1	
		.010" Thick	A/R	160HS100-2	160HS100-2	160HS100-2	
		.020" Thick	A/R	160HS100-3	160HS100-3	160HS100-3	
3*	Draw Key, Outer	3.38" Length	2	220HP100-1	220HP100-1	220HP100-1	
		3.08" Length	2	071HP101	071HP101	071HP101	
4*	Draw Key, Inner	4.62" Length	2	220HP100-2	220HP100-2	220HP100-2	
		3.56" Length	2	160HP102-2	160HP102-2	160HP102-2	
5*	Nut, Draw Key		4	220HN103	220HN103	220HN103	
6*	Washer, Belleville		8	1460HN100	1460HN100	1460HN100	Replaces 220HN102
7*	Bearing Assembly, Thrust		2	220HC100	220HC100	220HC100	
8	Bolt, King Pin Cap		12	HM241	HM241	HM241	
9*	Grease Fitting		4	819790	819790	819790	Replaces HN145
10	Cap, King Pin		4	220SC111	220SC111	220SC111	Replaces 220SC102
11*	O-Ring		4	220HH103	220HH103	220HH103	
12*	Bushing, King Pin		4	160HD102	160HD102	160HD102	
13	Pin, Cotter		3	220HP101	220HP101	220HP101	Length: 2.25
14	Nut, Slotted		2	161HN101	161HN101	161HN101	
15	Key, Woodruff		3	HP103	HP103	HP103	
16	Pin, Cotter		2	HP102	HP102	HP102	Length: 1.75
17	Pin, Cotter		2	HP116	HP116	HP116	Length: 3.00
18	Washer, Bearing Retainer		2	220HN105	220HN105	220HN105	
19	Nut, Slotted		2	220HN104	220HN104	220HN104	
20	Sleeve, ABS Mounting (ABS Only)		2	120RT100	120RT100	120RT100	

*Item included in Kingpin kit. Refer to P. 23 for kit information.

I-160W, I-180W, I-200W and I-220W Parts Explode



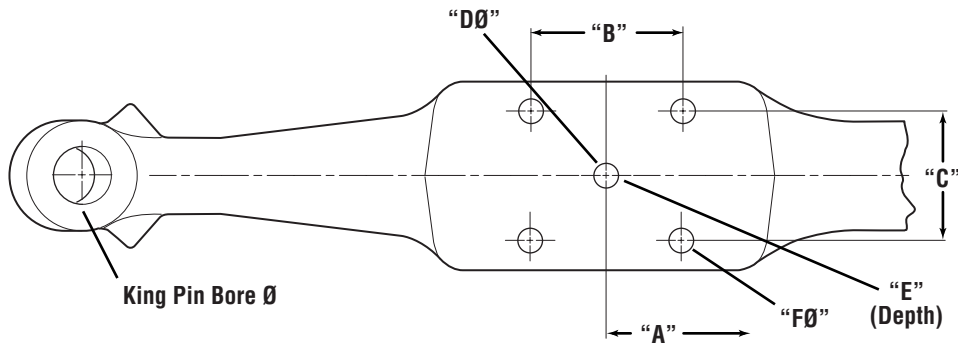
Item	Description	Shown on
A	I-Beam	15
B	Kingpin Kits	23
C	Knuckle Assy	21
D	Stop Bolt Assy	25
E	Steering Arm	24
F	Tie Rod Arm	19
G	Tie Rod Assy	26

I-160W, I-180W, I-200W and I-220W Parts List

Item	Part Name		Qty.	I-160W	I-180W - I-220W	Remarks
1*	Seal, King Pin Oil	Upper	2	160HH100	160HH100	
		Lower	2	160HH100	160HH100	
2*	Shim	.005" Thick	A/R	160HS100-1	160HS100-1	
		.010" Thick	A/R	160HS100-2	160HS100-2	
		.020" Thick	A/R	160HS100-3	160HS100-3	
3*	Draw Key, Outer	3.38" Length	2		220HP100-1	
		3.13" Length	2	220HP100-3		
4*	Draw Key, Inner	4.62" Length	2	220HP100-2	220HP100-2	
5*	Nut, Draw Key		4	220HN103	220HN103	
6*	Washer, Belleville		8	1460HN100	1460HN100	Replaces 220HN102
7*	Bearing Assembly, Thrust		2	220HC100	220HC100	
8	Bolt, King Pin Cap		12	HM241	HM241	
9*	Grease Fitting (90°)		2	819790	819790	Replaces HN145
10	Cap, King Pin		4	220SC111	220SC111	Replaces 220SC102
11*	O-Ring		4	220HH103	220HH103	
12*	Bushing, King Pin		4	160HD102	160HD102	
13	Pin, Cotter		4	220HP101	220HP101	
14	Nut, Slotted		4	161HN101	161HN101	
15	Key, Woodruff		4	HP103	HP103	
16	Pin, Cotter		2	HP102	HP102	
17	Pin, Cotter			HP116	HP116	
18	Washer, Bearing Retainer		2	220HN105	220HN105	
19	Nut, Slotted		2	220HN104	220HN104	
20	Sleeve, ABS Mounting (ABS Only)		2	120RT100	120RT100	

*Item included in Kingpin kit. Refer to P. 23 for kit information.

I Family I-Beams



I-60 and I-80 I-Beams

King Pin Bore Ø	A	B	C	D Ø	E	F Ø	Spicer Part Number	Remarks
1.360	31.00	3.656	4.25	.781	.625	.656	080TB114-2	
	33.00	3.689	3.70	.812	.625	.689	080TB106-4	
	35.00	3.656	4.25	.656	.625	.656	080TB106-1	
							080TB114-1	
	3.689	3.70	.812	.625	.689	080TB106-5		

I-100, I-120, I-132 and I-140 I-Beams

King Pin Bore Ø	A	B	C	D Ø	E	F Ø	Spicer Part Number	Remarks		
1.360	31.00	3.656	4.25	.781	.625	.656	080TB114-2			
1.862	32.50	4.812	4.25	.812	.630	.812	140TB115-1			
		3.780	4.25	.812	.625	.781	100TB102-1			
	4.812	4.25	.812	.625	.781	140TB106-1				
						140TB106-3				
						100TB102-3				
35.00	4.812	4.25	.812	.625	.781	100TB102-2				
41.06	3.780	4.25	.812	.625	.781	140TB106-2				
1.923	32.00	4.812	4.25	.812	.620	.781	100TB101-9	Replaces 100TB101-3		
		4.812	4.25	.812	.630	.812	140TB120-9	Replaces 140TB104-12		
	33.00	4.812	4.25	.812	.690	.812	140TB120-7	Replaces 140TB104-10		
							140TB121-14	Replaces 140TB108-17		
	34.00	3.780	4.25	.812	.625	.781	140TB121-12	Replaces 140TB108-15		
		4.812	4.25	.812	.620	.781	100TB101-10	Replaces 100TB101-4		
	35.00	3.780	4.25	.812	.620	.781	.625	.781	140TB121-13	Replaces 140TB108-16
							100TB101-8	Replaces 100TB101-2		
							140TB102-6	Replaces 140TB102-1		
100TB101-7							Replaces 100TB101-1			

I-100, I-120, I-132 and I-140 I-Beams (continued)

King Pin Bore Ø	A	B	C	D Ø	E	F Ø	Spicer Part Number	Remarks
2.048	31.00	3.812	4.25	.812	.625	.812	140TB121-10	Replaces 140TB108-13
	32.00	3.780	4.25	.812	.625	.781	140TB121-3	Replaces 140TB108-3
3.812		4.25	.812	.750	.781	140TB121-9	Replaces 140TB108-12	
						140TB120-6	Replaces 140TB104-9	
4.940		4.25	.812	.620	.940	140TB120-3	Replaces 140TB104-4	
5.060		4.38	.812	.620	1.062	140TB120-5	Replaces 140TB104-8	
32.50	4.312	4.25	.812	.690	.812	140TB121-11	Replaces 140TB108-14	
	4.940	4.25	1.062	.937	.937	140TB121-7	Replaces 140TB108-10	
34.00	3.780	4.25	.812	.625	.781	140TB116-1		
						140TB121-5	Replaces 140TB108-7	
	4.812	4.25	.812	.620	.781	140TB102-9	Replaces 140TB102-5	
				.625	.781	140TB121-8	Replaces 140TB108-11	
						140TB116-3		
				.780	.812	140TB120-8	140TB104-11	
	35.00	4.812	4.25	.812	.620	.781	140TB102-7	Replaces 140TB102-2
						140TB120-2	Replaces 140TB104-2	
					140TB104-13			
				.625	.781	140TB121-2	Replaces 140TB108-2	
						140TB108-19		
	4.940	4.25	.812	.620	.940	140TB104-6		
						140TB104-14		
				.625	.937	140TB108-6		
36.06	3.780	4.25	.812	.625	.781	140TB121-6	Replaces 140TB108-8	
41.06	3.780	4.25	.812	.625	.781	140TB116-2		

I-160, I-180 and I-200 I-Beams

King Pin Bore Ø	A	B	C	D Ø	E	F Ø	Spicer Part Number	Remarks
1.862	32.00	3.812	4.25	.812	.750	.781	140TB113-1	
	33.00	4.812	4.25	.812	.690	.812	140TB113-2	
	34.00	4.812	4.25	.812	.780	.812	140TB113-3	
2.048	31.00	3.940	4.25	.812	.625	.940	220TB101-14	Replaces 220TB101-8
	32.00	5.062	4.38	.812	.690	1.062	220TB101-11	Replaces 220TB101-2
			5.00	.812	.690	1.062	220TB101-10	Replaces 220TB101-1
	32.50	4.312	4.25	.812	.690	.812	220TB101-13	Replaces 220TB101-7
	34.00	3.000	4.25	.505	.500	.781	140TB105-2	
		3.790	4.25	.505	.500	.781	140TB105-1	
	35.00	5.062	5.00	.812	.690	1.062	220TB101-12	Replaces 220TB101-6
	40.00	3.000	4.25	.505	.500	.781	161TB101-2	
	40.95	5.118	5.00	.505	.500	.750	161TB108-1	

I-100W, I-120W and I-140W I-Beams

King Pin Bore Ø	A	B	C	D Ø	E	F Ø	Spicer Part Number	Remarks
2.048	33.00	4.810	4.25	.810	.620	.780	140TB119-1	

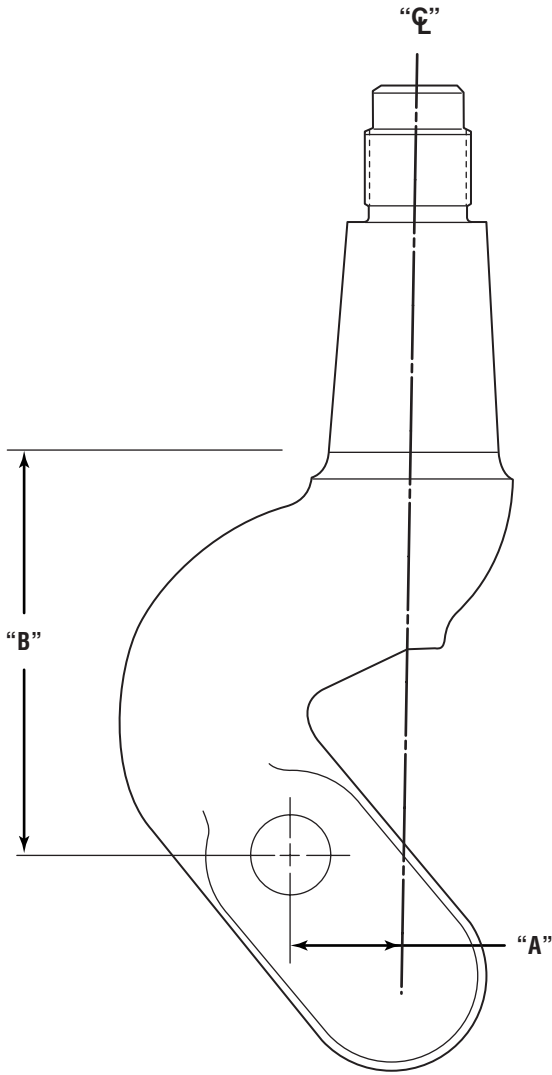
I-160W I-Beams

King Pin Bore Ø	A	B	C	D Ø	E	F Ø	Spicer Part Number	Remarks
2.048	33.00	5.062	5.00	.810	.690	1.060	160TB104-1	

I-180W, I-200W and I-220W I-Beams

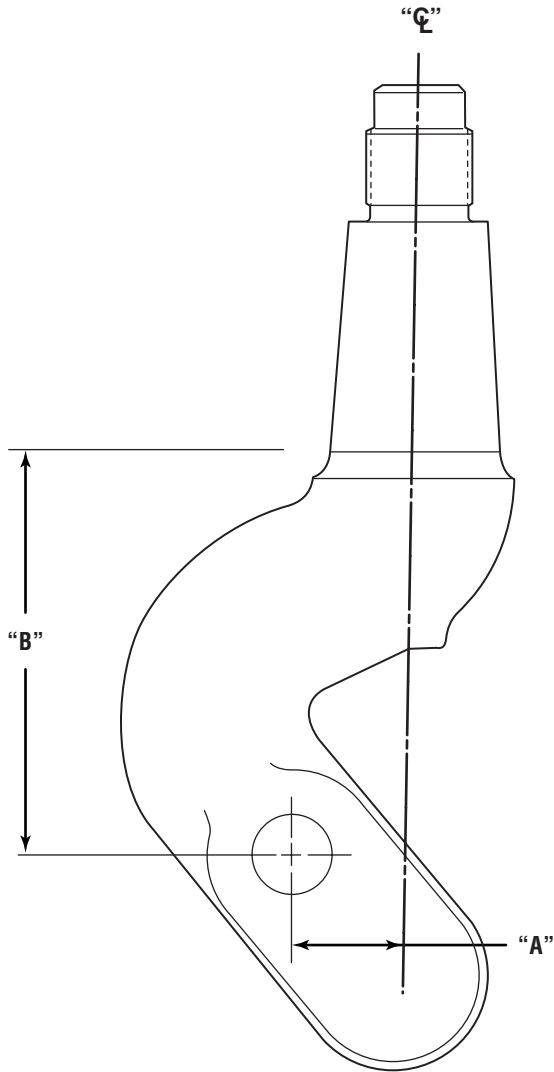
King Pin Bore Ø	A	B	C	D Ø	E	F Ø	Spicer Part Number	Remarks
2.048	33.00	5.062	5.00	.810	.690	1.060	220TB104-1	

I Family Tie Rod Arms
I-60 - I-200 Tie Rod Arms



A	B	Thread	Spicer Part Number
-1.05	6.88	LH	080TR105
		RH	080TR106
-1.18	5.72	LH	080TR107
		RH	080TR108
.17	6.41	LH	120TR103-5
		RH	120TR104-5
.44	4.88	LH	080TR102
		RH	080TR104
		LH	080TR133-1
.77	5.66	RH	080TR134-1
		LH	120TR103-6
1.37	4.91	RH	120TR104-6
		LH	120TR103-4
.09	14.61	RH	120TR104-4
		LH	161TR108
.17	6.41	RH	161TR107
		LH	120TR103-2
.29	5.94	RH	120TR104-2
		LH	120TR136-6
-31	6.69	RH	120TR138-6
		LH	120TR136-5
.47	6.47	RH	120TR138-5
		LH	120TR114-1
.63	5.94	RH	120TR115-1
		LH	120TR136-2
.73	6.22	RH	120TR138-2
		LH	120TR114-4
.77	5.66	RH	120TR115-4
		LH	120TR103-3
.80	8.61	RH	120TR104-3
		LH	161TR103-2
.89	5.19	RH	161TR104-2
		LH	120TR136-7
1.10	5.55	RH	120TR138-7
		LH	220TR112
1.24	5.44	RH	220TR113
		LH	120TR136-1
1.37	4.91	RH	120TR138-1
		LH	120TR103-1
1.42	4.53	RH	120TR104-1
		LH	220TR108
1.61	5.37	RH	220TR109
		LH	120TR142-1
		RH	120TR144-1

Note: Negative value in column "A" indicates that hole lies on opposite side of centerline.



I-100W, I-120W and I-140W Tie Rod Arms

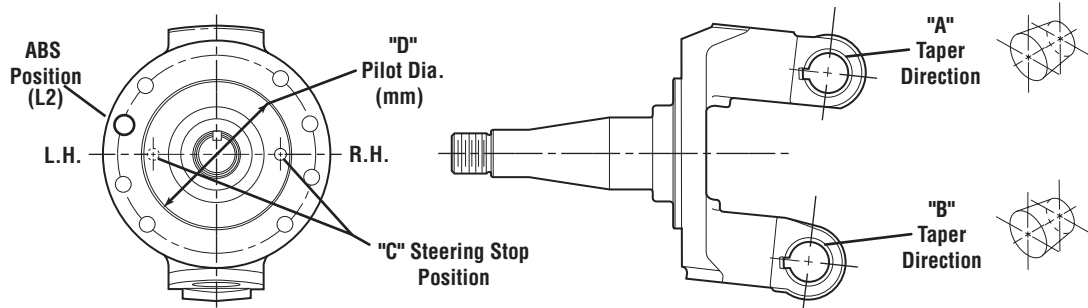
A	B	Thread	Spicer Part Number
1.74	5.47	LH	140TR139-1
		RH	140TR140-1
1.58	5.47	LH	140TR139-2
		RH	140TR140-2
1.40	5.72	LH	140TR139-3
		RH	140TR140-3
1.12	5.97	LH	140TR139-4
		RH	140TR140-4
0.65	6.72	LH	140TR139-5
		RH	140TR140-5
0.47	6.72	LH	140TR139-6
		RH	140TR140-6

I-160W, I-180W, I-200W and I-220W Tie Rod Arms

A	B	Thread	Spicer Part Number
1.78	5.12	LH	220TR135-1
		RH	220TR136-1
1.20	5.72	LH	220TR135-2
		RH	220TR136-2
0.81	5.89	LH	220TR135-3
		RH	220TR136-3
1.59	6.02	LH	220TR135-4
		RH	220TR136-4
1.02	6.41	LH	220TR135-5
		RH	220TR136-5
0.50	6.87	LH	220TR135-6
		RH	220TR136-6

I Family Knuckles

I-60 through I-200 and I-100W through I-220W Knuckles



Note: Viewed from front of spindle

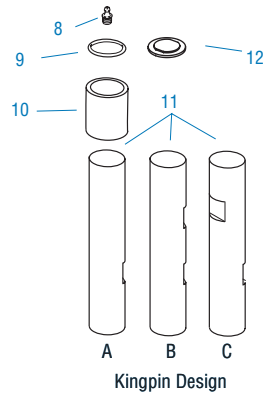
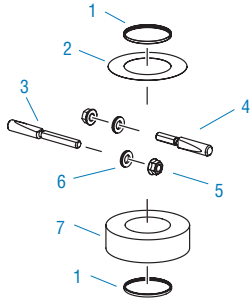
King Pin Bore (Ø)	Service Part No.	Knuckle Part No. (NSS)	Knuckle Side	A	B	C	D	ABS Location	Remarks
1.36	101SK111-X	101SK109	RH	Shown	Shown	RH	5.000	See Remarks	9 hole bolt pattern; ABS position is middle left.
	101SK112-X	101SK110	LH	Opposite	Opposite	LH	5.000	See Remarks	9 hole bolt pattern; ABS position is middle right.
1.48	061SK100-1X	061SK101	LH	Shown	Shown	RH	5.000	NA	
	061SK102-1X	061SK103	RH	None	Opposite	LH	5.000	NA	
	101SK100-1X	101SK102	LH	Shown	Shown	RH	5.000	NA	
	101SK103-1X	101SK104	RH	None	Opposite	LH	5.000	NA	
1.86	140SK102-X	140SK100	LH	Shown	Shown	RH	5.495	NA	
	140SK103-X	140SK101	RH	Opposite	Opposite	LH	5.495	NA	
1.99	140SK106-X	140SK104	LH	Shown	Shown	RH	5.495	L1	Knotched
	140SK107-X	140SK105	RH	Opposite	Opposite	LH	5.495	R1	Knotched
2.04	120SK115-X	120SK111	LH	Shown	Shown	RH	5.495	L2	Knotched
	120SK116-X	120SK112	RH	Opposite	Opposite	LH	5.495	R2	Knotched
	120SK129-X	120SK127	LH	Shown	Shown	RH	5.495	L2	Knotched
	120SK130-X	120SK128	RH	None	Shown	LH	5.495	R2	Knotched
	120SK159-X	120SK157	LH	Shown	Shown	RH	5.495	L1	Knotched
	120SK160-X	120SK158	RH	None	Shown	LH	5.495	R1	Knotched
	120SK155-X	120SK153	LH	Shown	Shown	RH	5.495	L1	Knotched
	120SK156-X	120SK154	RH	Opposite	Opposite	LH	5.495	R1	Knotched
	120SK102-X	120SK100	LH	Shown	Shown	RH	5.495	NA	
	120SK103-X	120SK101	RH	Opposite	Opposite	LH	5.495	NA	
	120SK145-X	120SK143	LH	Shown	Shown	RH	5.495	NA	
	120SK146-X	120SK144	RH	None	Opposite	LH	5.495	NA	

I Family Knuckles

King Pin Bore (Ø)	Service Part No.	Knuckle Part No. (NSS)	Knuckle Side	A	B	C	D	ABS Location	Remarks
2.17	160SK125-X	160SK123	LH	Shown	Shown	RH	5.495	L1	Knotched
	160SK126-X	160SK124	RH	Opposite	Opposite	LH	5.495	R1	Knotched
	160SK103-X	160SK101	LH	Shown	Shown	RH	5.495	NA	Knotched
	160SK104-X	160SK102	RH	Opposite	Opposite	LH	5.495	NA	Knotched
	160SK117-X	160SK113	LH	Shown	Shown	RH	5.495	L2	Knotched
	160SK118-X	160SK114	RH	Opposite	Opposite	LH	5.495	R2	Knotched
	161SK102-X	161SK100	LH	Shown	Shown	RH	5.745	NA	
	161SK103-X	161SK101	RH	Opposite	Opposite	LH	5.745	NA	
	161SK106-X	161SK104	LH	Shown	Shown	RH	5.745	NA	
	161SK107-X	161SK105	RH	None	Opposite	LH	5.745	NA	Contains special threaded upper boss holes
	161SK110-X	161SK108	LH	Shown	Shown	RH	5.745	L2	
	161SK111-X	161SK109	RH	Opposite	Opposite	LH	5.745	R2	
	220SK103-X	220SK101	LH	Shown	Shown	RH	5.745	NA	
	220SK104-X	220SK102	RH	Opposite	Opposite	LH	5.745	NA	
	220SK111-X	220SK109	LH	Shown	Shown	RH	5.745	L2	
	220SK112-X	220SK110	RH	Opposite	Opposite	LH	5.745	R2	

Identifying Steer Knuckle Taper Directions: In identifying tapered directions for steer knuckles, Columns A & B indicate the tapered direction of each knuckle as laid out exactly as pictured above. It doesn't matter if the knuckle is a LH or RH knuckle, lay the knuckle out as shown above and identify the taper direction. The taper directions are identified as "shown" for the tapers illustrated above or "opposite" for tapers in the opposite direction of the illustration above.

I & D Family Kingpin Kits

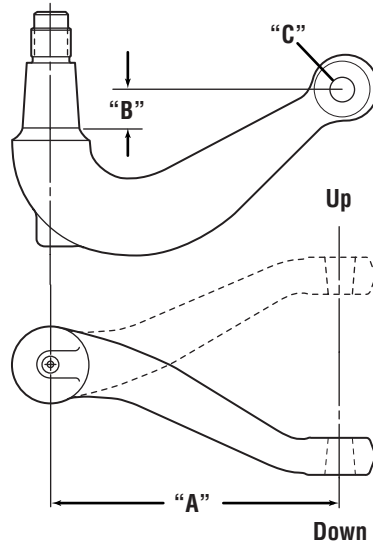


Kit Part No.	Model	Kingpin Part No. (NSS)	Kingpin Length	Bushing Type	Kingpin Design	Remarks
101KK110	I-80	101SC100	7.79 x 1.36	Garlock	A	
101KK111	I-80 D-800F/W (Made before 9/18/02)	101SC101	8.07 X 1.35	Garlock	C	
101KK113	I-80	441241C1	7.79 X 1.35	Bronze	A	
309KK102	I-90	441111C2	9.16 x 1.609	Synthetic	C	Replaces 309KK100
309KK103	I-90	441111C2	9.16 x 1.609	Bronze	C	
120KK100	I-100SA, I-100S/SG, I-120S/SG	120SC100	9.87 x 1.92	Garlock	C	
220KK100	I-100S/SG, I-120S/SG, I-140S/SG	220SC108	10.94 x 2.05	Garlock	C	Knuckle 220SC100 replaced by 220SC108
120KK102	I-120SA, I-140SA, I-146SA	140SC100	10.77 x 1.86	Garlock	C	
140KK100	I-132SG, I-140S/SG	160SC100	10.12 x 2.05	Garlock	C	
329022	I-140W	160SC100	10.12 x 2.05	Garlock	C	
151KK101	I-160S, I-180S	220SC108	10.94 x 2.05	Garlock	C	
161KK100	I-160S	161SC100	11.00 x 2.05	Garlock	C	For MCI Bus
329023	I-160W	220SC108	10.94 x 2.05	Garlock	C	
329116	I-161	161SC101	11.00x1.79	Garlock	C	For Neoplan Bus
329070	I-180W, I-200W, I-220W	220SC108	10.94 x 2.05	Garlock	C	
329182	D-600N/F, D-700N D-800F/W (Made after 9/18/02) D-850 F/W	085SC100	8.07 X 1.35	Garlock	B	
331434	D-2000F, D-2200F	220SC110	10.06x2.04	Garlock	C	Use with 5" drop assembly. Kit includes items 1-8 & 10-12.
331435	D-2000F, D-2200F	220SC112	10.06x2.04	Garlock	B	Use with 3.5" drop assembly. Kit includes items 1-8 & 10-12.

All Kits include items 1-11 illustrated above except where noted.

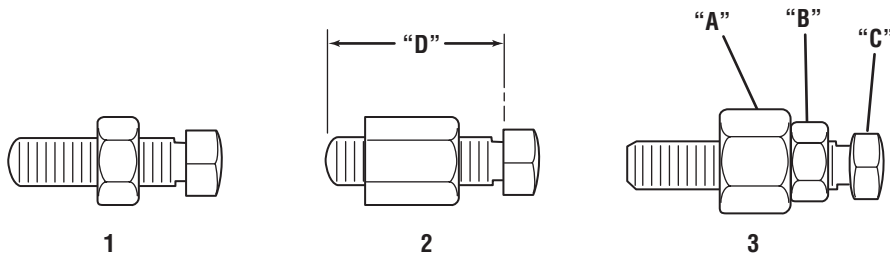
I Family Steer Arms

I-60 through I-200 and I-100W through I-220W



Direction	A	B	C (Ø)	Thread	Spicer Part Number	Remarks
Down	7.52	1.58	.938		140SA102	
					140SA102-2	
			1.044		140SA102-4	
					140SA131-1	
					140SA131-2	
8.42	1.53	.938	LH	140SA104-1		
		1.044	LH	140SA104-2		
8.47	1.09	.727		101SA101		
		.753		101SA101-1		
7.52	1.58	.938		140SA141-1		
7.24	1.53	.938		140SA148-2		
6.59	1.53	.938		140SA148-3		
6.966	.14	1.044	RH	220SA115-1		
8.58	.19	.938	LH	220SA121-1		
7.36	.74	.938	LH	220SA121-2		
7.966	.392	1.044	LH	220SA113-1		
8.56	.19	.938	RH	220SA123-1		
7.34	.64	.938	RH	220SA123-2		

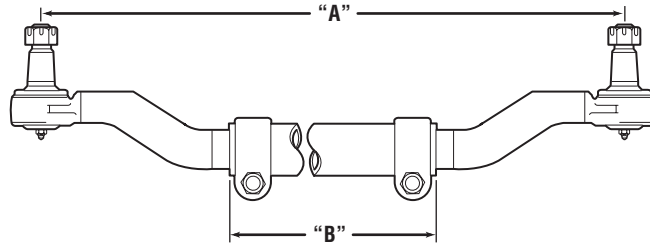
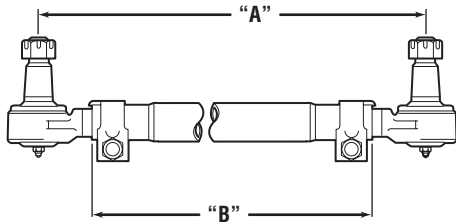
I Family Stop Bolts



Model	Style	Turn Angle (Max.)	A	B	C	D	Assembly Part Number
I-60, I-80	1	50°	NA	500380-5	NSS	1.50"	101HM110-1X
					NSS	1.75"	101HM110-3X
					NSS	2.25"	101HM110-2X
I-100 thru I-140	2	50°	160HN100-1	NA	NSS	2.63"	140HM100-1X
I-100 thru I-120	3	50°	120HN100	HN148	NSS	2.25"	120HM101
I-100 thru I-140	2	50°	160HN100-1	NA	NSS	3.00"	140HM100-3X
			160HN100-1	NA	NSS	2.38"	140HM100-4X
I-160 thru I-200	1	45°	NA	220HN106	NSS	2.38"	220HM102-1X
	2	45°	220HN100-2	NA	NSS	2.38"	220HM102-2X
	1	45°	NA	220HN106	NSS	2.00"	220HM102-3X
I-100W thru I-140W	2	50°	160HN100-1	NA	NSS	2.38"	140HM100-4X
	2	45°	160HN100-1	NA	NSS	2.63"	140HM100-1X
I-160W thru I-220W	1	50°	NA	220HN106	NSS	2.50"	220HM102-5X
	2	43°	220HN100-2	NA	NSS	2.75"	220HM102-4X

NSS - Not Sold Separately

I Family Tie Rod Assemblies/Kits



* Drop-Center Application

I-80 & I-100 Tie Rod Assemblies

TIE ROD END ASSY - COMPLETE			CROSS TUBES			TIE ROD ENDS		
I-80	I-100	Assy. Length "A"	Cross Tube Width	Cross Tube Assy. (includes clamp)	Tube Length "B"	LH Side	Type	RH Side
NA	120TR100-1X	64.72	1.50	120TR106	59.38	120TR109	S	120TR110
NA	100TR105-3X	64.72	1.44	NA	59.38	140TR111	S	140TR112
NA	220TR114-1*	65.62	2.50	220TR120	48.20	220TR118	D	220TR119
NA	120TR100-2X	65.92	1.50	120TR107	60.56	120TR109	S	120TR110
NA	100TR105-4X	65.92	1.44	100TR109	60.56	140TR111	S	140TR112
NA	220TR100-3	66.24	1.75	220TR117-3	61.00	220TR115	S	220TR116
NA	100TR111-1X	67.12	1.44	100TR112	67.12	140TR111	S	140TR112
080TR109-3	NA	68.64	1.44	080TR115	50.32	080TR116	D	080TR117

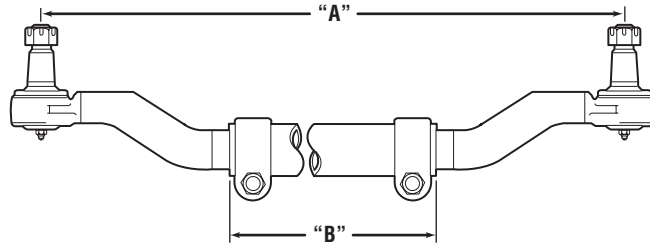
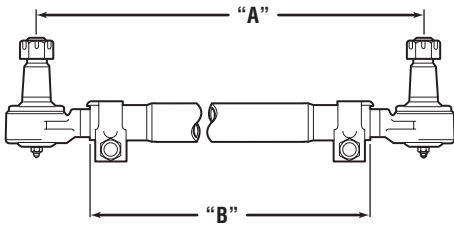
D = Drop Socket Design S = Straight Design

I-120, I-130, I-132 & I-140 Tie Rod Assemblies

TIE ROD END ASSY - COMPLETE			CROSS TUBES			TIE ROD ENDS		
I-120	I-130 I-132 I-140	Assy. Length "A"	Cross Tube Width	Cross Tube Assy. (includes clamp)	Tube Length "B"	LH Side	Type	RH Side
NA	140TR129-1*	64.72	2.25	140TR116-1	43.25	140TR130	D	140TR131
NA	140TR105-2	65.28	1.62	140TR118	51.79	140TR111	S	140TR112
220TR114-1*	220TR114-1*	65.62	2.50	220TR120	48.20	220TR118	D	220TR119
NA	120TR100-2X	65.92	1.50	120TR107	60.56	120TR109	S	120TR110
NA	140TR100-2X	65.92	1.62	140TR107	60.56	140TR109	S	140TR110
NA	140TR129-2	65.92	2.25	NA	43.38	140TR130	D	140TR131
220TR100-3	220TR100-3	66.24	1.75	220TR117-3	61.00	220TR115	S	220TR116
NA	815326	66.90	1.75	NA	60.00	817018	S	817019
120TR123-3*	NA	67.12	2.00	120TR122-2	43.38	140TR114	D	140TR115
NA	140TR105-1	67.12	1.62	140TR108	53.63	140TR111	S	140TR112
120TR130-2	NA	67.96	1.50	120TR134	62.60	140TR109	S	140TR110
NA	971443	68.90	1.66	971444	62.00	817018	S	817019

D = Drop Socket Design S = Straight Design

I-Family Tie Rod Assemblies/Kits(Cont.)



* Drop-Center Application

I-160, I-180 & I-200 Tie Rod Assemblies

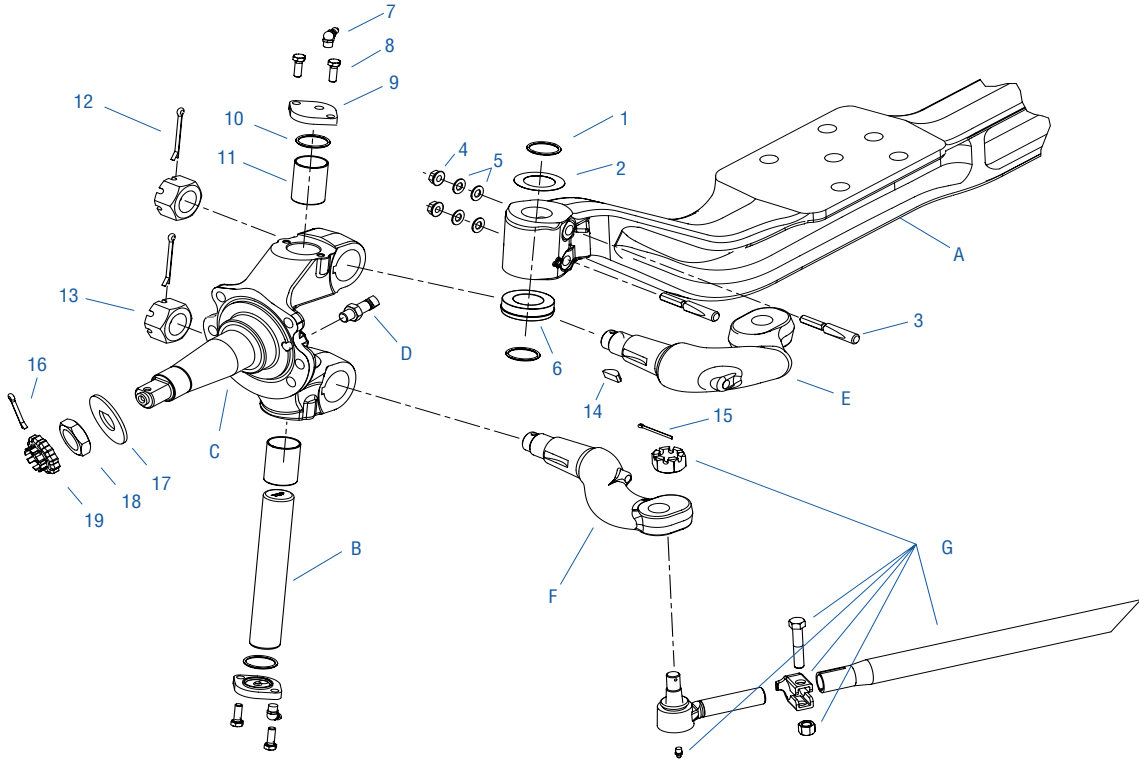
TIE ROD END ASSY - COMPLETE			CROSS TUBES			TIE ROD ENDS		
I-160	I-180 I-200	Assy. Length "A"	Cross Tube Width	Cross Tube Assy. (includes clamp)	Tube Length "B"	LH Side	Type	RH Side
161TR100-3	NA	70.03	1.75	161TR114-3	64.79	220TR115	S	220TR116
NA	220TR100-3	66.24	1.75	220TR117-3	61.00	220TR115	S	220TR116
D = Drop Socket Design S = Straight Design								

I-100W through I-220W Tie Rod Assemblies

TIE ROD END ASSY - COMPLETE			CROSS TUBES			TIE ROD ENDS		
I-100W I-120W I-140W	I-160W I-180W I-200W I-220W	Assy. Length "A"	Cross Tube Width	Cross Tube Assy. (includes clamp)	Tube Length "B"	LH Side	Type	RH Side
971092	NA	68.50	1.90	971093	61.00	818472	S	818471
NA	220TR129-1	66.50-71.00	1.90	220TR132-1	61.00	220TR130	S	220TR131
D = Drop Socket Design S = Straight Design								

D-600N and D-700N Parts Explode

Item	Description	Shown on
A	I-Beam	34
B	Kingpin Kits	23
C	Knuckle Assy	36
D	Stop Bolt Assy	36
E	Steering Arm	38
F	Tie Rod Arm	35
G	Tie Rod Assy	37

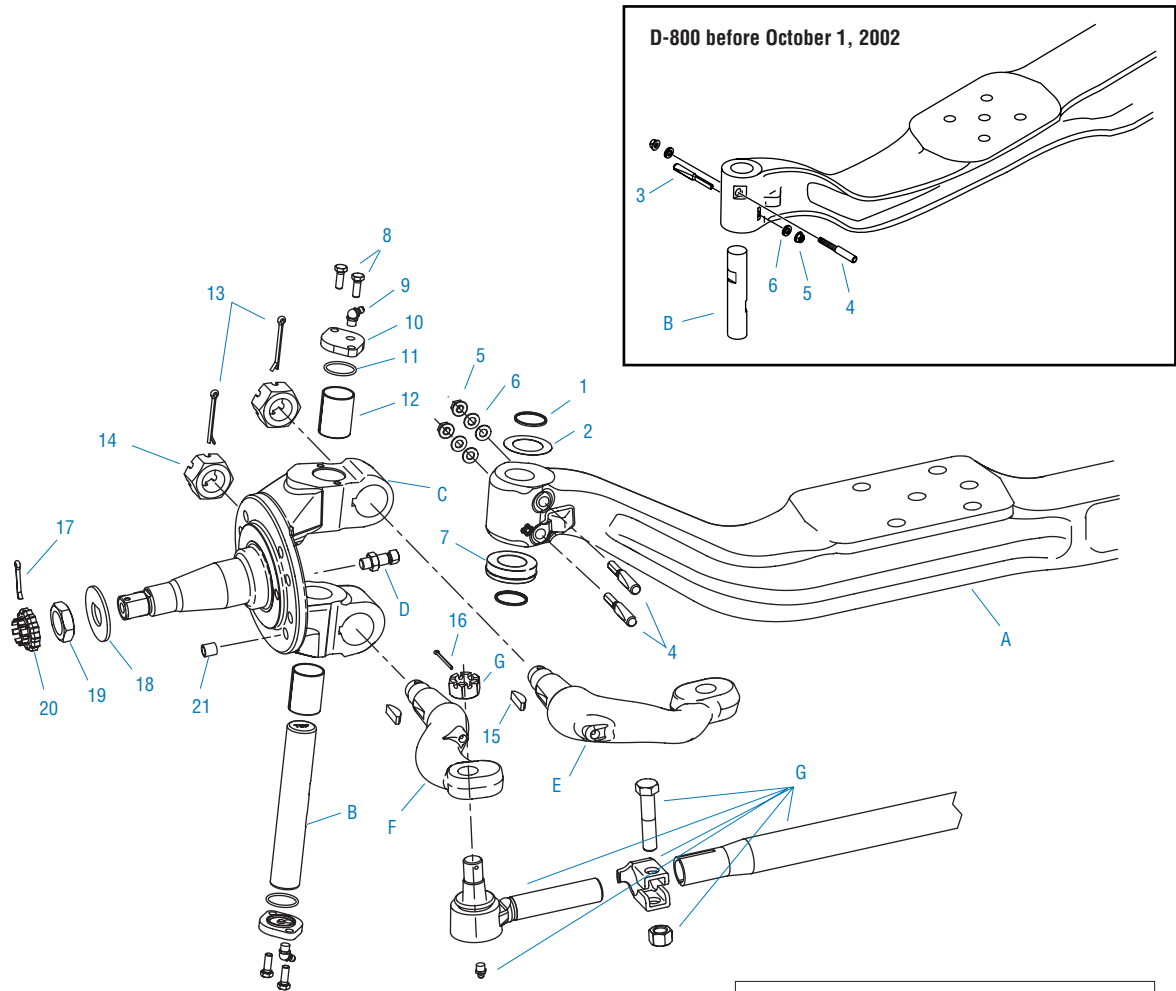


D-600N & D-700N Parts List

Item	Part Name		Qty.	D-600N D-700N	Notes
1	King Pin Oil Seal	Upper	2	101HH101	
		Lower	2	101HH101	
2*	Shim	.005" Thick	A/R	HS111	
		.010" Thick	A/R	HS112	
3*	Draw Key, Inner		4	071HP101	
4*	Nut, Draw Key		4	220HN103	
5*	Washer, Belleville		8	1460HN100	
6*	Bearing Assembly, Thrust		2	080HC100	
7*	Grease Fitting		2	819790	Replaces HN144
8	Bolt, King Pin Cap		8	HM241	
9	Cap, King Pin		4	085SC101	Replaces 071SC102
10*	O-Ring		4	HH103	
11*	Bushing, King Pin		4	101HD101	
12	Pin, Cotter		3	220HP101	
13	Nut, Slotted		3	HN146	
14	Key, Woodruff		2	HP103	
15	Pin, Cotter		2	HP102	
16	Pin, Cotter		2	HP118	
17	Washer, Bearing Retainer		2	HN167	
18	Nut, Spindle		2	HN147	
19	Lock, Spindle Nut		2	HN168	

*Item included in Kingpin kit. Refer to P. 23 for kit information.

D-700F, D-800F/W and D-850F/W Parts Explode



Item	Description	Shown on
A	I-Beam	34
B	Kingpin Kits	23
C	Knuckle Assy	36
D	Stop Bolt Assy	36
E	Steering Arm	38
F	Tie Rod Arm	35
G	Tie Rod Assy	37

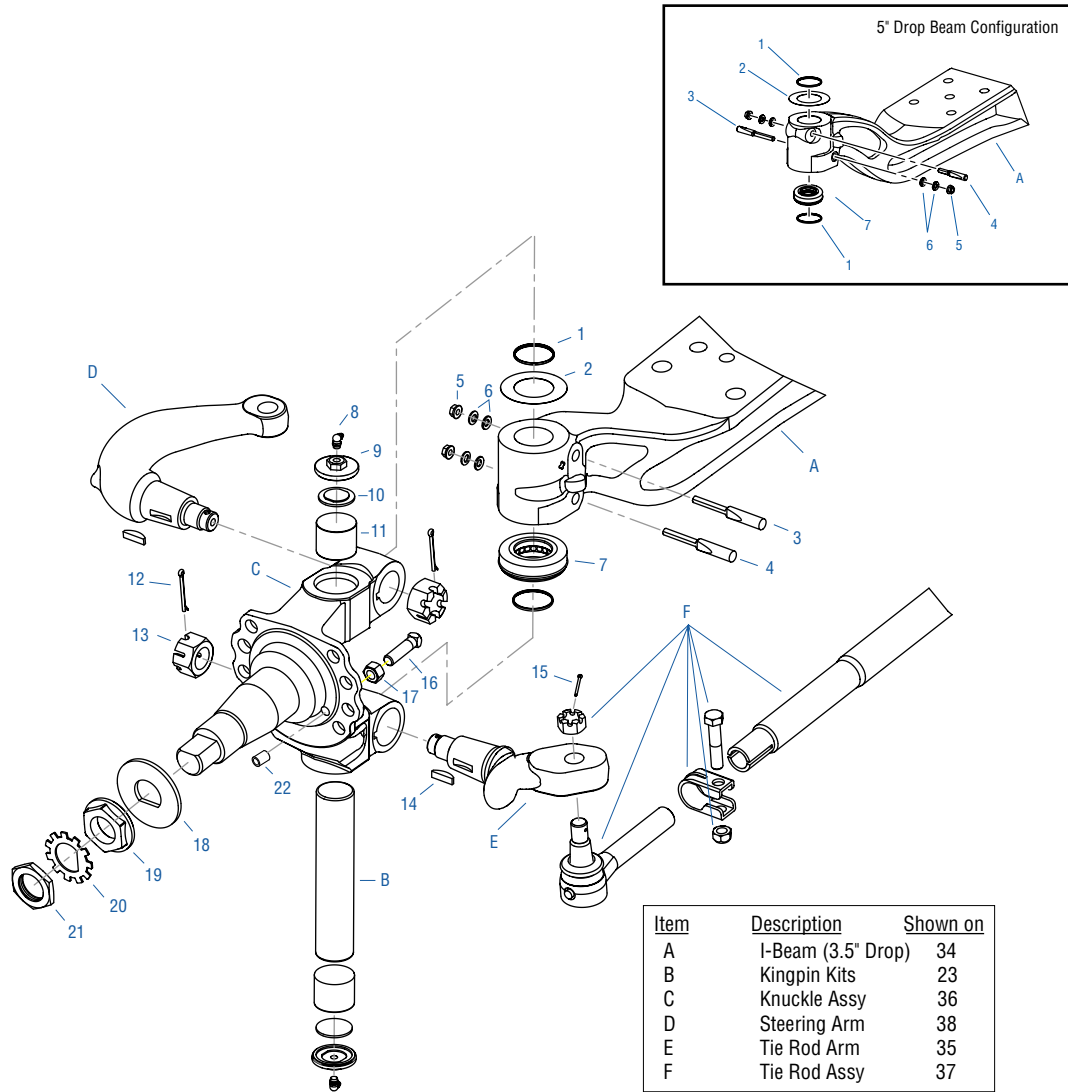
D-700F, D-800F/W and D850F/W Parts List

Item	Part Name	Qty.	D-700F D-800F/W	D-850F/W	Remarks
1*	Seal, King Pin Oil				
	Upper	2	101HH101	101HH101	
	Lower	2	101HH101	101HH101	
2*	Shim				
	.005" Thick	A/R	HS111	HS111	
	.010" Thick	A/R	HS112	HS112	
3*	Draw Key, Outer	2	080HP100	N/A	
4*	Draw Key, Inner	2	071HP101	N/A	
	Draw Key, Inner	4	N/A	07HP101	
5*	Nut, Draw Key	4	220HN103	220HN103	
6*	Washer, Belleville	8	220HN102	220HN102	
7*	Bearing Assembly, Thrust	2	080HC100	080HC100	
8	Bolt, King Pin Cap	8	HM241	HM241	
9*	Grease Fitting	4	819790	819790	Replaces HN144
10	Cap, King Pin	4	085SC101	085SC101	Replaces 071SC102
11*	O-Ring	4	HH103	HH103	
12*	Bushing, King Pin	4	101HD101	101HD101	
13	Cotter Pin	3	220HP101	220HP101	
14	Nut, Slotted	3	HN146	HN146	
15	Key, Woodruff	3	HP103	HP103	
16	Cotter Pin	2	HP102	HP102	
17	Cotter Pin	2	HP118	HP118	
18	Washer	2	HN167	HN167	
19	Nut, Spindle	2	HN147	HN147	
20	Lock, Spindle Nut	2	HN168	HN168	
21	Sleeve, ABS Mounting (ABS Only)	2	120RT100	120RT100	

*Item included in Kingpin kit. Refer to P. 23 for kit information.

** For models with Julian dates through October 1, 2002, use D-800F part numbers. Julian dates after October 1, 2002, use D-850F part numbers.

D-2000F and D-2200F Parts Explode

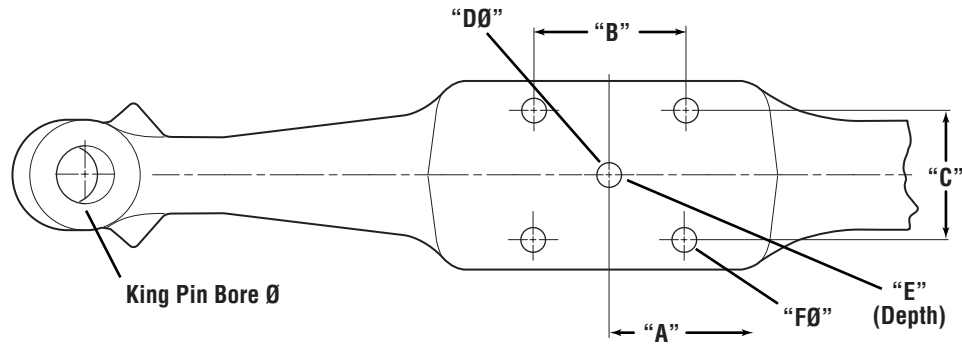


D-2000F and D-2200F Parts List

Item	Part Name	Qty.	D-2000F D-2200F	Remarks
1*	Seal, King Pin Oil			
	Upper	2	160HH100	
	Lower	2	160HH100	
2*	Shim			
	.005" Thick	A/R	160HS100-1	
	.010" Thick	A/R	160HS100-2	
	.020" Thick	A/R	160HS100-3	
3*	Draw Key, Inner	2	220HP100-1	
4*	Draw Key, Inner	2	220HP100-2	
5*	Nut, Draw Key	4	220HN103	
6*	Washer, Belleville	8	1460HN100	
7*	Bearing Assembly, Thrust	2	220HC100	
8*	Grease Fitting	4	1001414	
9	Cap, King Pin	4	971370	
10*	Foam Insert	4	971010	
11*	Bushing, King Pin	4	160HD100	
12	Cotter Pin	4	220HP101	
13	Nut, Slotted	4	161HN101	
14	Key, Woodruff	4	HP103	
15	Cotter Pin	2	HP102	
16	Screw, Stop	2	971454	
17	Nut, Hex	2	220HN106	
18	Washer	2	220HN105	
19	Locknut, Hex Flange	2	976921	
20	Washer - Keyed	2	HN114	
21	Lock, Spindle Nut	2	M10HN107	
22	Sleeve, ABS Mounting (ABS Only)	2	120RT100	

*Item included in Kingpin kit. Refer to P. 23 for kit information.

D Family I-Beams



D600N, D-700N/F, D-800F, D-850F, D-2000F and D-2200F I-Beams

King Pin Bore (Ø)	A	B	C	D Ø	E	F Ø	Spicer Part Number	Beam Drop
1.360	32.00	3.812	4.250	0.810	0.625	0.810	085TB100-1*	
1.360	32.50	4.810	4.250	0.810	0.625	0.690	085TB100-6	
1.360	35.00	3.812	4.250	0.810	0.625	0.810	072TB101-1	3.5"
2.048	34.00	4.940	4.250	0.812	0.780	0.940	220TB101-19	5"
2.048	34.00	4.940	4.250	0.812	0.780	0.940	220TB108-2	

*Before October 1, 2002 Time Frame Axles, need King Pin Kit with Beam.

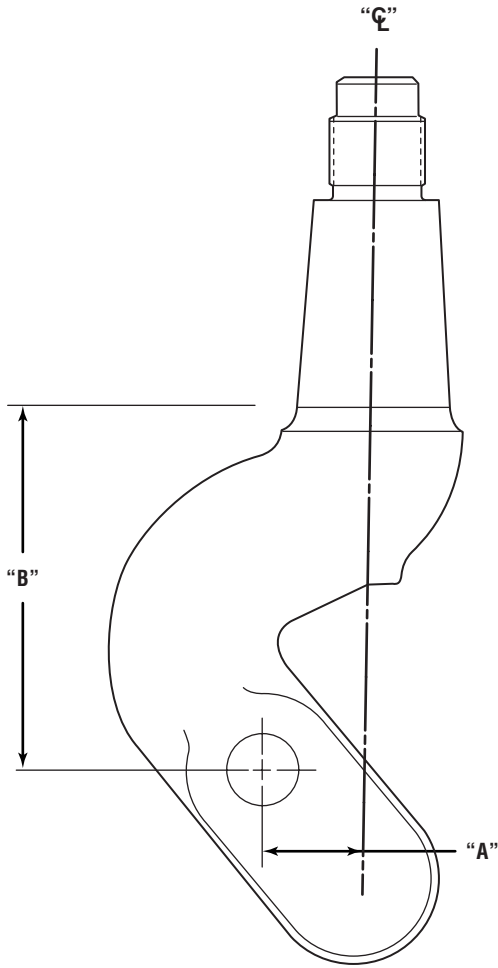
D-800W and D-850W I-Beams

King Pin Bore (Ø)	A	B	C	D Ø	E	F Ø	Spicer Part Number	Remarks
1.360	32.00	3.812	4.250	0.810	0.625	0.810	085TB100-2	
1.360	33.00	4.680	4.580	0.780	0.625	0.810	085TB100-5	

*Before October 1, 2002 Time Frame Axles, need King Pin Kit with Beam.

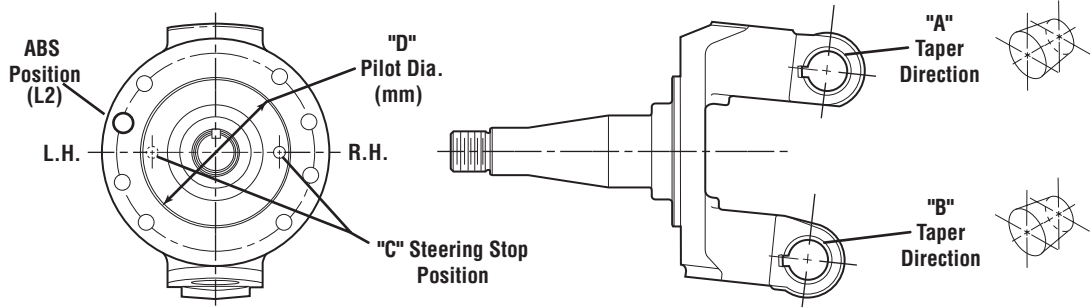
D Family Tie Rod Arms

D600N, D700N/F, D-800F/W, D-850F/W,
D-2000F and D-2200F Tie Rod Arms



A	B	Thread	Spicer Part Number
0.830	4.93	LH	081TR108-3
0.160	4.93	RH	081TR109-3
0.830	5.06	LH	081TR108-4
0.160	5.06	RH	081TR109-4
0.370	5.00	LH	081TR108-5
0.370	5.00	RH	081TR109-5
0.640	4.93	LH	081TR108-6
0.160	5.06	RH	081TR109-4
1.47	6.01	LH	220TR145-1
1.47	6.01	RH	220TR146-1
.90	6.40	LH	220TR145-2
.90	6.40	RH	220TR146-2
.38	6.86	LH	220TR145-3
.38	6.86	RH	220TR146-3
1.66	5.11	LH	220TR145-4
1.66	5.11	RH	220TR146-4
1.08	5.71	LH	220TR145-5
1.08	5.71	RH	220TR146-5
.69	5.88	LH	220TR145-6
.69	5.88	RH	220TR146-6

D Family Knuckles



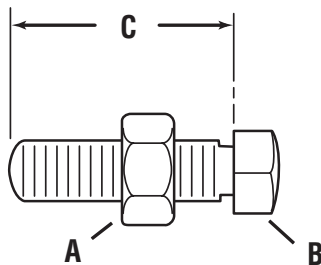
Note: Viewed from front of spindle

D-600N, D-700N/F, D-800F/W, D-850F/W, D-2000F and D-2200F Knuckles

King Pin Bore (Ø)	Service Part No.	Knuckle Part No. (NSS)	Knuckle Side	A	B	C	D	ABS Location	Remarks
1.48	072SK103	072SK101	LH	Shown	Shown	RH	4.125	NA	6 hole bolt pattern
1.48	072SK104	072SK102	RH	None	Shown	LH	4.125	NA	6 hole bolt pattern
1.48	085SK103	085SK101-1	LH	Shown	Shown	RH	5.000	See Remarks	9 hole bolt pattern; ABS position is middle left.
1.48	085SK104	085SK102-1	RH	None	Opposite	LH	5.000	See Remarks	9 hole bolt pattern; ABS position is middle right.
1.48	085SK105	085SK101-2	LH	Shown	Shown	RH	5.000	See Remarks	9 hole bolt pattern; ABS position is middle left.
1.48	085SK106	085SK102-2	RH	None	Shown	LH	5.000	See Remarks	9 hole bolt pattern; ABS position is middle right.
2.17	220SK138-1	220SK136-1	LH	Opposite	Opposite	RH	5.745	L2	8 hole bolt pattern
2.17	220SK139-1	220SK137-1	RH	Opposite	Opposite	LH	5.745	R2	8 hole bolt pattern
2.17	220SK138-2	220SK136-2	LH	Opposite	Shown	RH	5.745	L2	8 hole bolt pattern
2.17	220SK139-2	220SK137-2	RH	Shown	Opposite	LH	5.745	R2	8 hole bolt pattern

Identifying Steer Knuckle Taper Directions: In identifying tapered directions for steer knuckles, Columns A & B indicate the tapered direction of each knuckle as laid out exactly as pictured above. It doesn't matter if the knuckle is a LH or RH knuckle, lay the knuckle out as shown above and identify the taper direction. The taper directions are identified as "shown" for the tapers illustrated above or "opposite" for tapers in the opposite direction of the illustration above.

D Family Stop Bolts

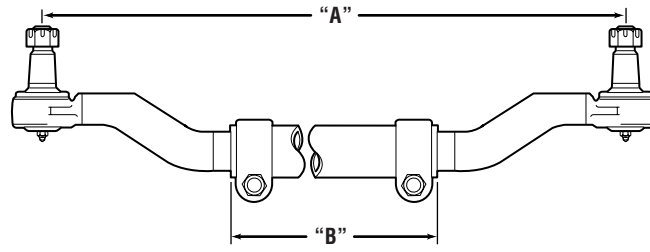
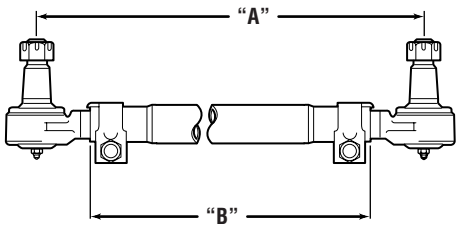


D-600N/F, D-700N, D-800F/W and D-850F/W Stop Bolts

Model	Turn Angle (Max.)	A	B	C	Assembly Part Number
D-600N, D-700N/F	45-55°	500380-5	NSS	1.75	101HM110-3X
D-800F/W, D-850F/W	50°	500380-5	NSS	2.25"	101HM110-2X

NSS - Not Sold Separately

D Family Tie Rod Assemblies / Kits

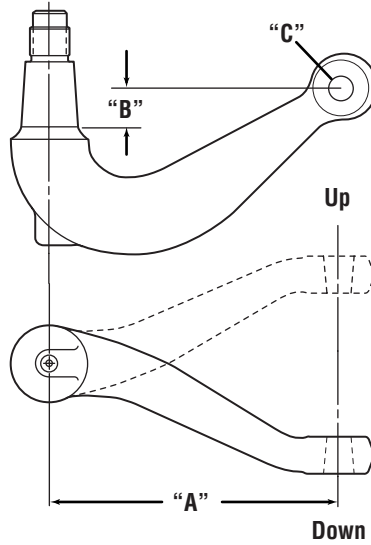


* Drop-Center Application

D-600N, D-700N/F, D-800F/W, D-850F/W, D-2000F and D-2200F Tie Rod Assemblies/Kits

Model	Tie Rod Assy	Tie Rod Socket	Threads	Tube and Clamp Assy	A	B	Remarks
D-600N	971814	8117018	LH	NA	62.00"	55.00"	
D-700N		8117019	RH				
D-600F	971314	8117018	LH	NA	71.10"	63.50"	
D-800F/W		8117019	RH				
D-850F/W	971762	970579	LH	NA	67.60"	56.00"	
		970580	RH				
D-2000	220TR114-1	220TR118	LH	220TR120	65.62	48.20	Use with 5" drop assembly
D-2200F		220TR119	RH				
	220TR129-2	220TR130	LH	NA	63.00 - 67.50	57.50	Use with 3.5" drop assembly
		220TR131	RH				

D Family Steer Arms



D-600N, D-700N/F, D-800F/W, D-850F/W, D-2000F and D-2200F Steer Arms

Direction	A	B	C (Ø)	Spicer Part Number	Remarks
Down	7.380	1.91	.938	081SA101-2	
	7.380	1.15	.938	081SA101-1	
	7.270	2.07	.938	081SA101-3	
Up	8.715	1.392	1.044	220SA140-1	
	8.715	1.392	1.044	220SA142-1	
Down	8.715	1.392	1.220	220SA144-1	
	8.715	1.392	1.220	220SA146-1	

For spec'ing or service assistance, call 1-877-777-5360 or visit our website at www.dana.com

Dana Commercial Vehicle Products Group

3939 Technology Drive
Maumee, Ohio, USA 43537

www.dana.com



SPICER[®]

Drivetrain Products