

# Roadranger®

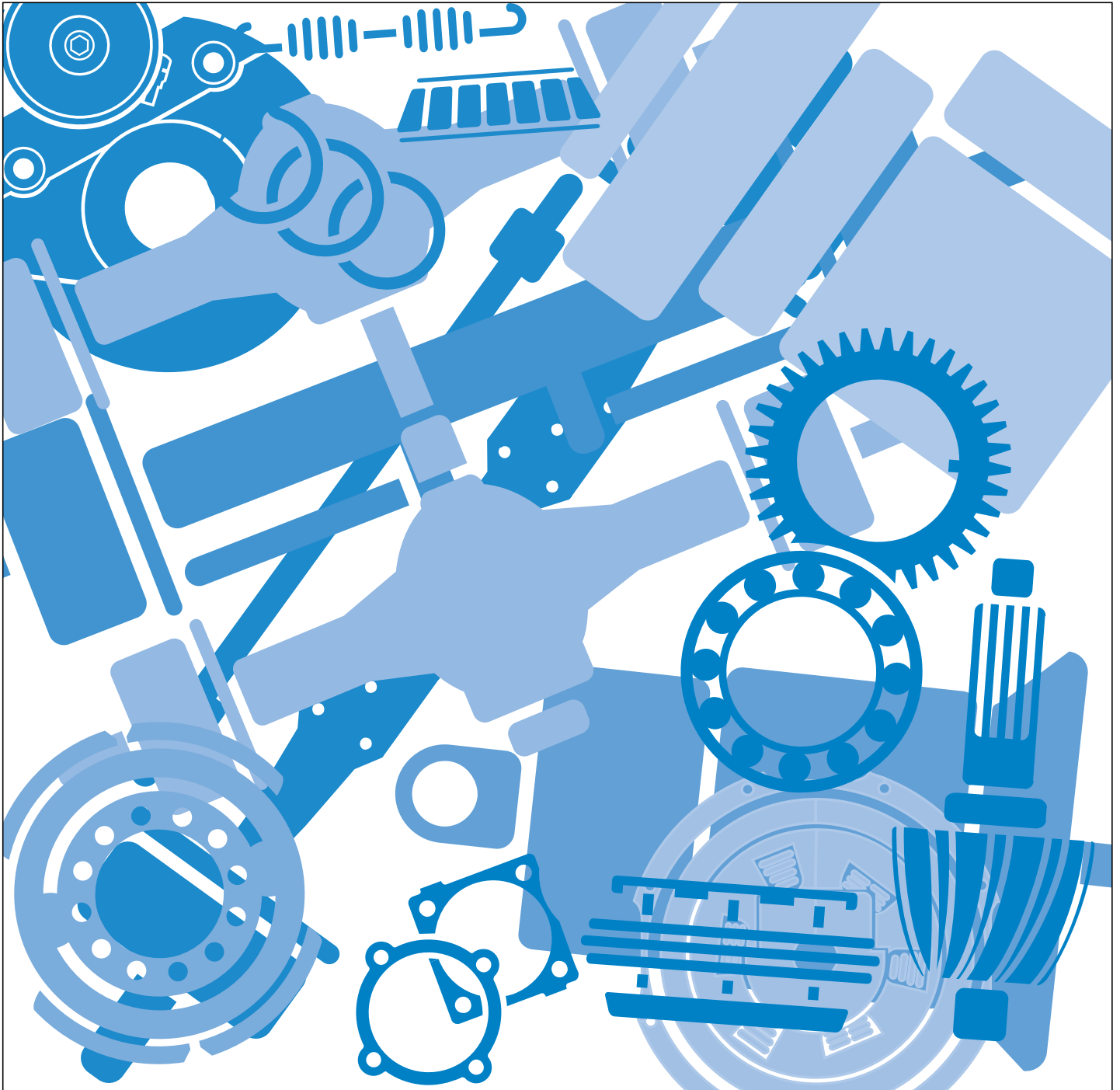
## Dana® Spicer® Drive Axles

DSP40-(P), DSP41-(P), DDP40-(P), DDP41-(P),  
RSP40, RSP41, RDP40, RDP41



One Great Drivetrain from Two Great Companies

Illustrated Parts List AXIP-0240 January 2003



For the most current information, visit the Roadranger web site at [www.roadranger.com](http://www.roadranger.com)



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## General Information

### How To Use Illustrated Parts List

#### Ordering Parts

- This parts book is organized in sections according to parts servicing requirements. Use the Contents or page headings and colored tabs to find information.
- Use this book to order parts for your Dana® Spicer® Axle.
- For convenience, part numbers have been included for all pieces of the carrier assembly. Some of these parts, such as the carrier and caps, are serviced only in kits or assemblies. Part numbers are for your reference only. Those parts not serviced separately are identified with NSS.

#### Kits and Assemblies

- Kits and Assemblies contain groups of individual or assembled parts developed for optimal replacement or repair of a service problem.
- Kits and Assemblies are shown with applicable parts groupings in the parts listing.
- See the Appendix for detailed information concerning kits applicable to this model.

#### Abbreviations

- **AR - 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. Example: brake shoes.
- **RH/LH - Right Hand/Left Hand** - Determined as viewed from behind the vehicle looking forward.
- **“RTV” - Gasket Compound** - Formed-in-place gasket sealer. It is recommended for use on all surfaces requiring a gasket.
- **Assy - Assembly**
- **Brg - Bearing**

- **Diff - Differential**
- **Hsg - Housing**
- **Inv - Involute**
- **IASS - In Axle Speed Sensor**
- **ABS - Antilock Brake System**
- **N/A - Not Applicable**
- **Str - Straight**

#### Illustrations

- Illustrations show parts in assembly groups.
- Item numbers on illustrations correspond with parts listings on pages that accompany the drawings.
- Notes are included on illustrations where needed.

#### Parts Listings

- Parts listings are defined by parts groupings and are broken down by service assemblies.
- Parts Listings identify a part for servicing with the following categories:
  - **Item** - corresponds with numbers on illustrations for part identification
  - **Part Name** - specifies part name or description
  - **Quantity (Qty)** - quantity required for assembly
  - **Current Part** - service part numbers are broken down by model, type or other applicable information
  - **Notes** - define unique characteristics or replacement notes
  - **Kits / Assy's Where Used** - indicates Kits or Assemblies that contain a particular part
- *Other pertinent information is listed in tables or parts listings as required.*

### Effectively using a Parts Listing - Example

- Follow the example below to locate and order exactly what is required for servicing.

Match to items on illustration	Use to identify Part	Order this quantity for servicing	Order Part Number by Model indicated		Indicated information important to ordering or use
Item	Part Name	Qty	DSP-40	DDP-40	Remarks
1	Axle Shaft	2	123456	789101	See Axle Shaft Chart
2	Flat Washer	4	246841	121416	

#### Kits and Assemblies

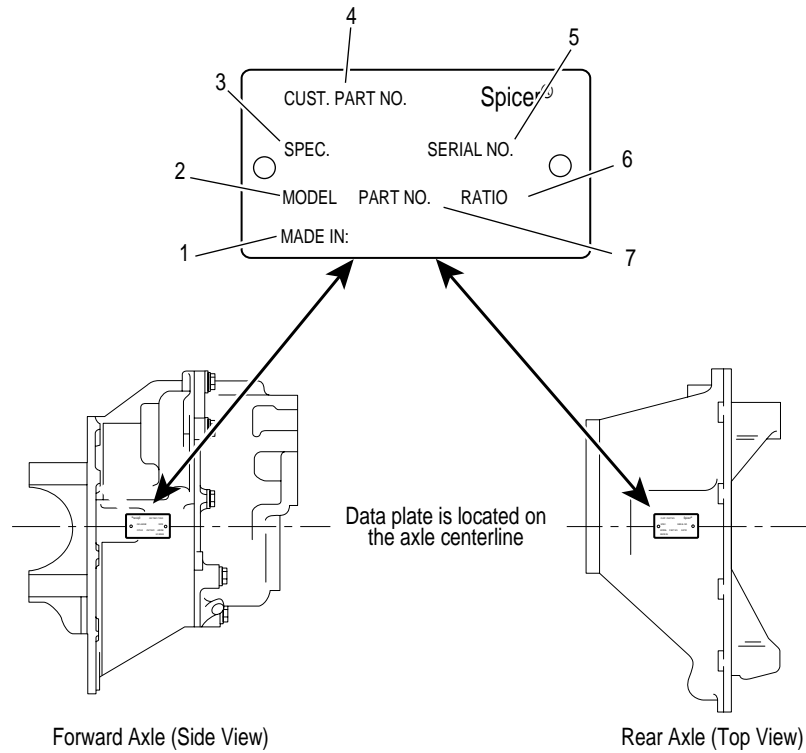
Oil Seal & Shim Kit	216225	Includes 29-30, 36
Basic Overhaul Kit	216221	Contents Identified with *

## Model Identification

### Locating Model Designation Information

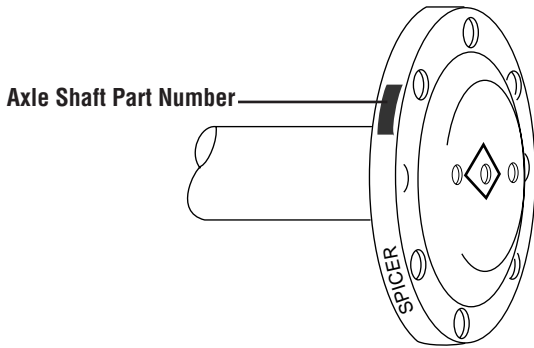
- Axle Model Identification, Part Number and Serial Number are located on a tag at the axle centerline. This information will help to locate information in this book and to identify the correct parts for servicing.

### Drive Axles



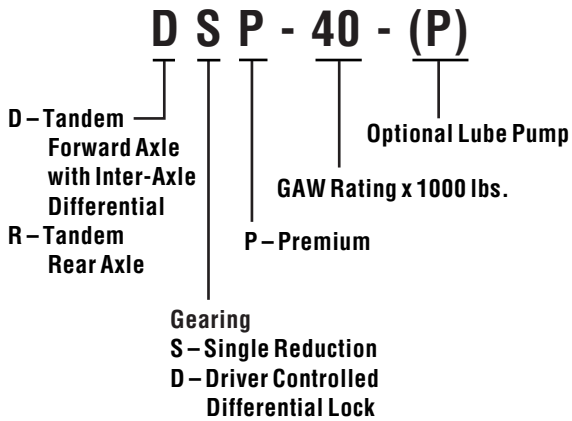
- 1 – Country or origin
- 2 – Axle model identification
- 3 – Specification number assigned to the axle built by Spicer. Identifies all component parts of the axle including special OEM requirements such as yokes or flanges.
- 4 – OEM part number assigned to the axle build
- 5 – Carrier assembly serial number assigned by the manufacturing plant
- 6 – Axle gear ratio
- 7 – Carrier assembly production or service part number

## Identification

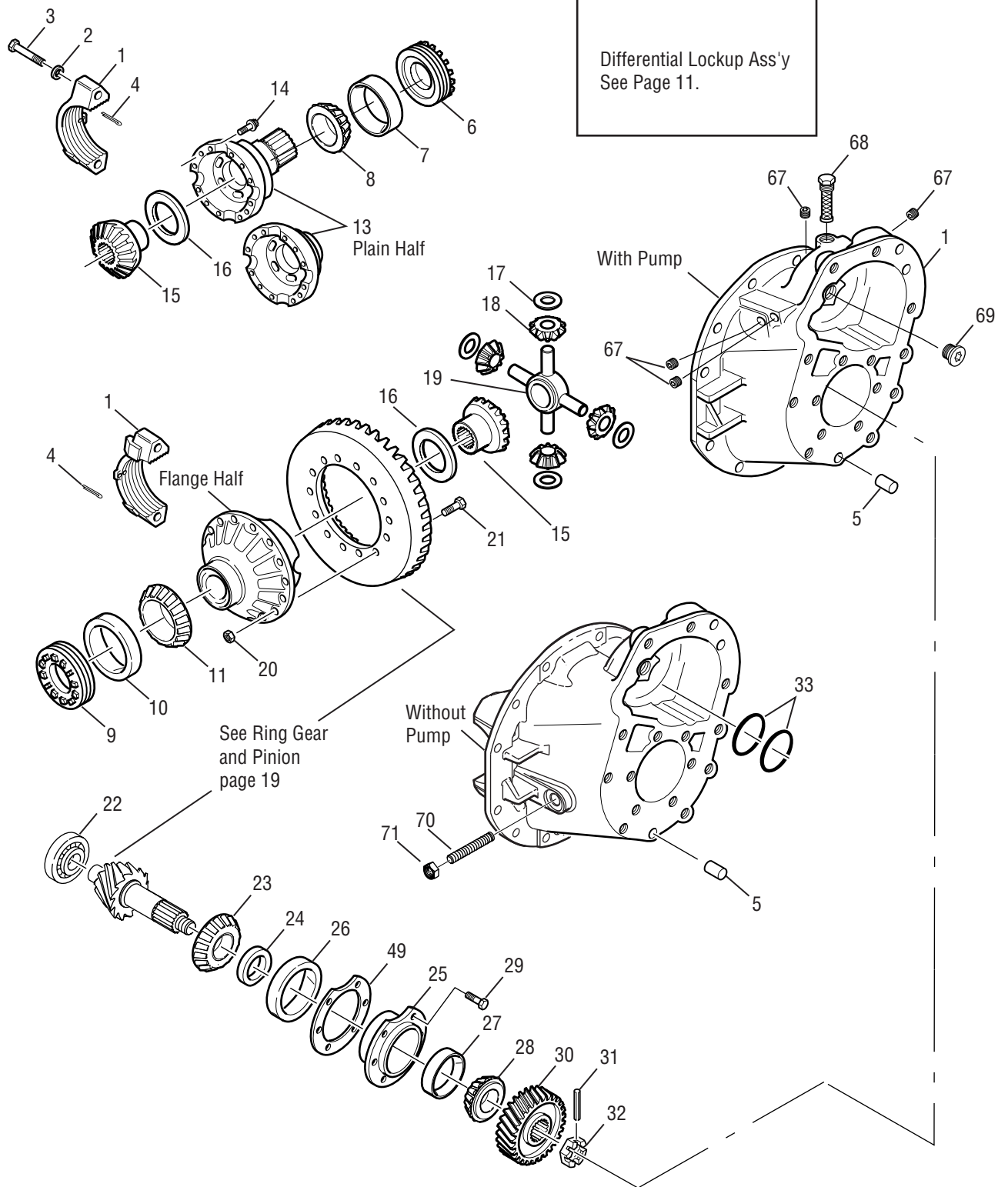


### Using Model Designation to Identify Axle Components

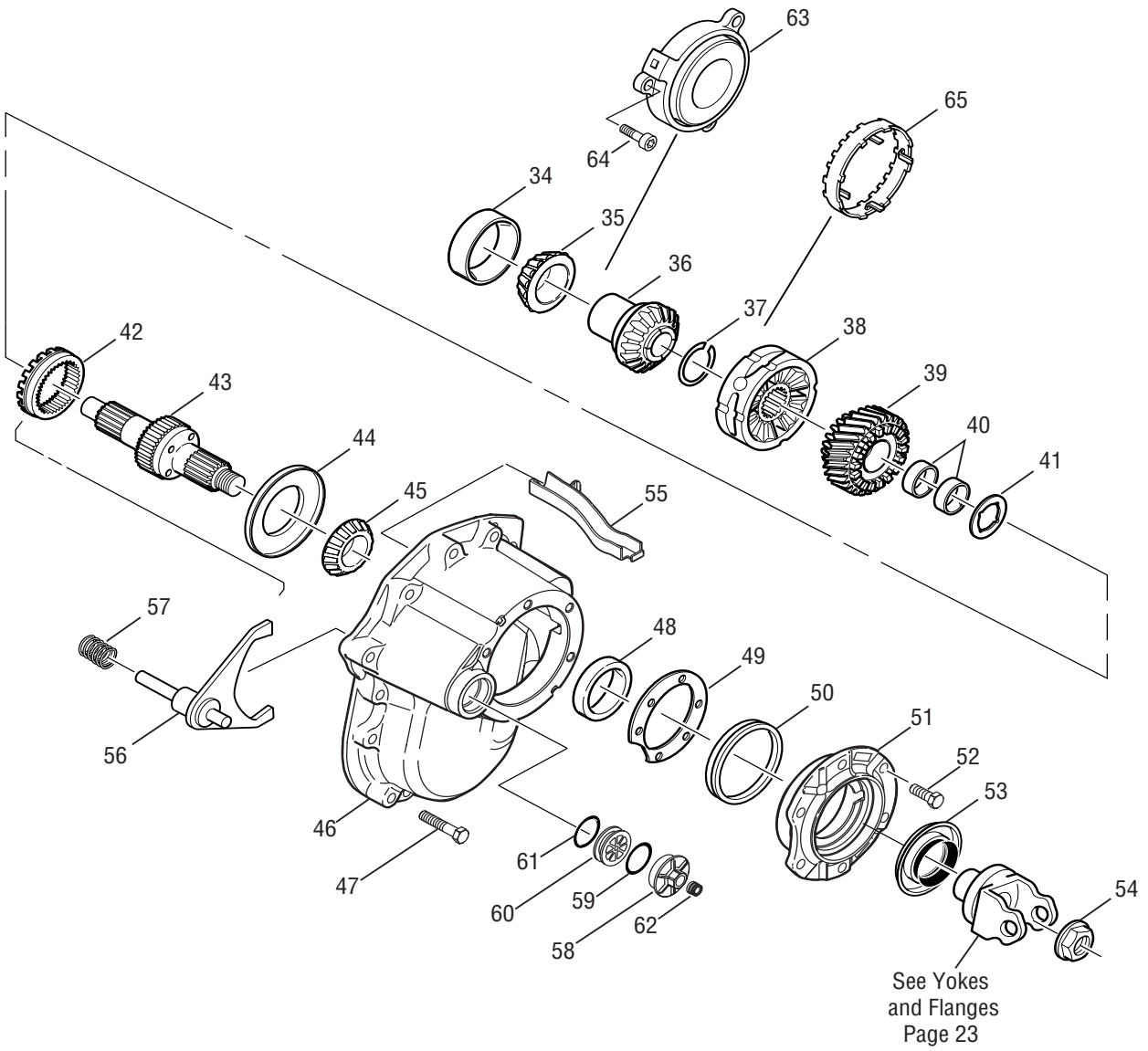
The Axle Model Identification number contains information that is important to understand when purchasing service parts or new components. The Model Identification number provides important vehicle, capacity and application information and model features. Use this guideline to understand your Axle Model Identification. If you need assistance, contact your Roadranger representative.



# Forward Axle Parts Explode



# Forward Axle Parts Explode





## Forward Axle Parts List

Item	Part Name	Qty	DSP40-(P) DSP41-(P)	DDP40-(P) DDP41-(P)	Remarks
	<b>BASIC OVERHAUL KIT</b>		510393	510399	Contents Identified with •
1	Diff Carr & Brg Caps Kit (Includes: 1-3, 5, 71-72) See Note 1				
	DSP40, 41 Non-Pump		510023	-	Casting #130809 See Note 1
	DSP40-P, 41-P Pump		510024	-	Casting #129551
	DDP40, 41 Non-pump		-	510027	Casting #129550
	DDP40-P, 41-P Pump		-	510028	Casting #129550
2	Flat Washer	4	210288	210288	
3	Capscrew	4	210095	210095	
4	Cotter Pin	2	90873	90873	
5	Dowel Pin	2	7641	7641	
6	Diff Brg Adjuster - Plain Half	1	129130	128616	
7	Brg Cup - Plain Half	1	129566•	15092•	
8	Brg Cone - Plain Half	1	129565•	128604•	
9	Diff Brg Adjuster - Flange Half	1	129128	129128	
10	Brg Cup - Flange Half	1	129564•	129564•	
11	Brg Cone - Flange Half	1	129563•	129563•	
	<b>WHEEL DIFF CASE KITS</b>				Includes items 12-14
12	Diff Case-RH (Flg Half)-NSS129464	1	508653	508724	Ratios 2.64 to 3.55
	NSS129465		508654	508725	Ratios 3.70 to 4.11
	NSS129466		508655	508726	Ratios 4.33 to 4.88
	NSS129467		508656	508727	Ratios 5.29 to 6.50
13	Diff Case-LH (Plain Half)-NSS	1	127498	128607	Order kits listed above
14	Capscrew	12	127465	128619	
	<b>WHEEL DIFF SIDE GEAR KIT</b>				Includes items 15-19
	41 Inv spline		510397	510397	
	<b>WHEEL DIFF KIT w/o SIDE GEARS</b>		510396	510396	Includes items 16-19
15	Side Gear 41 Inv spline	2	127368	127368	
16	Side Gear Thrust Washer	2	127386•	127386•	
17	Side Pinion Thrust Washer	4	129305•	129305•	
18	Side Pinion	4	129765	129765	
19	Diff Spider	1	129599	129599	

• Included in Basic Overhaul Kit 510393 / 510399.

**Note 1:** On June 3, 2002, the design of carrier mounting flange of the DSP40, 41 and RSP40, 41 models changed. The new carrier's are designed with a "Thick Flange". Carriers designed with a "Thick Flange" require the use of "long" capscrews. The fastening hardware for these models can be found on pages 16-18 of this IPL. Refer to Dana bulletin abib-0210 for further details.

## IMPLEMENTATION DATES:

- |                    |              |
|--------------------|--------------|
| • DSP40, DSP41     | June 3, 2002 |
| • Pump Models      | No Change    |
| • Diff-Lock Models | No Change    |

## CARRIER CASTING REFERENCE - FORWARD MODELS:

- |                   |                     |                             |
|-------------------|---------------------|-----------------------------|
| • Casting #130809 | Thick Flange Design | Replaces Casting #129540    |
| • Casting #129540 | Original Design     | Replaced by Casting #130809 |

## Forward Axle Parts List

Item	Part Name	Qty	DSP40-(P) DSP41-(P)	DDP40-(P) DDP41-(P)	Remarks
	RING GEAR NUT & BOLT KIT		508652	508652	Includes items 20-21
20	Nut	16	126216	126216	
21	Bolt	16	129686	129686	
22	Pinion Pilot Brg	1	127484•	127484•	
23	Pinion Brg Cone - Inner	1	129560	129560	
24	Pinion Brg Spacer	AR			Pinion Bearing Spacer pg. 15
25	Pinion Brg Cage & Cup Assy Cage #127488C NSS	1	129767	129767	Includes item 25-27
26	Pinion Brg Cup - Inner	1	129561•	129561•	
27	Pinion Brg Cup - Outer	1	12495•	12495•	
28	Pinion Brg Cone - Outer	1	127535•	127535•	
29	Capscrew	6	210115	210115	
30	Pinion Helical Gear	1	127523	127523	
31	Roll Pin	1	118807	118807	
32	Slotted Pinion Nut	1	126182	126182	
33	Output Shaft O-Ring	2	127545•	127545•	
34	Output Shaft Brg Cup	1	127536•	127536•	
35	Output Shaft Brg Cone	1	110812•	110812•	
36	Output Shaft Side Gear	1	127645	127645	
37	Snap Ring	1	85997•	85997•	
38	Inter-Axle Diff Assy	1	128634	128634	
39	Helical Side Gear & Bushing Assy Gear #127494 NSS (Incls item 40)	1	127495	127495	
40	Helical Gear Bushing	2	129371	129371	Replaces 127543
41	Helical Gear Thrust Washer	1	128702•	128702•	
42	Lockout Sliding Clutch	1	127510	127510	
43	INPUT SHAFT KIT / SHAFT #128704 NSS	1	510394	510394	Includes Items 41, 43, 54
44	Oil Retainer	1	128700•	128700•	
45	Input Shaft Bearing Cone	1	820643	820643	
46	PDU Cover	1	130823	130823	See Note 2 Replaced 129572
47	Capscrew Long	11	210091	210091	See Note 2
48	Bearing Cup	1	1008912	1008912	

• Included in Basic Overhaul Kit 510393 / 510399.

**Note 2:** On June 3, 2002, the design of the power divider cover changed. The original PDU covers (P/N: 129572) have 9 holes and require 9 fasteners. The current design PDU covers (P/N: 130823) have 11 holes and require the use of 11 long fasteners. The new 130823 PDU covers now replace the 129572 covers in service.

- The 9-hole PDU cover will NOT work on a carrier machined with 11 holes.
- A new 11-hole PDU cover will adapt to a 9-hole carrier without modifications. Refer to Dana bulletin abib-0210 for further details.

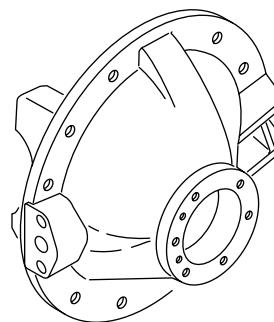
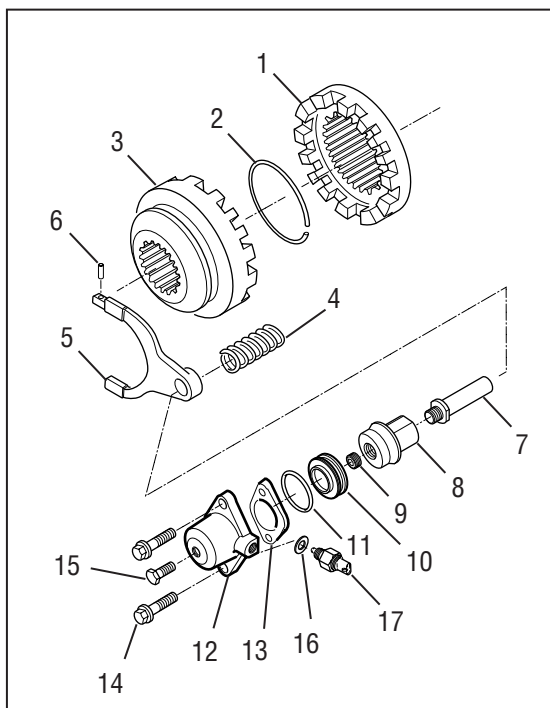
## Forward Axle Parts List

Item	Part Name	Qty	DSP40-(P) DSP41-(P)	DDP40-(P) DDP41-(P)	Remarks
	OIL SEAL & SHIM KIT	1	216224	216224	Includes items 49, 53 & 127592 Oil Seal Page 16
49	Shim.003	AR	127595•	127595•	
	Shim.005		127596•	127596•	
	Shim.010		127597•	127597•	
	Shim.020		127598•	127598•	
	Shim.030		127599•	127599•	
50	Oil Seal-V-Ring	1	128703•	128703•	
51	Input Brg Cover Assy - #129574C	1	129575	129575	Includes item 48
52	Bearing Cover Cap Screw	6	210115	210115	
53	Oil Seal	1	127591•	127591•	
54	Locknut	1	128049	128049	In 510394 Kit (M42x1.5)
55	Lube Trough	1	129577	129577	
	AIR LOCKOUT KIT - COMPLETE	1	510052	510052	Includes items 56, 57, 59, 61, 62
	REPAIR KIT	1	510053	510053	Includes items 59, 61, 62
56	Shift Fork Assy - NSS	1	129856	129856	Order Kit 510870
57	Compression Spring	1	129859	129859	
	SHIFT FORK & COMPRESSION SPRING KIT	1	510870	510870	Includes 56 and 57
58	Piston Cover Assy	1	129573	129573	Includes Cover #129578 & #62
59	O-Ring	1	129579	129579	
60	Piston	1	129580	129580	
61	O-Ring	1	210180	210180	
62	Shipping Plug	1	599792	599792	
63	Lube Pump Assembly	1	127534	127534	Pump Models Only
64	Capscrew	3	127551	127551	Pump Models Only
65	Drive Coupling - Service	1	128628	128628	Pump Models Only
66	Pipe Plug	4	90897	90897	Pump Models Only
67	Filter Screen Assy	1	127649	127649	Pump Models Only
68	Poppet Valve Plug	1	90897**	90897**	Pump Models Only
69	Thrust Screw	1	126193	126193	
70	Jam Nut	1	210184	210184	
71	RTV - Sealant	1	107276S•	107276S•	Not Illustrated

• Included in Basic Overhaul Kit 510393 / 510399.

\*\* For models designed after 1997 (.375"-18 thread). Before 1997 use 19411.

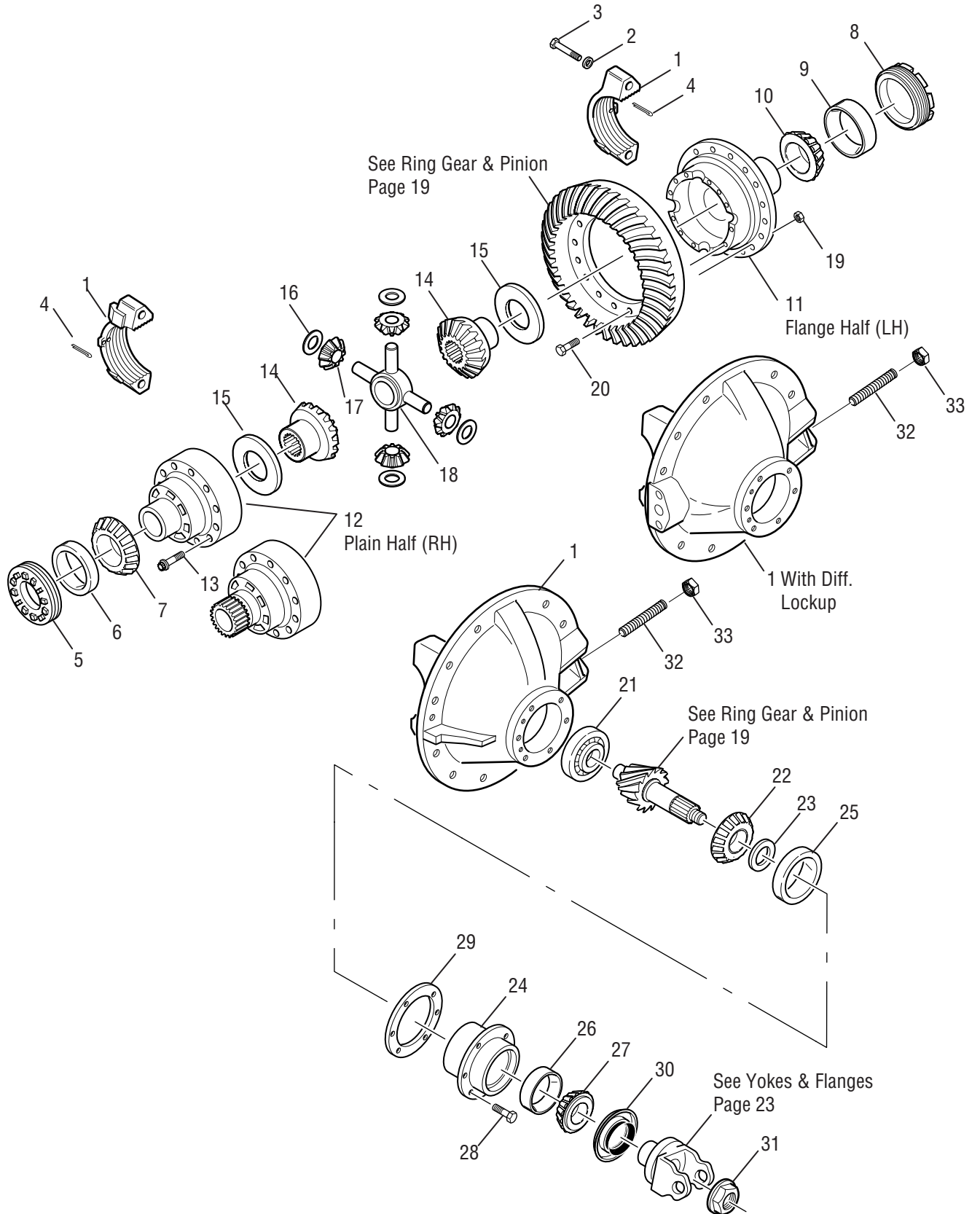
## Wheel Differential Lock Assembly



Rear carrier illustrated above.  
Parts for forward carrier are identical to the rear carrier.

Item	Part Name	Qty	DDP40-(P) DDP41-(P) RDP40 RDP41	Remarks
1	Fixed Curvic Clutch Gear	1	128627	
2	Snap Ring	1	129433	
3	SL Curvic Clutch Gear - 41 Inv spline	1	126840	
4	Compression Spring	1	128614	
	SHIFT FORK ASSY		217465	Includes items 5-6
5	Shift Fork - 128609 NSS	1		
6	Spring Pin	1	210020	
7	Push Rod	1	128617	
8	Piston Driver	1	128640	
9	Set Screw	1	128618	
10	Piston	1	128624	
11	O-Ring	1	210180	
12	Piston Cover	1	129425	
13	Gasket	1	128643	
14	Capscrew - Flg Head	2	128744	
15	Capscrew	1	128274	M12 x 1.5
16	Washer	1	129034	
17	Switch	1	129035	
18	Wiring Harness	1	129047	

Rear Axle Parts Explode



## Rear Axle Parts List

Item	Part Name	Qty	RSP40 RSP41	RDP40 RDP41	Remarks
	<b>BASIC OVERHAUL KIT</b>		510398	510400	Contents Identified with •
1	Diff Carr & Brg Caps Kit				
	Includes 1 - 3, 32 - 33		510018	-	Casting # 130824 See Note 1
			-	510017	Casting # 128600C
2	Flat Washer	4	210288	210288	
3	Capscrew	4	210095	210095	
4	Cotter Pin	2	90873	90873	
5	Diff Brg Adjuster - Plain Half	1	129130	128616	
6	Bearing Cup - Plain Half	1	129566•	15092•	
7	Bearing Cone - Plain Half	1	129565•	128604•	
8	Diff Brg Adjuster - Flange Half	1	129128	129128	
9	Bearing Cup - Flange Half	1	129564•	129564•	
10	Bearing Cone - Flange Half	1	129563•	129563•	
	<b>WHEEL DIFF CASE KITS</b>				Includes items 11-13
11	Diff Case-LH (Flg Half)-NSS129464	1	508653	508724	Ratios 2.64 to 3.55
	Diff Case-LH (Flg Half)-NSS129465		508654	508725	Ratios 3.70 to 4.11
	Diff Case-LH (Flg Half)-NSS129466		508655	508726	Ratios 4.33 to 4.88
12	Diff Case-RH(Plain Half)-NSS	1	127498	128607	Order kits listed above
13	Capscrew	12	127465	128619	
	<b>WHEEL DIFF SIDE GEAR KIT</b>		510397	510397	Includes items 14-18
	<b>WHEEL DIFF KIT w/o SIDE GEARS</b>		510396	510396	Includes items 15-18
14	Side Gear 41 Inv spline	2	127368	127368	
15	Side Gear Thrust Washer	2	127386•	127386•	
16	Side Pinion Thrust Washer	4	129305•	129305•	
17	Side Pinion	4	129765	129765	
18	Diff Spider	1	129599	129599	

• Included in Basic Overhaul Kit 510398 / 510400.

**Note 1:** On June 3, 2002, the design of carrier mounting flange of the DSP40, 41 and RSP40, 41 models changed. The new carrier's are designed with a "Thick Flange". Carriers designed with a "Thick Flange" require the use of "long" capscrews. The fastening hardware for these models can be found on pages 16-18 of this IPL. Refer to Dana bulletin abib-0210 for further details.

## IMPLEMENTATION DATES:

- RSP40, RSP41 June 3, 2002
- Diff-Lock Models No Change

## CARRIER CASTING REFERENCE - REAR MODELS:

- Casting #130824 Thick Flange Design Replaces Casting #129541C
- Casting #129541C Original Design Replaced by Casting #130824

## Rear Axle Parts List

Item	Part Name	Qty	RSP40 RSP41	RDP40 RDP41	Remarks
	<b>RING GEAR NUT &amp; BOLT KIT</b>		<b>508652</b>	<b>508652</b>	<b>Includes items 19-20</b>
19	Nut	16	126216	126216	
20	Bolt	16	129686	129686	
21	Pinion Pilot Brg	1	127485•	127485•	
22	Pinion Brg Cone - Inner	1	129562•	129562•	
23	Pinion Brg Spacer	AR			Pinion Bearing Spacer pg. 15
24	Pinion Brg Cage & Cup Assy Cage #127481C NSS	1	129768	129768	Includes items 24-26
25	Pinion Brg Cup - Inner	1	129561•	129561•	
26	Pinion Brg Cup - Outer	1	12495•	12495•	
27	Pinion Brg Cone - Outer	1	12496	12496	
28	Capscrew	6	210115	210115	
	<b>OIL SEAL &amp; SHIM KIT</b>		<b>216225</b>	<b>216225</b>	<b>Includes items 29-30, 34</b>
29	Shim.003	AR	127595	127595	
	Shim.005		127596•	127596•	
	Shim.010		127597•	127597•	
	Shim.020		127598•	127598•	
	Shim.030		127599•	127599•	
30	Oil Seal	1	127591•	127591•	
31	Pinion Nut	1	127589	127589	M36 x 1.5
32	Thrust Screw	1	126193	126193	
33	Jam Nut	1	210184	210184	
34	RTV - Sealant	1	107276S•	107276S•	Not Illustrated

• Included in Basic Overhaul Kit 510398 / 510400.

NSS - Not Sold Separately

## Bearing Spacers

### DSP40-(P), 41-(P) DDP40-(P), 41-(P)

Part Number	Spacer Thickness
129079	.797
129080	.798
129081	.800
129082	.801
129083	.802
129084	.803
129085	.804
129086	.806
129087	.807
129088	.808
129089	.809*
129090	.810*
129091	.811*
129093	.812*
129097	.814*
129099	.815*
129101	.816*
129103	.817*
129105	.818*
129107	.819*
129109	.820*
129111	.821
129113	.822
129115	.823
129117	.824
129119	.825
129120	.826
129121	.828
129122	.829
129123	.830
129124	.831
129125	.832
129126	.833

\* Most Popular

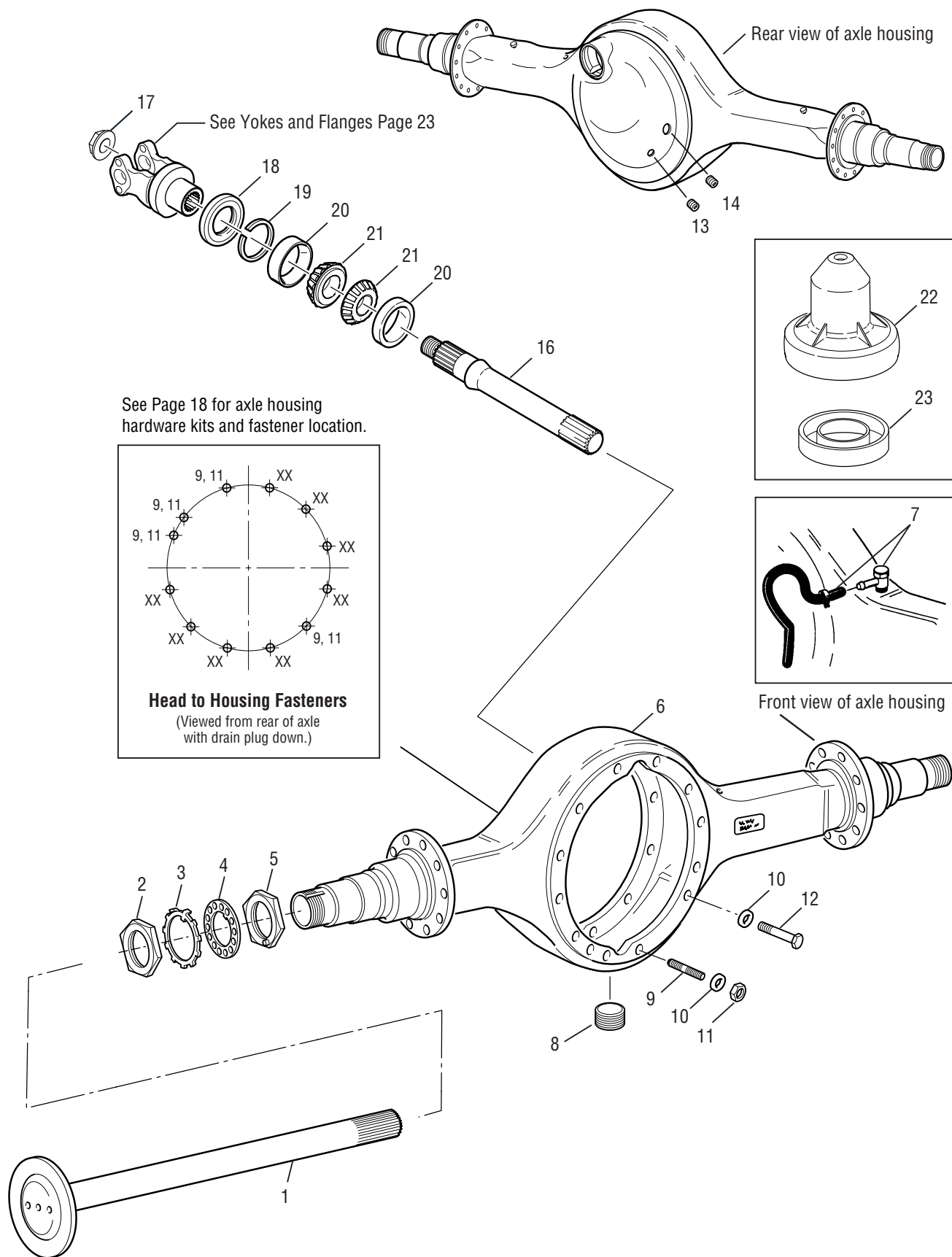
### RSP40, 41 RDP40, 41

Part Number	Spacer Thickness
91552	.623
91553	.624
91554	.625
91555	.626
91556	.627
91557	.628
91558	.629
91559	.630
91560	.631
91561	.632
91562	.633
91564	.634*
91566	.635*
91568	.636*
91572	.637*
91576	.638*
91580	.639*
91584	.640*
91588	.641*
91592	.642*
91596	.643*
91600	.644*
91602	.645
91604	.646
91606	.647
91608	.648
91610	.649
91611	.650
91612	.651
91613	.652
91614	.653
91615	.654

\* Most Popular



Output Shaft & Axle Housing Parts Explode



## Output Shaft & Axle Housing Parts List

Item	Part Name	Qty	Part No.	Remarks
1	Axle Shaft	2		Axle Shaft Chart Pg. 20
2	Outer Bearing Adjuster Nut	2	119881	
3	Lockwasher - w/Tab	2	129132	
4	Dowel-Type Lockwasher	2	119883	
5	Inner Bearing Adjuster Nut	2	119882	
6	Axle Housing Assy	1		See your OEM Catalog
7	U-Tube Breather Kit	1	507162	
8	Magnetic Drain Plug - 3/4"	1	54254	All D/R models
9 -12	Carrier to Hsg Fasteners			See Page 18
13	Non-Magnetic Plug 3/4"	1	129492	
13	Magnetic Plug - 3/4"	1	129491	
14	Temperature Sensor Plug 1/2"	1	90898	
15	Lube Tag (for 3/4" Plug)	1	129486	Part - Not Illustrated
	<a href="#">OUTPUT SHAFT KIT</a>	<a href="#">1</a>	<a href="#">216227</a>	<a href="#">Includes Items 16-17</a>
16	Output Shaft - #127646 NSS			
17	Locknut - Hex	1	127588	M39 x 1.5
18	Oil Seal	1	127592•	
19	Snap Ring .103"	1	129594•	
20	Bearing Cup	2	127539•	
21	Bearing Cone	2	127540•	
22	Seal Driver	1	126917	In Kit 217414 - See Page 26
23	Adapter	1	128706	In Kit 217414 - See Page 26
24	Loctite Adhesive	1	129293	Not Illustrated, .5 ml Tube
25	RTV - Sealant	1	107276S	Not Illustrated, 3 oz. Tube

NSS - Not Sold Separately

### SUMMARY OF KITS AND ASSEMBLIES

<a href="#">Axle Hsg Hardware Kits</a>		<a href="#">See Page 18</a>
<a href="#">Oil Seal Driver Installation Kit</a>	<a href="#">217414</a>	<a href="#">Reference page 24</a>
<a href="#">Output Shaft Kit</a>	<a href="#">216227</a>	<a href="#">Includes Items 16-17</a>

## Carrier Mounting Flange Design Change

Beginning June 3rd, 2002, the nominal thickness of the carrier to housing flange was increased in the DSP40, DSP41, RSP40 and RSP41 models. This change required the use of new fastener parts. A new (45mm) capscrew (P/N 130836) was released as it replaced both 210173 and 130158 old design capscrews. Additionally, a much thicker boss was added to the flange at the 12:00 & 6:00 o'clock positions. These new thicker flange bosses require an even longer (70mm) capscrew (P/N 130837). A thicker and larger diameter flat washer (P/N 130877) was also released as part of this upgrade. The new washer replaces existing washer 29804. The existing stud (P/N 127641) and nut (P/N 127567) are not affected by these changes and will continue to be used.

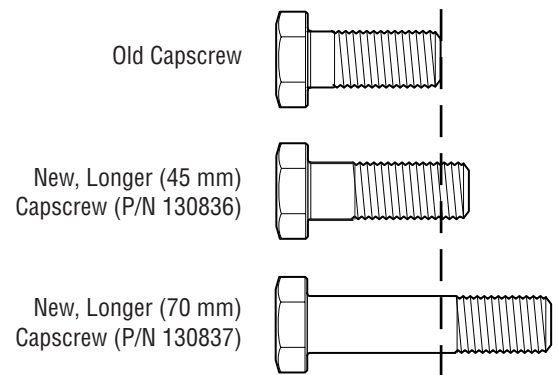
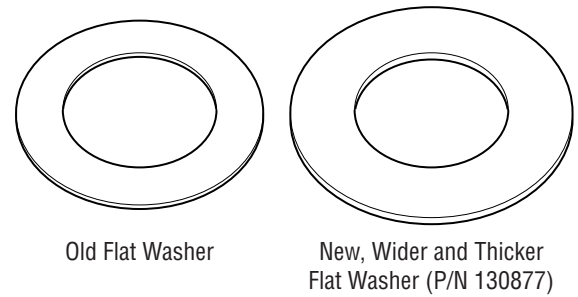
**Note:** Dana models with Wheel Differential Lock and Lube Pump options do not have "Thick Flange" carriers as of this publication. The upgrade for these particular models will take place 1st quarter 2003.

### EXCHANGE CARRIER NOTE:

Due to the popularity of the Dana Carrier Exchange program, stock levels of both early design carriers and new "Thick Flange" design carriers exist. If you have a vehicle that was originally equipped with a Dana axle built with the "Thick Flange" carrier design, it can be universally serviced with an early style (Thin Flange) Carrier Exchange Assembly. The repairing dealer must simply make sure to use the correct axle housing hardware parts when installation is done. New exchange carriers built with the thick flange design, will include the necessary thick flange hardware kit to minimize any down time to the customer.

- Differentials with "THICK FLANGE" carriers use axle housing hardware kit (P/N 512087).
- Early design differentials with "THIN FLANGE" carriers use axle housing hardware kit (P/N 511600).
- GM Vehicles requires the use of double-ended capscrews at the housing fastener location. Double-ended capscrews for thick flange design carriers are not available at this time. GM vehicles must be serviced with early design carriers.

## New Axle Housing Fasteners



### IMPORTANT!

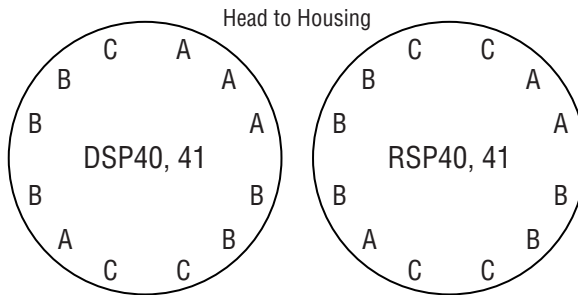
Dana does not recommend the mixing of various designs carrier-to-housing capscrews on the same assembly. Whether mixing or not, torques must be measured using a calibrated torque wrench. Failure to re-torque bolts and nuts to proper specifications may lead to carrier to housing leaks and possible component damage.

## Axle Housing Fasteners

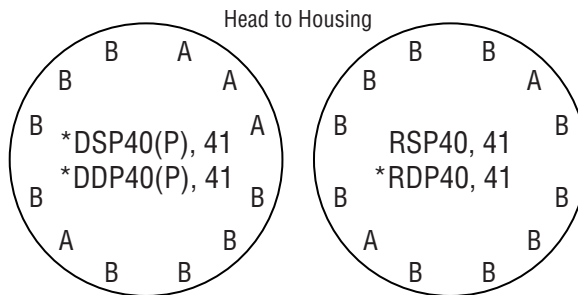
On June 3, 2002 the DSP40, 41, RSP40, 41 models were upgraded to the new "Thick Flange" carrier design as fully detailed in Dana bulletin AXIP-0210r1. Shown below are the axle housing hardware kits and fastener locations for both variations. View fastener locations as if installing differential into the axle housing.

**Note:** GM models require a special double-ended capscrews. They continue to use carriers with the original design thin flange. At this time Dana does not have a double-ended capscrew for "Thick Flange" models.

### Thick Flange – After 6/3/02



### Original Design Flange – Before 6/3/02\*



- A – 127641 Studs & 127567 Nuts
- B – 130836 Capscrews – Short (45 mm)
- C – 130837 Capscrews – Long (70 mm)
- D – 130877 Flat Washers – All Locations

\*Dana models with Wheel Differential Lock and Lube Pump options do not have "Thick Flange" carriers as of this publication. The upgrade for these particular models will take place first quarter 2003.

### 512087 Hardware Kit (Thick Flange)

Part No.	Qty.	Description
107276S	1	RTV Sealant 3 oz. Tube
127567	4	Nut
127641	4	Stud
129293	1	Loctite 271 0.5 ml. Tube
130836	8	Capscrew (45 mm) - Short
130837	4	Capscrew (70 mm) - Long
130877	12	Washer
shais 136	1	Instruction Sheet - Thick Flange

### 511600 Hardware Kit

Part No.	Qty.	Description
107276S	1	RTV Sealant 3 oz. Tube
127567	4	Nut
127641	4	Stud
129293	1	Loctite 271 0.5 ml. Tube
130836	10	Capscrew (was 130158)
130877	12	Washer (was 29804)
shais 131	1	Instruction Sheet

## Casting & Service Parts Cross-Reference Listing

Below are two helpful cross-reference charts. Chart-A shows "casting" numbers that can quickly identify the old design parts versus the new design parts. Chart-B is a "service parts" cross-reference listing. The part numbers in this chart are sorted by part type; refer to the "New Part Description" column.

### Chart A: Part Number Cross-Reference - Casting Numbers

New Casting Part No.	Old Casting Part No.	Description	Model
130809	129539, 129540	Diff. Carrier Casting	DSP40, DSP 41
130814*	129550	Diff. Carrier Casting	DDP40, DDP40-P, DDP41, DDP41-P
130819*	129551	Diff. Carrier Casting	DSP40-P, DSP 41-P
130822	129571	PDU Cover Casting	All "D" Forward Carriers - 11 hole
130824	129351C, 129541	Diff. Carrier Casting	RSP40, RSP41
130827*	128600	Diff. Carrier Casting	RDP40, RDP41

\* New Thick Flange Carriers not in production yet, production to start 1st quarter 2003.

### Chart B: Part Number Cross-Reference - Service Parts

Current Service Part No.	Replaces Old Service Part No.	New Part Description	Notes
511600	None	Axle Hsg hardware Kit - Thin Flange Models	Use only in Models with Thin Flange Carrier Design
512087	None	Axle Hsg hardware Kit - Thick Flange Models	Use only in Models with Thick Flange Carrier Design
130836	130158, 210173	Capscrew - 45 mm	Use in All Models (New & Old Design)
130837	None	Capscrew - 70 mm	Use only in Models with Thick Flange Carrier Design
130158	NLA	Capscrew - 40 mm	Replaced by 130836 Capscrew
210173	NLA	Capscrew - 40 mm	Replaced by 130836 Capscrew
130877	29804*	Flat Washer	Use in All Models (New & Old Design) - *Old Part Not Obsolete
29804*	None	Flat Washer	Used only in Brake Assemblies - *Part Not Obsolete
130823	129572	PDU Cover - 11 hole	All "D" Forward Carriers (new cover uses 11 capscrews)
129572	NLA	PDU Cover - 9 hole	Replaced by 130823 PDU Cover
510023	Refer to Note 1	Carrier & Cap Kit	DSP40, DSP41
510024		Carrier & Cap Kit	DSP40-P, DSP41-P
510027		Carrier & Cap Kit	DDP40, DDP41
510028		Carrier & Cap Kit	DSP40-P, DSP41-P
510017		Carrier & Cap Kit	RDP40, RDP41
510018		Carrier & Cap Kit	RSP40, RSP41

**Note 1:** The Carrier & Cap kits have been optimized for service. New design carriers and hardware will be provided in kits when various model options are released through production.

## Axle Shafts

Axle shafts are used in "sets", have unequal shaft lengths and may be "location specific" or "Wheel Equipment specific".

DO NOT MISPLACE AXLE SHAFTS FROM THEIR INTENDED LOCATION.

### Axle Shafts - Single Reduction Models

Model	Part No.	Qty	Spline	Body O.D.	Shaft Length	Spline Length	Flange O.D.	Flange Holes
DSP40 RSP40	127437	1	41	38.976	1.87	4"	8.500	8(.635) STR
DSP41 RSP41	127438	1	41	43.307	1.87	4"	8.500	8(.635) STR

### Axle Shafts - Diff Lock Models

Model	Part No.	Qty	Spline	Body O.D.	Shaft Length	Spline Length	Flange O.D.	Flange Holes
DDP40 RDP40	127437	1	41	38.976	1.87	4"	8.500	8(.635) STR
DDP41 RDP41	128435	1	41	43.307	1.87	11"	8.500	8(.635) STR

## Gear & Pinion Kits

**Note:** The DSP/RSP40, 41 models are serviced with Gear/Pinion kits from other existing Dana models. Shown below are the original “production” gear and pinion part numbers used in current DSP/RSP40, 41 models. Order the correct service kit for the ratio you require. In all cases the durability of the

service gear sets provided for these models are equal to or better than the original product. For *identifying purposes only*, a detailed chart is provided showing the actual part numbers of the gear and pinion of each of the service kit.

### D - Forward Axle DSP/DDP40, DSP/DDP41

#### Pinion Nut Part No. 126182 Forward Axle Service Gear Kits

Ratio	Original Gear (NSS)	Original Pinion (NSS)	Tooth Combo	For Service Order Kit Part No.	Ring Gear Size (in.)
2.64	127387	127439	37/14	211462	14.9
2.85	127388	127440	37/13	211463	15.4
2.93	129531	129532	41/14	509423	15.4
3.08	127388	129716	37/12	510104	15.4
3.25	127389	130120	39/12	510105	15.4
3.36	127388	130121	37/11	510106	15.4
3.55	127389	130122	39/11	510107	15.4
3.70	127388	130123	37/10	510108	15.4
3.90	127389	130124	39/10	510109	15.4
4.11	127388	130125	37/9	510110	15.4
4.33	127389	130126	39/9	510111	15.4
4.63	127390	129733	37/8	510112	15.7
4.88	127391	129735	39/8	510113	15.7
5.29	127390	129816	37/7	511894	15.7
5.57	127391	129820	39/7	512147	15.7
6.17	127390	129843	37/6	510462	15.7
6.50	127391	127454	39/6	511571	15.7

#### Service Kit Identification Chart - Forward Axle

Service Gear/Pinion Kit	Gear Part No. in Svc Kit (NSS)	Pinion Part No. in Svc Kit (NSS)
211462	127387	127439
211463	127388	127440
509423	129531	129532
510104	129717	129716
510105	129721	129719
510106	129723	129722
510107	129721	129725
510108	129723	129727
510109	129721	129729
510110	129723	129730
510111	129721	129732
510112	129734	129733
510113	129736	129735
511894	129815	129816
512147	129819	129820
510462	129734	129843
511571	129736	127454

**R - Rear Axle**  
**RSP/RDP40, RSP/RDP41**  
**39-1.95" Inv Spline**

Pinion Nut Part No. 127589  
 Rear Axle Service Gear Kits

Ratio	Original Gear (NSS)	Original Pinion (NSS)	Tooth Combo	For Service Order Kit Part No.	Ring Gear Size (in.)
2.64	127380	127420	37/14	211478	14.9
2.85	127381	127421	37/13	211479	15.4
2.93	129534	129533	41/14	509424	15.4
3.08	127381	129737	37/12	510114	15.4
3.25	127382	130127	39/12	510115	15.4
3.36	127381	130128	37/11	510116	15.4
3.55	127382	130129	39/11	510117	15.4
3.70	127381	130130	37/10	510118	15.4
3.90	127382	130131	39/10	510119	15.4
4.11	127381	130132	37/9	510120	15.4
4.33	127382	130133	39/9	510121	15.4
4.63	127383	129748	37/8	510122	15.7
4.88	127384	129750	39/8	510123	15.7
5.29	127383	129818	37/7	511518	15.7
5.57	127384	129822	39/7	511519	15.7
6.17	127383	129844	37/6	510463	15.7
6.50	127384	127435	39/6	511573	15.7

**Service Kit Identification Chart - Rear Axle**

Service Gear/Pinion Kit	Gear Part No. in Svc Kit (NSS)	Pinion Part No. in Svc Kit (NSS)
211478	127380	127420
211479	127381	127421
509424	129534	129533
510114	129783	129737
510115	129740	129739
510116	129742	129741
510117	129740	129743
510118	129742	129744
510119	129740	129745
510120	129742	129746
510121	129740	129747
510122	129749	129748
510123	129751	129750
511518	129817	129818
511519	129821	129822
510463	129749	129844
511573	129751	127435



## Exchange Carriers - Single Reduction

### DSP40 / DSP41

Ratio	Spline	For Service Use Exchange Carrier
2.64	41 Inv	675965
2.93	41 Inv	675966
3.08	41 Inv	675967
3.25	41 Inv	675968
3.36	41 Inv	675969
3.55	41 Inv	675970
3.70	41 Inv	675971
3.90	41 Inv	675972
4.11	41 Inv	675973
4.33	41 Inv	675974
4.63	41 Inv	675975
4.88	41 Inv	675976
5.29	41 Inv	675977
5.57	41 Inv	675978
6.17	41 Inv	675979
6.50	41 Inv	675980

### DSP40-P / DSP41-P (with Pump)

Ratio	Spline	For Service Use Exchange Carrier
2.64	41 Inv	675997
2.93	41 Inv	675998
3.08	41 Inv	675999
3.25	41 Inv	676000
3.36	41 Inv	676001
3.55	41 Inv	676002
3.70	41 Inv	676003
3.90	41 Inv	676004
4.11	41 Inv	676005
4.33	41 Inv	676006
4.63	41 Inv	676007
4.88	41 Inv	676008
5.29	41 Inv	676009
5.57	41 Inv	676010
6.17	41 Inv	676011
6.50	41 Inv	676012

### RSP40 / RSP41

Ratio	Spline	For Service Use Exchange Carrier
2.64	41 Inv	676029
2.93	41 Inv	676030
3.08	41 Inv	676031
3.25	41 Inv	676032
3.36	41 Inv	676033
3.55	41 Inv	676034
3.70	41 Inv	676035
3.90	41 Inv	676036
4.11	41 Inv	676037
4.33	41 Inv	676038
4.63	41 Inv	676039
4.88	41 Inv	676040
5.29	41 Inv	676041
5.57	41 Inv	676042
6.17	41 Inv	676043
6.50	41 Inv	676044

**DDP40 / DDP41**

Ratio	Spline	For Service Use Exchange Carrier
2.64	41 Inv	675949
2.93	41 Inv	675950
3.08	41 Inv	675951
3.25	41 Inv	675952
3.36	41 Inv	675953
3.55	41 Inv	675954
3.70	41 Inv	675955
3.90	41 Inv	675956
4.11	41 Inv	675957
4.33	41 Inv	675958
4.63	41 Inv	675959
4.88	41 Inv	675960
5.29	41 Inv	675961
5.57	41 Inv	675962
6.17	41 Inv	675963
6.50	41 Inv	675964

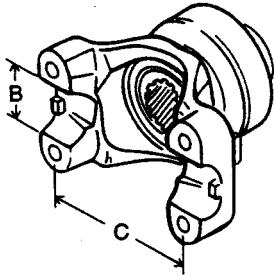
**DDP40-P / DDP41-P (with Pump)**

Ratio	Spline	For Service Use Exchange Carrier
2.64	41 Inv	675981
2.93	41 Inv	675982
3.08	41 Inv	675983
3.25	41 Inv	675984
3.36	41 Inv	675985
3.55	41 Inv	675986
3.70	41 Inv	675987
3.90	41 Inv	675988
4.11	41 Inv	675989
4.33	41 Inv	675990
4.63	41 Inv	675991
4.88	41 Inv	675992
5.29	41 Inv	675993
5.57	41 Inv	675994
6.17	41 Inv	675995
6.50	41 Inv	675996

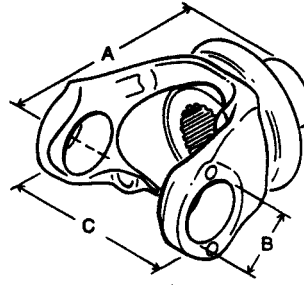
**RDP40 / RDP41**

Ratio	Spline	For Service Use Exchange Carrier
2.64	41 Inv	676013
2.93	41 Inv	676014
3.08	41 Inv	676015
3.25	41 Inv	676016
3.36	41 Inv	676017
3.55	41 Inv	676018
3.70	41 Inv	676019
3.90	41 Inv	676020
4.11	41 Inv	676021
4.33	41 Inv	676022
4.63	41 Inv	676023
4.88	41 Inv	676024
5.29	41 Inv	676025
5.57	41 Inv	676026
6.17	41 Inv	676027
6.50	41 Inv	676028

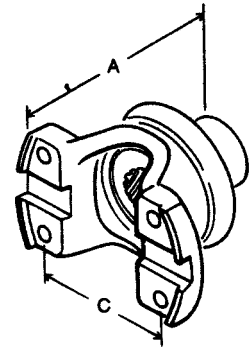
## Yokes & Flanges



**Style X  
Half Round**



**Style Y  
Full Round**



**Style Z  
Half Round  
Tapped Holes  
Bearing Strap**

### DSP40/RSP40 Series

#### Forward Axle - Input / 44-2.25 Inv Spline

Yoke & Slinger	Series	Joint Angle	Style	Dim. A	Dim. B	Dim. C	Vendor P/N
210801	92N	N/A	Comp.	4.03	-----	-----	92NYS36-75A
210831	SPL170	25	X	5.27	2.17	6.46	170-4-201-1X
210833	SPL250	25	X	5.49	2.36	6.42	250-4-81-1X
210869	RPL25	24	X	4.81	-----	8.36	25WYS36-1A

#### Forward Axle - Output / 39-1.95 Inv Spline

Yoke & Slinger	Series	Joint Angle	Style	Dim. A	Dim. B	Dim. C	Vendor P/N
210805	92N	31	Comp.	4.38	-----	-----	92NYS32-35A
210835	SPL170	25	X	5.27	2.17	6.46	170-4-221-1X
210837	SPL170	45	X	6.50	2.17	6.46	170-4-241-1X
210871	RPL20	30	X	5.38	-----	7.06	20WYS32-7A
210873	RPL20	42	X	5.94	-----	7.06	20WYS32-8A

#### Rear Axle - Pinion / 39-1.95 Inv Spline

Yoke & Slinger	Series	Joint Angle	Style	Dim. A	Dim. B	Dim. C	Spicer P/N
210809	92N	31	Comp.	4.29	-----	-----	
210839	SPL170	25	X	5.16	2.17	6.46	170-4-261-1X
210841	SPL170	45	X	6.24	2.17	6.46	170-4-281-1X
210875	RPL20	30	X	4.85	-----	7.06	20WYS32-5A
210877	RPL20	42	X	5.69	-----	7.06	20WYS32-6A

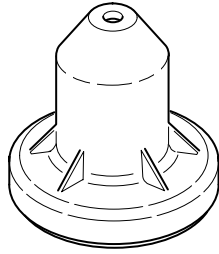
## Oil Seal Installation Tools

This kit contains installation tools used for installing drive axle oil seals. Using these tools ensures proper installation of the seal. Failure to use these tools may result in an improperly installed or damaged seal.

### Oil Seal Driver Installation Kit 217414

#### D-Input

Use 126917

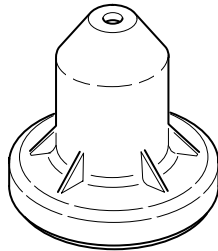


126917

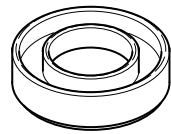
#### D-Output

Use 126917 and 128706

126917



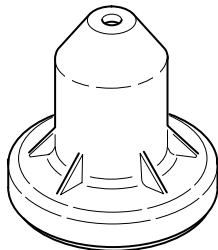
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128706

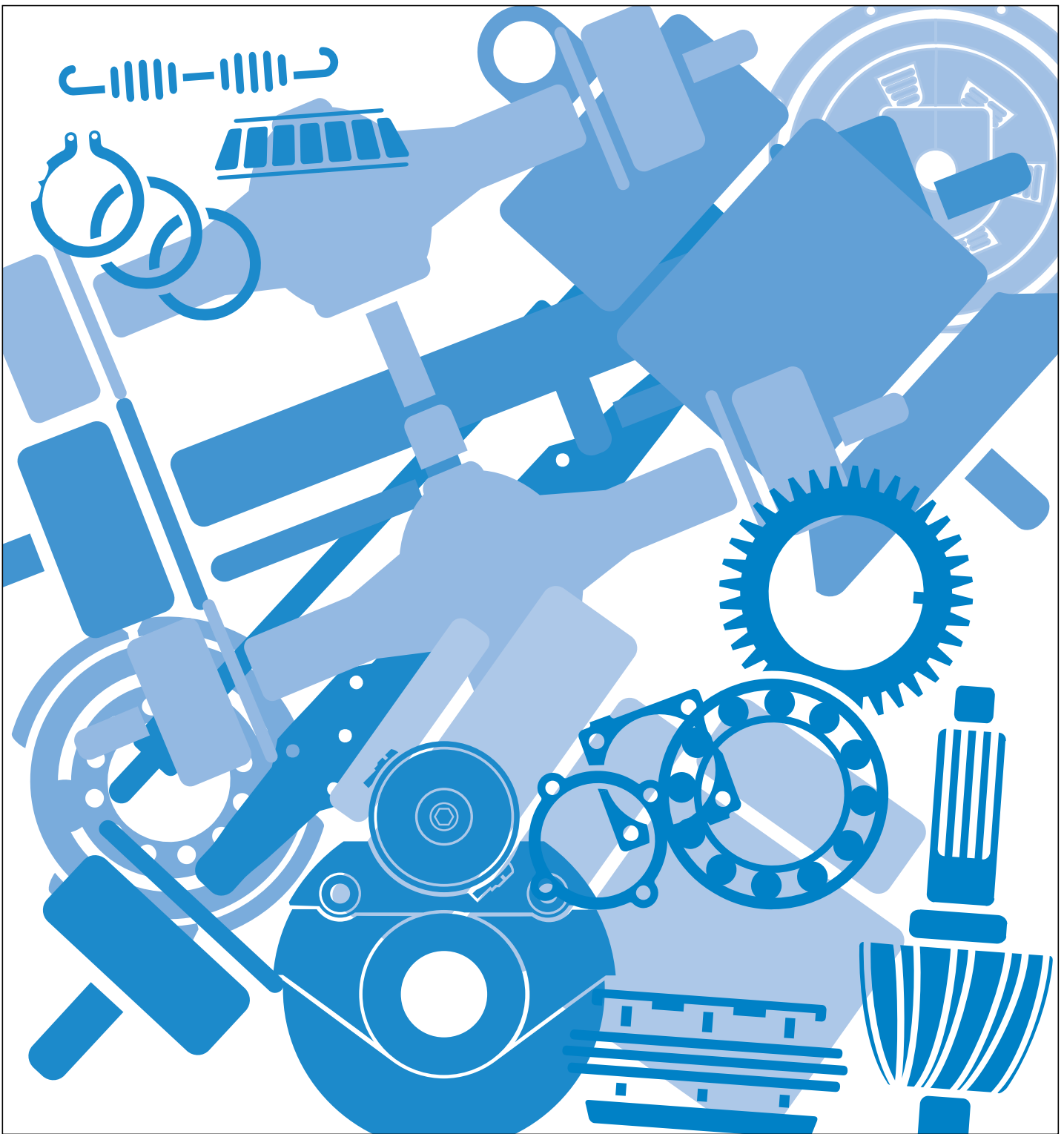
#### R-Pinion

Use 126917



126917





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