

Spicer® Tandem Drive Axles

SPICER®



Illustrated Parts List

Spicer® Tandem Drive Axles

AXIP-8661

January 1998

F340-S, J380-S, J400-S, W440-S, W460-S

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SPICER®



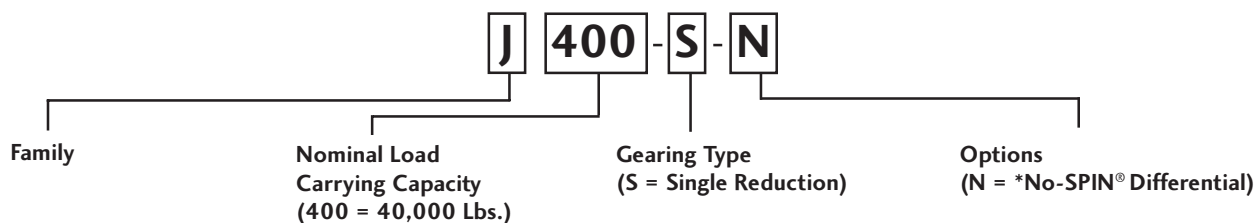
GENUINE SPICER SERVICE PARTS

Should an axle assembly require replacement component parts, it is recommended that Spicer Heavy Axle Service Parts be used. Spicer Heavy Axle Service Parts are manufactured under the same rigid specification as are original equipment axle components. This assures the customer who uses genuine Spicer service parts, maximum reliability for a Spicer Heavy Axle assembly. They may be obtained through your vehicle manufacturer.

The use of non-original Spicer Service Parts may cause premature component failure and may void the warranty.

The items included in this book are currently being offered as service parts at the time of printing. The part numbers and illustrations are provided specifically for reference purposes only. Therefore, Spicer reserves the right to update this manual without notice or liability.

MODEL IDENTIFICATION NUMBERING SYSTEM



AXLE IDENTIFICATION

All axle assemblies are identified with two tags. One located on the differential carrier, and the other located on the right hand side of the axle housing. Two types of tags may be found on the axle, an aluminum tag that is riveted on the assembly or a coated mylar tag.

The aluminum **axle assembly tag** contains the following items: serial number, according to the julian date, Dana part number, and the model. The mylar **axle assembly tag** contains the following items: Dana part number, julian date code, axle model, and ratio. Optional items include customer part number, line set number, and the last six digits of the vehicle serial number.

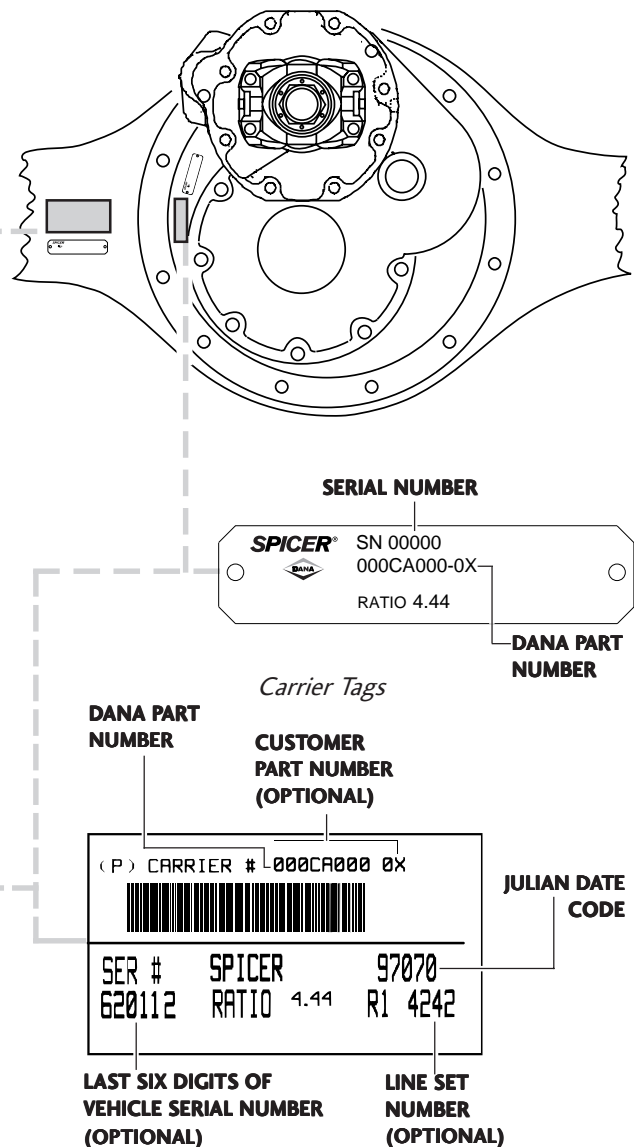
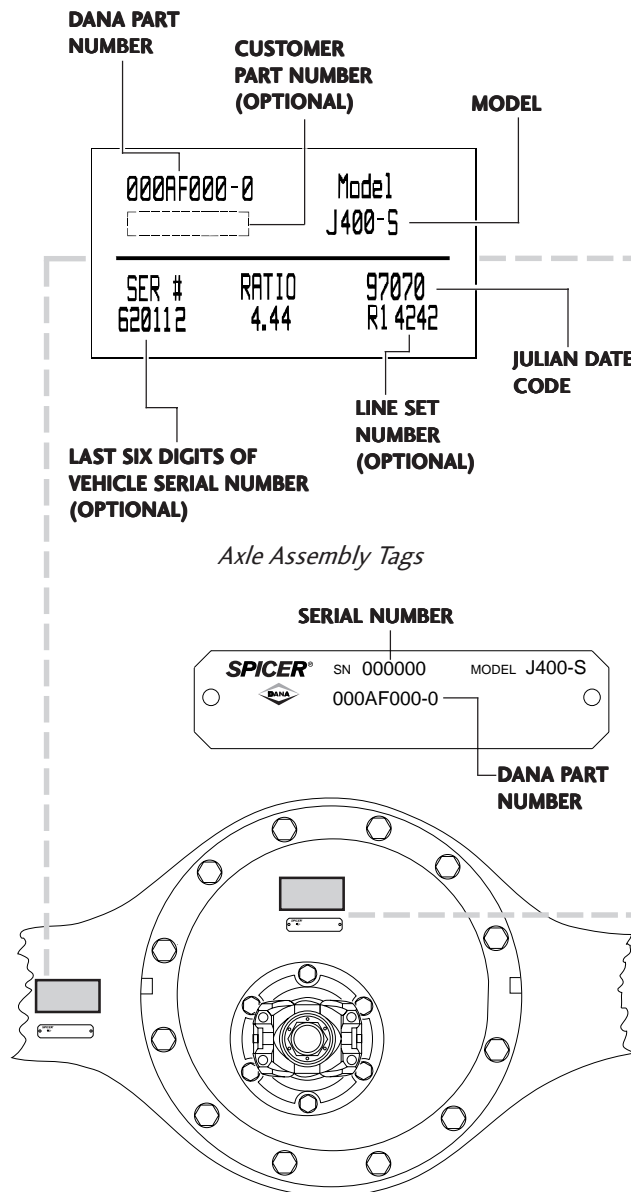
JULIAN DATE CODE

97 170

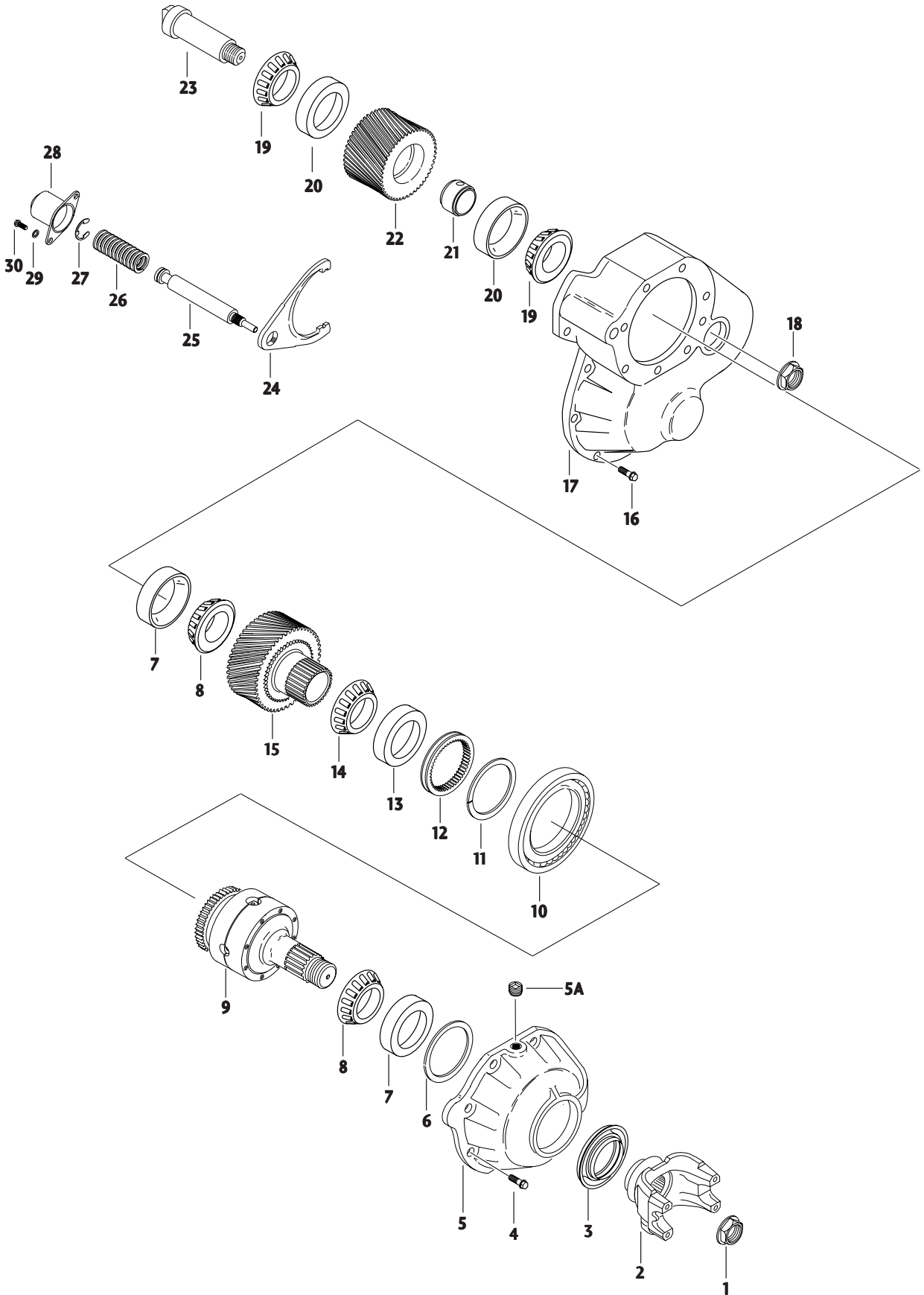
MODEL YEAR

DAY OF YEAR

The aluminum **differential carrier tag** contains the following items: serial number, according to the julian date code, the Dana part number, and ratio. The mylar **differential carrier tag** contains the following: Dana part number, julian date code, and ratio. Optional items include customer part number, line set number, and the last six digits of the vehicle serial number.



POWER DIVIDER COMPONENTS

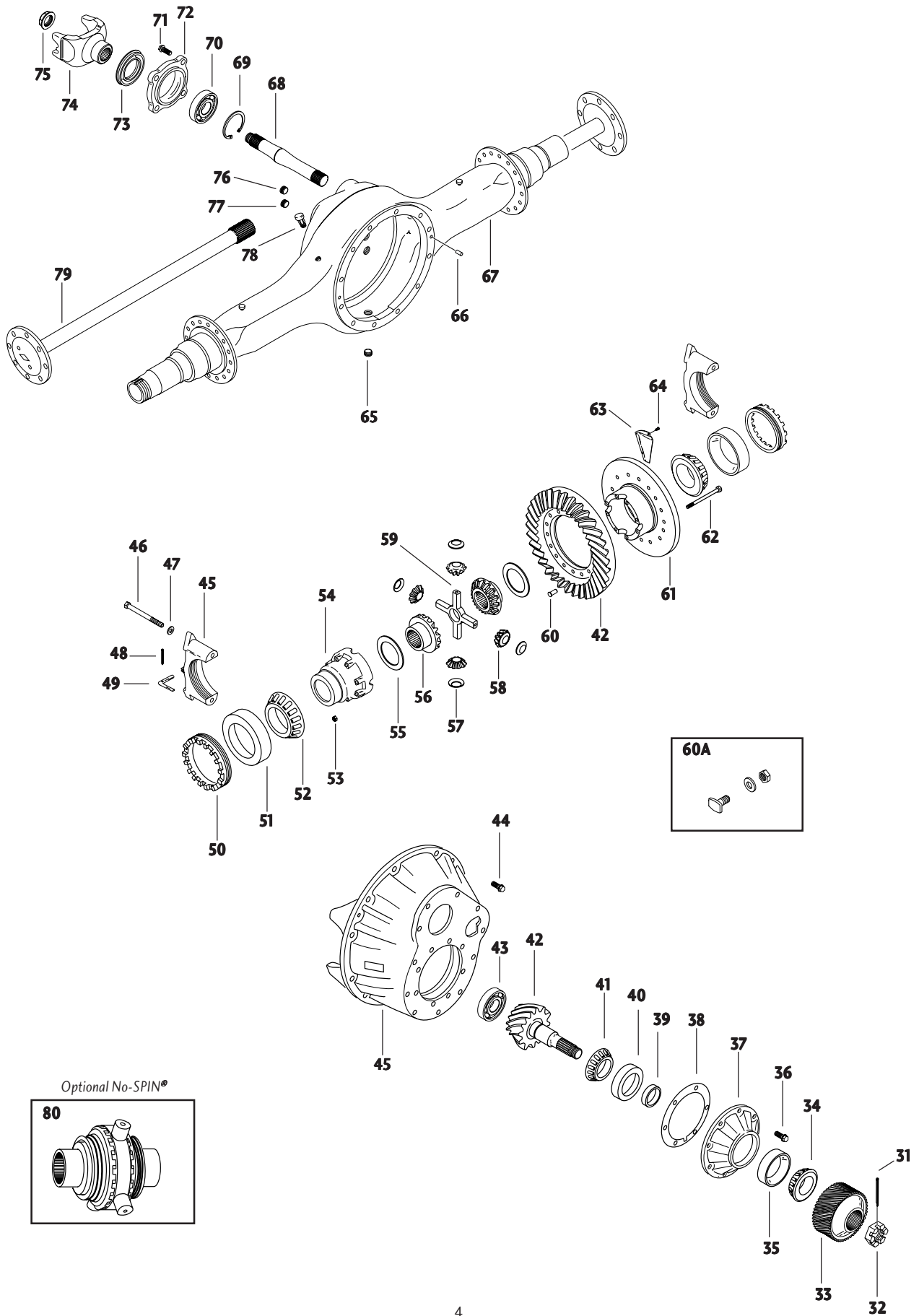


POWER DIVIDER PARTS LIST

Item	Part Name	Qty.	J Model	W Model
1 ⁺	Flanged Hex Nut	1	HN162	HN162
2	Input Yoke Assembly	1	See Page 9 for correct part numbers	
3 ⁺	Input Oil Seal	1	472HH100	472HH100
4	Inter-Axle Differential Cover Bolt	8	583164C1	583164C1
5 ⁺	Inter-Axle Differential Cover	1	472CB101	472CB101
5A ⁺	Fill Plug	1	MJAHM120	MJAHM120
6 ⁺	Shim (Selective)	A/R	See Page 12 for correct part numbers	
7 ⁺	Input Bearing Cup	2	390HA100	390HA100
8 ⁺	Input Bearing Cone	2	390HB101	390HB101
9 ⁺	Inter-Axle Differential Case Assembly	1	472DD102-X	472DD102-X
10 ⁺	Inter-Axle Differential Rear Bearing	1	HD100	HD100
11 ⁺	Inter-Axle Differential Bearing Retainer	1	495024C1	495024C1
12 ⁺	Shift Collar	1	463430C2	463430C2
13 ⁺	Inter-Axle Differential Bearing Cup	1	Included with Item 9	
14 ⁺	Inter-Axle Differential Bearing Cone	1	258453C91	258453C91
15	Input Drive Gear	1	472GS106	472GS106
16	Intermediate Housing Bolt			
	Short, Grade 8, 1/2" 13 UNC x 1-1/4"	5	583164C1	583164C1
	Long, Grade 8, 1/2" 13 UNC x 2-1/4"	6	583166C1	583166C1
17	Intermediate Housing	1	592535C1	592535C1
18	Idler Shaft Nut	1	HN131	HN131
19 ⁺	Idler Gear Bearing Cone	2	ST791	ST791
20 ⁺	Idler Gear Bearing Cup	2	ST951	ST951
21 ⁺	Idler Gear Bearing Spacer (Selective)	1	See Page 12 for correct part numbers	
22	Idler Gear w/cup	1	472GS112-X	472GS112-X
23	Idler Gear Shaft	1	463420C2	463420C2
24	Shift Fork Assembly	1	504810C91	504810C91
25	Shift Fork Shaft	1	587212C1	587212C1
26 ⁺	Compression Spring	1	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Kit Only 472SU100-X </div>	
27 ⁺	Retainer Clip	1		
28 ⁺	Air Shift Cylinder	1		
29 ⁺	Air Shift Cylinder Washer	2		
30 ⁺	Air Shift Cylinder Bolt	2		

⁺Item Included in Kit
A/R - As Required

FORWARD REAR AXLE COMPONENTS



FORWARD REAR PARTS LIST

Item	Part Name	Qty.	J Model	W Model
31+	Roll Pin	1	HP112	HP112
32+	Castellated Pinion Nut	1	HN137	HN137
33	Pinion Driven Gear	1	472GS107	472GS108
34+	Outer Pinion Bearing Cone	1	360HB100	483067C91
35+	Outer Pinion Bearing Cup	1	360HA100	483068C1
36	Pinion Bearing Cage Bolt	8	584255C1	584255C1
37	Pinion Bearing Cage (Includes Items 35 & 40)	1	482787C91	482784C91
38+	Pinion Postion Shim(s)	A/R	See Page 12 for correct part numbers	
39+	Bearing Preload Spacer	A/R	See Page 12 for correct part numbers	
40+	Inner Pinion Bearing Cup	1	360HA100	HA100
41+	Inner Pinion Bearing Cone	1	360HB100	HB103
42+	Ring Gear & Pinion Set	1	See Page 13 for correct part numbers	
43+	Pinion Pilot Bearing	1	91082R91	472658C91
44	Carrier Mounting Bolt			
	Grade 8, $\frac{5}{8}$ " 11 UNC x 1- $\frac{3}{4}$ "	12	HM109	----
	Grade 8, $\frac{5}{8}$ " 11 UNC x 1- $\frac{3}{4}$ "	6	----	HM109
	Grade 8, $\frac{5}{8}$ " 11 UNC x 2- $\frac{1}{4}$ "	2	----	HM110
	Dowel Stud	4	----	057HM101
	Dowel Stud Hex Nut	4	----	057HN102
	Dowel Stud Washer	4	----	MJAHN143
45	Carrier Sub-Assembly (Includes Items 46 & 47)	1	464253C92	463395C92
46	Differential Bearing Cap Bolt	4	HM200	HM200
47	Differential Bearing Cap Washer	4	HN125	HN125
48	Cotter Pin	2	103407	103407
49	Adjusting Ring Lock	2	157491R2	157491R2
50	Adjusting Ring	2	69208R1	161066R1
51+	Differential Bearing Cup	2	ST2161	HA101
52+	Differential Bearing Cone	2	ST2162	HB102
53+	Differential Case Nut	8	274638	274639
54+	Differential Case Cap Half	1	864358R2	161080R3
55+	Differential Gear Thrust Washer	2		
56+	Differential Side Gear	2		
57+	Differential Pinion Mate Thrust Washer	4		
58+	Differential Pinion Mate	4		
59+	Differential Cross Shaft	1		
60	Ring Gear Rivet	12	157490R1	HM203
60A+	Ring Gear Bolt Kit	1	401KY101-X	057KY101-X
61+	Differential Case Flange Half			
	3.54 Ratio	1	584281C1	584284C1
	3.73 thru 4.44	1	505756C1	208523R5
	4.78 and Up	1	505757C1	161091R5
62+	Differential Case Bolt			
	3.54 Ratio	8	HM123	HM114
	3.73 thru 4.44	8	HM122	HM113
	4.78 and Up	8	HM121	HM112
63**	Oil Scoop	2	----	868467R91
64	Oil Scoop Bolt	6	----	25752R1
65	Magnetic Drain Plug	1	MJAHM106	MJAHM106
66	Dowel Stud	4	See Item 44 Above	
67	Housing	1	See Page 11 for correct part numbers	
68	Output Shaft	1	464238C2	464237C2
69	Snap Ring	1	660433R1	660433R1

Kit Only

See Page 13 for correct part numbers

*Item Included in Kit
 **For carriers built prior to 5/28/97
 A/R - As Required

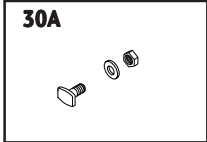
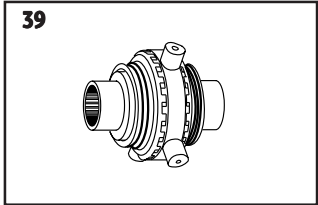
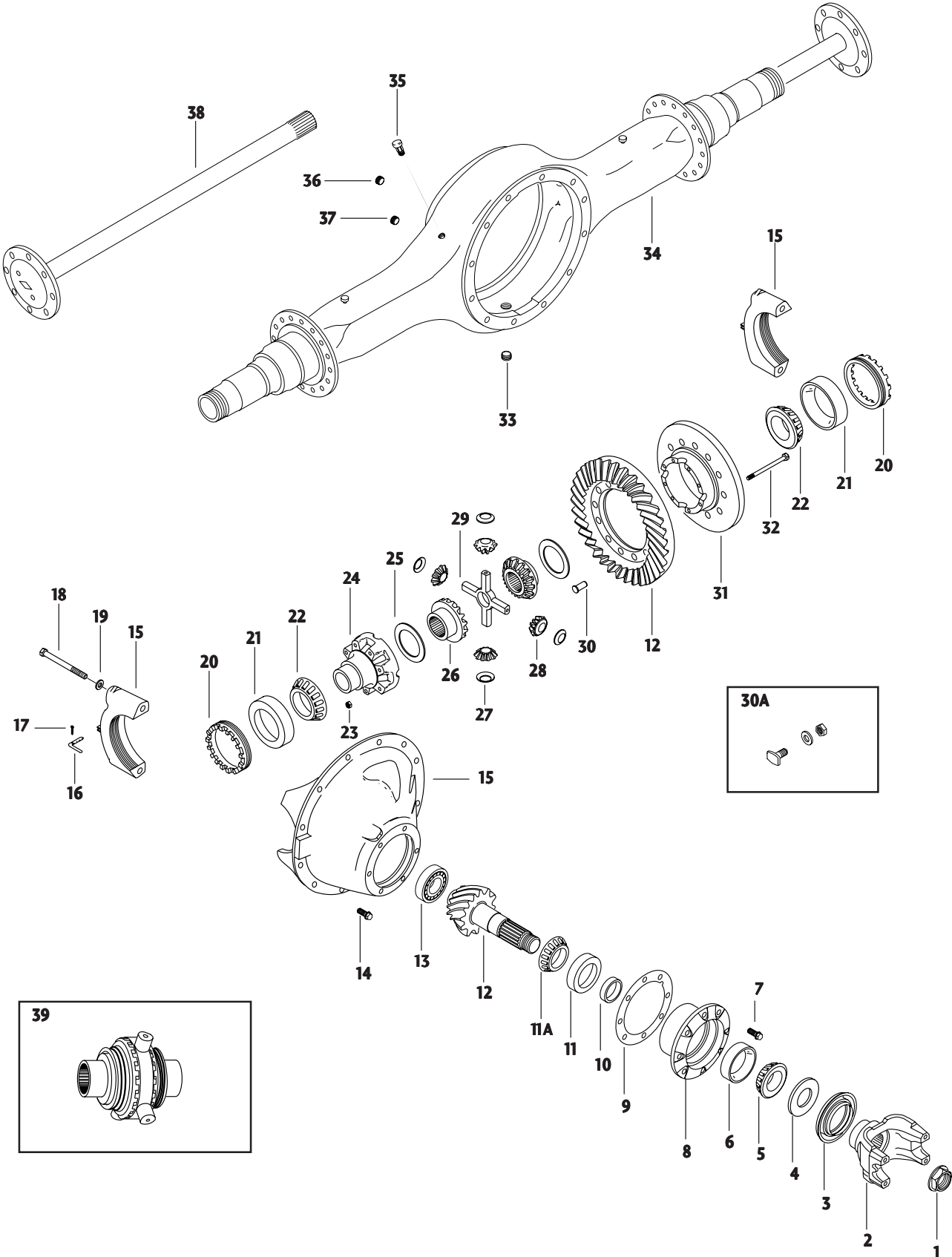


FORWARD REAR PARTS LIST

Item	Part Name	Qty.	J Model	W Model
70+	Output Shaft Bearing	1	ST264	ST264
71	Bearing Retainer Bolt	4	HM201	HM201
72	Bearing Retainer	1	472CP101	472CP101
73+	Output Oil Seal			
	After July 15, 1991	1	472HH101	472HH101
	Prior to July 15, 1991	1	GGAHH104	GGAHH104
74	Output Yoke Assembly	1	See Page 9 for correct part numbers	
75	Flanged Hex Nut	1	HN161	HN161
76	Temperature Sensor Plug	1	MJAHM115	MJAHM115
77	Fill Plug	1	MJAHM120	MJAHM120
78	Vent Plug	1	MJAHN110	MJAHN110
79	Axle Shaft	1	See Page 10 for correct part numbers	
80	No-SPIN® Differential	1	390GN100	057GN100



REAR REAR AXLE COMPONENTS



REAR REAR PARTS LIST

Item	Part Name	Qty.	J Model	W Model
1+	Flanged Hex Nut	1	HN162	HN162
2	End Yoke Assembly	1	See Page 9 for correct part numbers	
3+	Pinion Oil Seal	1	401HH102	401HH102
4+	Bearing Preload Spacer	A/R	----	892790R1
5+	Outer Pinion Bearing Cone	1	360HB100	483067C91
6+	Outer Pinion Bearing Cup	1	360HA100	483068C1
7	Pinion Bearing Cage Bolt	6	HM117	HM111
8	Pinion Bearing Cage (Includes Items 6 & 11)	1	454719C91	482782C91
9+	Pinion Postion Shim(s)	A/R	See Page 12 for correct part numbers	
10+	Pinion Bearing Spacer (Selective)	A/R	See Page 12 for correct part numbers	
11A+	Inner Pinion Bearing Cone	1	360HB100	HB103
11+	Inner Pinion Bearing Cup	1	360HA100	HA100
12+	Ring Gear & Pinion Set	1	See Page 13 for correct part numbers	
13+	Pinion Pilot Bearing	1	91082R91	472658C91
14	Carrier Mounting Bolt	12	HM109	----
	Grade 8, $\frac{5}{8}$ " 11 UNC x 2- $\frac{1}{4}$ "	2	----	HM110
	Grade 8, $\frac{5}{8}$ " 11 UNC x 1- $\frac{3}{4}$ "	6	----	HM109
	Dowel Stud	4	----	057HM101
	Dowel Stud Nut	4	----	057HN102
	Dowel Stud Washer	4	----	MJAHN143
15	Carrier Sub-Assembly (Includes Item 18 & 19)	1	042CS100-X	451918C92
16	Adjusting Ring Lock	2	157491R2	157491R2
17	Cotter Pin	2	103407	103407
18	Differential Bearing Cap Bolt	4	24895R1	HM202
19	Differential Bearing Cap Washer	4	HN125	HN125
20	Adjusting Ring	2	69208R1	161066R1
21+	Differential Bearing Cup	2	ST2161	HA101
22+	Differential Bearing Cone	2	ST2162	HB102
23+	Differential Case Nut	8	274638	274639
24+	Differential Case Cap Half	1	864358R2	161080R3
25+	Differential Gear Thrust Washer	2	<div style="border: 1px solid black; padding: 10px; text-align: center;"> Kit Only See Page 13 for correct part numbers </div>	
26+	Differential Side Gear	2		
27+	Differential Pinion Mate Thrust Washer	4		
28+	Differential Pinion Mate	4		
29+	Differential Cross Shaft	1		
30	Ring Gear Rivet	12	157490R1	HM203
30A+	Ring Gear Bolt Kit	1	401KY101-X	057KY101-X
31+	Differential Case Flange Half			
	3.54 Ratio	1	584281C1	584284C1
	3.73 thru 4.44	1	505756C1	208523R5
	4.78 and Up	1	505757C1	161091R5
32+	Differential Case Bolt			
	3.54 Ratio	8	HM123	HM114
	3.73 thru 4.44	8	HM122	HM113
	4.78 and Up	8	HM121	HM112
33	Magnetic Drain Plug	1	MJAHM106	MJAHM106
34	Housing	1	See Page 11 for correct part numbers	
35	Vent Plug	1	MJAHN110	MJAHN110
36	Fill Plug	1	MJAHM120	MJAHM120
37	Temperature Sensor Plug	1	MJAHM115	MJAHM115
38	Axle Shaft	2	See Page 10 for correct part numbers	
39	No-SPIN® Differential	1	See Page 13 for correct part numbers	

*Item Included in Kit
A/R - As Required

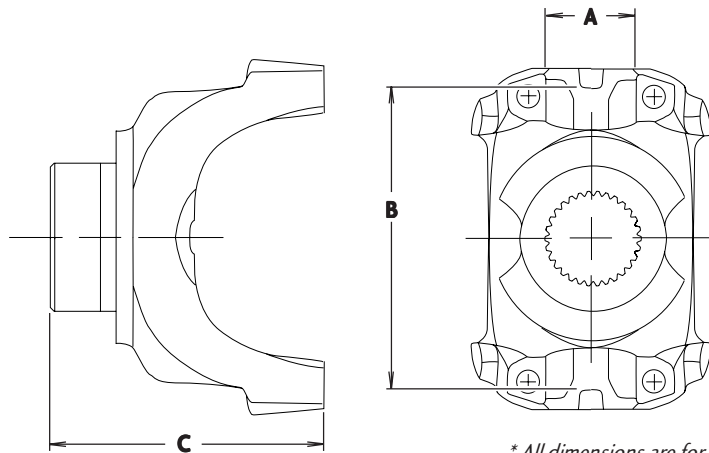
END YOKE ASSEMBLIES

FORWARD REAR (INPUT)

Series	- A-	-B-	-C-	Joint Angle	Spline Major Dia. - Number of Splines	Spicer Part Number
1610	1.88"	5.31"	6.38"	21°	2.364-36	5-4-8651-1X
1710	1.94"	6.09"	6.31"	27.5°	2.364-36	6-4-8721-1X
1760	1.94"	7.00"	5.94"	30°	2.364-36	6.3-4-1561-1X
1810	1.94"	7.55"	5.31"	30°	2.364-36	6.5-4-4441-1X
SPL170	55mm	164mm	5.46"	29°	2.364-36	170-4-761-1X
SPL250	60mm	163mm	5.24"	25°	-----	250-4-371-1X

FORWARD REAR (OUTPUT)

Series	- A-	-B-	-C-	Joint Angle	Spline Major Dia. - Number of Splines	Spicer Part Number
1610	1.88"	5.31"	6.56"	45°	1.989-30	5-4-8661-1
1710	1.94"	6.09"	6.43"	41°	1.989-30	6-4-8731-1
SPL170	----	----	----	45°	-----	170-4-771-1

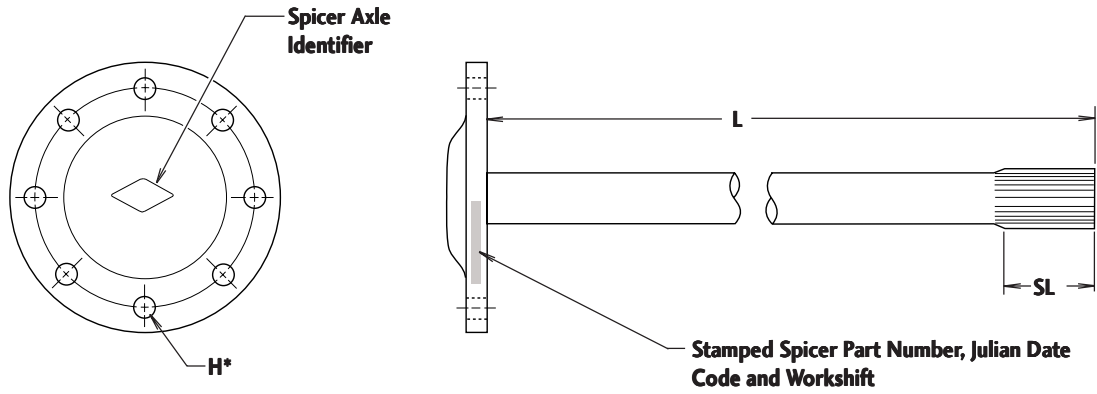


* All dimensions are for reference purposes only

REAR REAR

Series	Series	- A-	-B-	-C-	Joint Angle	Spline Major Dia. - Number of Splines	Spicer Part Number
1610	J	1.88"	5.31"	6.38"	33.5°	2.114-32	5-4-8611-1X
1610	W	1.88"	5.31"	5.54"	21°	2.364-36	5-4-8631-1X
1610	J	1.88"	5.31"	6.31"	45°	2.114-32	5-4-8691-1X
1610	W	1.88"	5.31"	5.62"	45°	2.364-36	5-4-7231-1X
1710	J	1.94"	6.09"	4.97"	43°	2.114-32	6-4-8761-1X
1710	W	1.94"	6.09"	5.03"	22°	2.364-36	6-4-8701-1X
SPL170	J	55mm	164mm	6.25"	45°	-----	170-4-791-1X

AXLE SHAFTS



FORWARD REAR & REAR REAR						
-SL - Spline Length	-L- Length	-H- Hole Dia.	Hole Type	J340-S	J380-S & J400-S	W440-S & W460-S
2.50"	40.25"	.65"	Straight	571349C2		
3.50"	40.72"	.69"	Tapered		MJASR103-1	
2.84"	40.00"	.78"	Straight		571350C2	
3.50"	42.07"	.73"	Tapered		MJASR124	
2.84"	40.84"	.69"	Tapered			057SR102-1
2.84"	39.98"	.78"	Straight			230SR100-1

* Tapered holes are measured at the bottom of the taper



HOUSINGS

FORWARD REAR

Suspension	J340-S	J380-S	J400-S	W440-S & W460-S
Spring	351CG101	472CG101	472CG101	474CG101
Spring w/ ABS	----	472CG126	472CG126	----
Air Standard	351CG102	472CG102	472CG102	474CG102
Air w/ABS	----	472CG129	472CG129	----
Henderickson Air	351CG100	472CG117	472CG117	474CG106
	----	472CG100	472CG100	474CG105
	----	----	472CG104-X	474CG103-X
Base Housing	----	472CG1001	472CG1001	----

REAR REAR

Suspension	J340-S	J380-S	J400-S	W440-S & W460-S
Spring	351CH101	472CH101	472CG101	057CH113
Spring w/ ABS	----	472CG126	472CG126	----
Air Standard	351CH102	472CG102	472CH102	474CH102
	----	----	----	474CH117
Air w/ABS	----	472CH126	472CH126	----
Henderickson Air	351CH100	472CG117	472CG117	474CH105
	----	472CH100	472CG100	474CH106
	----	----	472CG104-X	474CH107
	----	----	----	474CH103-X
	----	----	----	474CH104-X
	----	----	----	474CH121
Base Housing	----	047CH1001-2	047CH1001-2	057CH104

PINION POSITION SHIM

Inches	MM	Spicer Part Number
.003	.076	472HS101-1
.005	.127	472HS101-2
.010	.254	472HS101-3
.030	.762	472HS101-4

Rear Rear Axle - J Model

Inches	MM	Spicer Part Number
.005	.127	042HS104-3
.010	.254	042HS104-1
.030	.762	042HS104-2

Rear Rear Axle - W Model

Inches	MM	Spicer Part Number
.005	.127	057HS104-3
.010	.254	057HS104-1
.030	.762	057HS104-2

INTER-AXLE DIFERENTIAL SHIM

Inches	MM	Spicer Part Number
.026	0.660	472HS100-1
.033	0.838	472HS100-2

SHIMS AND BEARING SPACERS

INTER-AXLE DIFERENTIAL SHIM

Inches	MM	Spicer Part Number
.040	1.016	472HS100-3
.047	1.194	472HS100-4
.054	1.372	472HS100-5
.061	1.549	472HS100-6
.068	1.727	472HS100-7
.075	1.905	472HS100-8

IDLER GEAR BEARING SPACER

Inches	MM	Spicer Part Number	Spacer Kit
1.277	32.436	472HS102-1	472KV100-X
1.282	32.563	472HS102-2	
1.287	32.690	472HS102-3	
1.292	32.817	472HS102-4	
1.297	32.944	472HS102-5	
1.302	33.071	472HS102-6	
1.307	33.198	472HS102-7	
1.312	33.325	472HS102-8	
1.317	33.452	472HS102-9	
1.322	33.579	472HS102-10	

SHIMS AND BEARING SPACERS

BEARING PRELOAD SPACER - J MODEL			
Inches	MM	Spicer Part Number	Spacer Kit
.718	18.237	042HS101-1	
.719	18.263	042HS101-2	
.720	18.288	042HS101-3	
.721	18.313	042HS101-4	
.722	18.339	042HS101-5	
.723	18.364	042HS101-6	
.724	18.390	042HS101-7	
.725	18.415	042HS101-8	
.726	18.440	042HS101-9	
.727	18.466	042HS101-10	
.728	18.491	042HS101-11	
.729	18.517	042HS101-12	
.730	18.542	042HS101-13	
.731	18.567	042HS101-14	042KV100-X
.732	18.593	042HS101-15	
.733	18.618	042HS101-16	
.734	18.644	042HS101-17	
.735	18.669	042HS101-18	
.736	18.694	042HS101-19	
.737	18.720	042HS101-20	
.738	18.745	042HS101-21	
.739	18.771	042HS101-22	
.740	18.796	042HS101-23	
.741	18.821	042HS101-24	
.742	18.847	042HS101-25	
.745	18.923	042HS101-26	

BEARING PRELOAD SPACER - W MODEL			
Inches	MM	Spicer Part Number	Spacer Kit
.893	22.682	474HS102-1	
.894	22.708	474HS102-2	
.895	22.733	474HS102-3	
.896	22.758	474HS102-4	
.897	22.784	474HS102-5	
.898	22.809	474HS102-6	
.899	22.835	474HS102-7	
.900	22.860	474HS102-8	
.901	22.885	474HS102-9	
.902	22.911	474HS102-10	
.903	22.936	474HS102-11	
.904	22.962	474HS102-12	
.905	22.987	474HS102-13	
.906	23.012	474HS102-14	474KV100-X
.907	23.038	474HS102-15	
.908	23.063	474HS102-16	
.909	23.089	474HS102-17	
.910	23.114	474HS102-18	
.911	23.139	474HS102-19	
.916	23.266	474HS102-20	

KITS

RING GEAR AND PINION			
Ratio	J Model	W Model	Included Items
3.54	597236C91	597247C91	Forward Rear 31, 32, 42
3.73	597237C91	597248C91	
3.91	597238C91	597249C91	
4.10	597239C91	597250C91	
4.44	597240C91	597251C91	
4.78	597241C91	597252C91	
5.38	597242C91	597253C91	Rear Rear 1, 12
6.14	597243C91	597254C91	
6.57	597244C91	597255C91	
7.17	597245C91	597256C91	
8.17	597246C91	----	

DIFFERENTIAL PARTS

Description	J340-S	J380-S	J400-S	W440-S & W460-S
2" x 39 Spline	472KS108-X	472KS108-X	----	----
2- ¹ / ₈ " x 41 Spline	----	----	472KS109-X	----
2- ³ / ₈ " x 46 Spline	----	----	----	472KS110-X

DIFFERENTIAL CASE WITH BOLTS

Ratio	J Model	W Model	Included Items
3.54	586702C91	586703C91	Forward Rear 53, 54, 61, 62
3.73 thru 4.44	493204C91	493206C91	Rear Rear 23, 24, 31, 32
4.78 thru 8.17	493205C91	493207C91	

BEARINGS AND SEALS

Description	J Model	W Model	Included Items
Power Divider and Forward Rear Axle	472KS113	474KS102	3, 7, 8, 10, 13, 14, 19, 20, 34, 35, 40, 41, 43, 51, 52, 70, 73
Rear Rear Axle	472KS101	474KS101	3, 5, 6, 11, 13, 21, 22

POWER DIVIDER LOCK

Description	J Model	W Model	Included Items
Shift Cylinder Kit	472SU100X	472SU100X	26, 27, 28, 29, 30

POWER DIVIDER

Description	J Model	W Model	Included Items
Inter-axle Differential With Cover	472KS111-X	472KS111-X	1, 3, 5, 5A, 6, 7, 8, 9, 10, 11A, 11, 13, 14
Inter-axle Differential Assembly	472KS112-X	472KS112-X	1, 9
* Inter-axle Differential Parts	472KS102-X	472KS102-X	Item 9 contents

* For use with bolted Inter-Axle Differential Case

No-SPIN® ASSEMBLIES

Description	J340-S	J380-S	J400-S	W440-S & W460-S
2 x 39 Spline	390GN102	390GN102	----	----
2- ¹ / ₈ " x 41 Spline	----	----	390GN100	----
2- ³ / ₈ " x 46 Spline	----	----	----	057GN100



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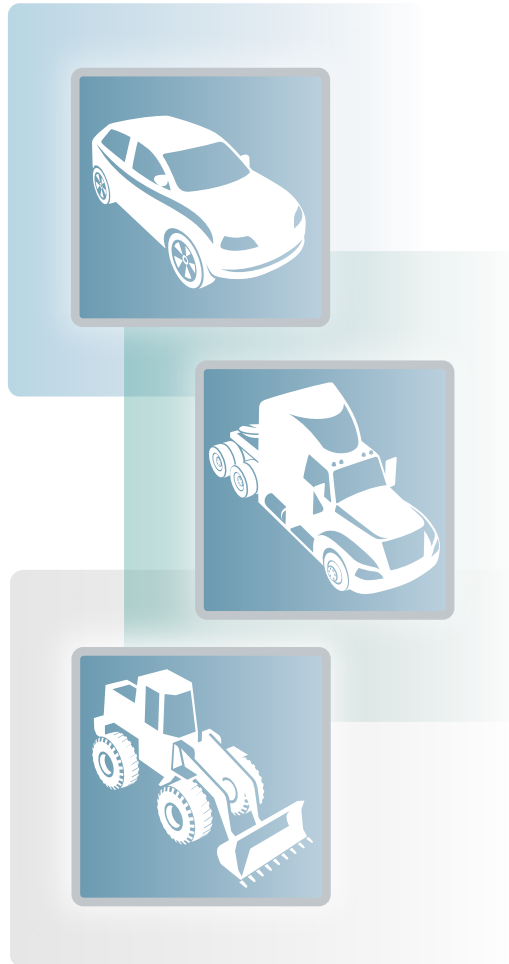
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