



Dana Spicer® Drive Axles

Roadranger®

Illustrated Parts List

Dana Spicer® Drive Axles

AXIP0200

May 2011

344, 404, 405, 454 Models



Table of Contents

General Information	2	Axle Shafts	34
How To Use Illustrated Parts List.....	2	Axle Shafts - Single Reduction Models.....	34
Model Identification.....	3	Axle Shafts - Diff Lock Models.....	34
Single Reduction - Front Axles - After June 2008	6	Axle Shafts - Models having IASS	35
Bearing Spacers	11	Axle Shafts - Wide Track Models.....	35
Single Reduction - Front Axles - Before June 2008	12	Axle Shafts - Hardware.....	35
Wheel Differential Lock Assembly	17	Axle Housings.....	36
Piston Cover Upgrade Kits	19	Gear & Pinion Kits.....	39
Wiring Harness Usage by OEM.....	19	Service Carrier Assemblies	42
Air Lockout Parts - After 11/2/98	20	Supersession of D/R454 Models to	
Air Lockout Parts - Before 11/2/98.....	22	New Generation Models	43
Single Reduction - Rear Axles	24	Yokes and Flanges	46
In Axle Speed Sensor	27	Kits and Assemblies.....	48
Output Shaft and Axle Housing Components.....	29	Oil Seal Installation Tools.....	48
Carrier Mounting Flange Design Change	31	Service Kits and Assemblies.....	48
		Quick Part Number Replacement Listing	50

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

- ABS - Antilock Brake System
- AR - As Required - Parts that vary in quantity with each axle.
Example: shims
- Assy - Assembly
- Brg - Bearing
- Diff - Differential
- Hsg - Housing
- IASS - In Axle Speed Sensor
- Inv - Involute
- N/A - Not Applicable
- 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.
- 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		Indicates information important to ordering or use
			DS404	DD404	
Item	Description	Qty			Notes
1	Axle Shaft	2	123456	789101	See Axle Shaft Chart
2	Flat Washer	4	246810	121416	

Summary of Kits and Assemblies

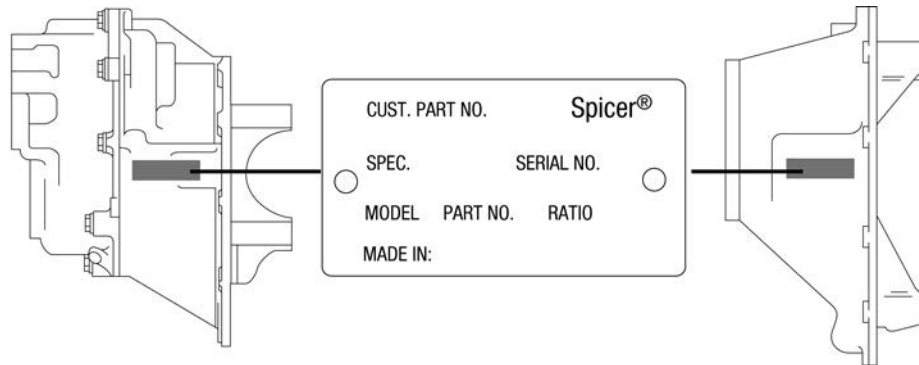
Oil Seal & Shim Kit	216225	Includes 29-30,36
Basic Overhaul Kit	216221	Contents Identified with *

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



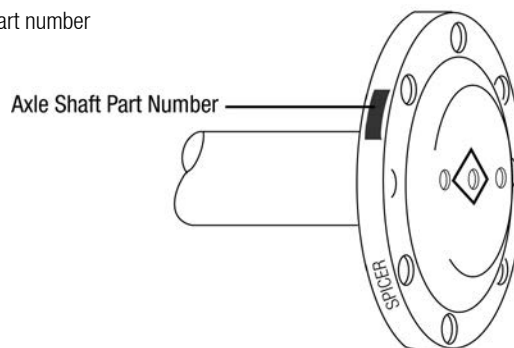
- Model Number, Part Number and Serial Number are located on the data plate on the axle centerline

Drive Axle Assembly Tag

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

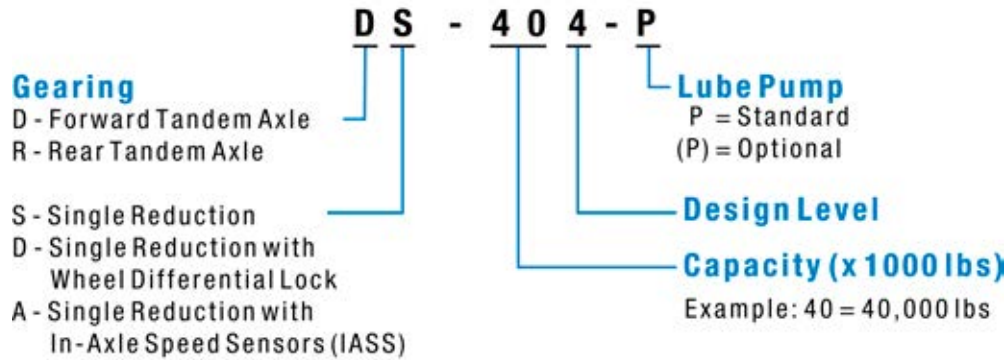
NOTE: When inquiring about specific information on your axle, write down all of the above information from your tag and call your local OEM dealer or your Roadranger representative.

- The axles illustrated in this book are specified with a variety of different axle shafts, according to OEM specifications. When ordering replacement axle shafts, note the part number stamped into the flange.



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.



Example:

DS = Forward Tandem/Single Reduction
or
RS = Rear Tandem/Single Reduction

Models

The following models are included in this publication:

Single Reduction Models

Forward Axle	Rear Axle	Axle Capacity	Gear Size
DS344	RS344	34,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.
DS404-(P)	RS404	40,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.
DS405-(P)	RS405	40,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.
DS454-(P)	RS454	45,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.

Single Reduction Models with Wheel Differential Lock

Forward Axle	Rear Axle	Axle Capacity	Gear Size
DD404-(P)	RD404	40,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.
DD405-(P)	RD405	40,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.
DD454-(P)	RD454	45,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.

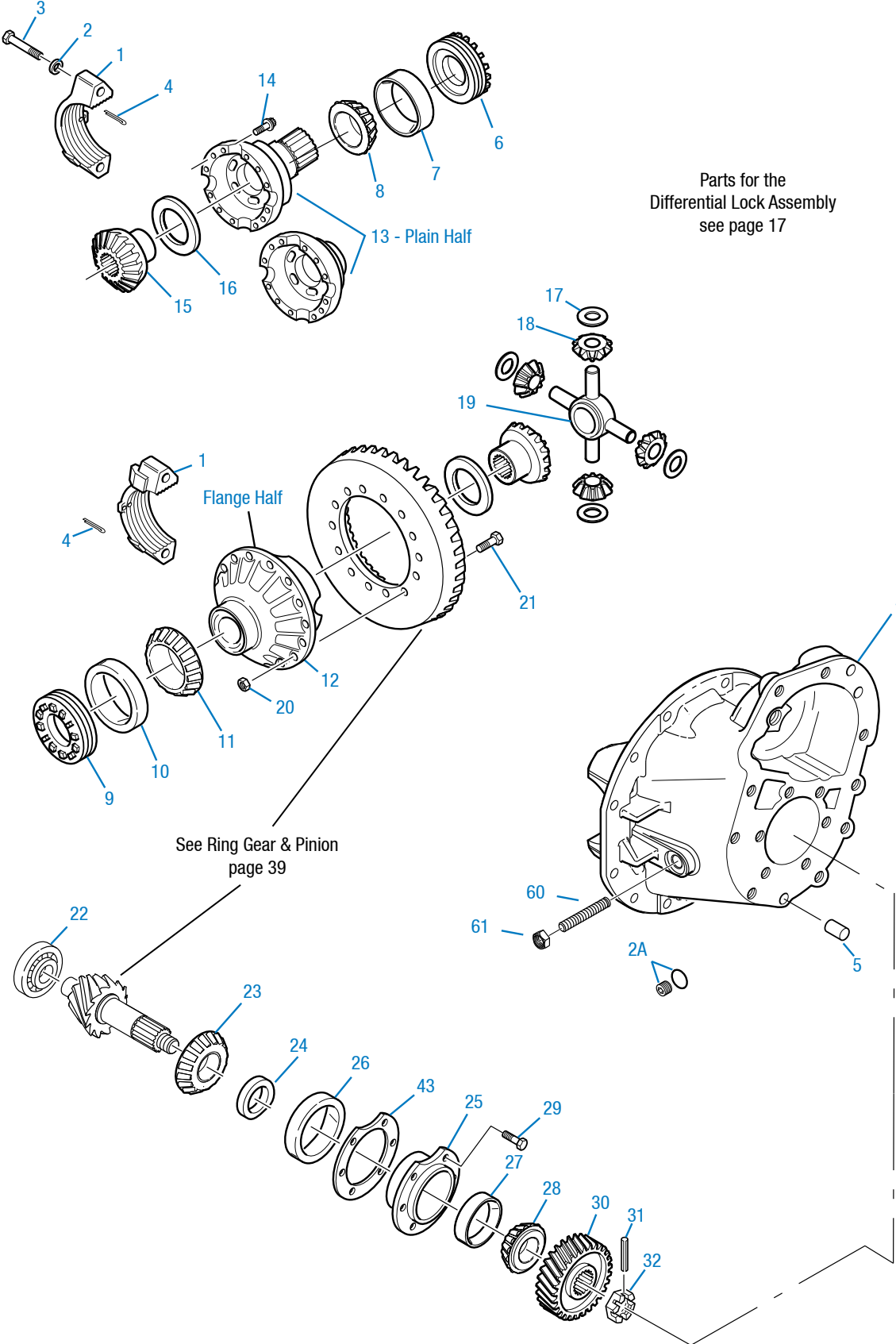
Single Reduction Models With IASS (In-Axle Speed Sensors)-NLA

Forward Axle	Rear Axle	Axle Capacity	Gear Size
DA344-NLA	RA344-NLA	34,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.
DA404-(P)-NLA	RA404-NLA	40,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.
DA405-(P)-NLA	RA405-NLA	40,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.
DA454-(P)-NLA	RA454-NLA	45,000 Lbs	15.40"/15.70" Hypoid Gear, Nom.

Note: The D/R454 and the DA/RA344-404 models no longer produced after 2001.

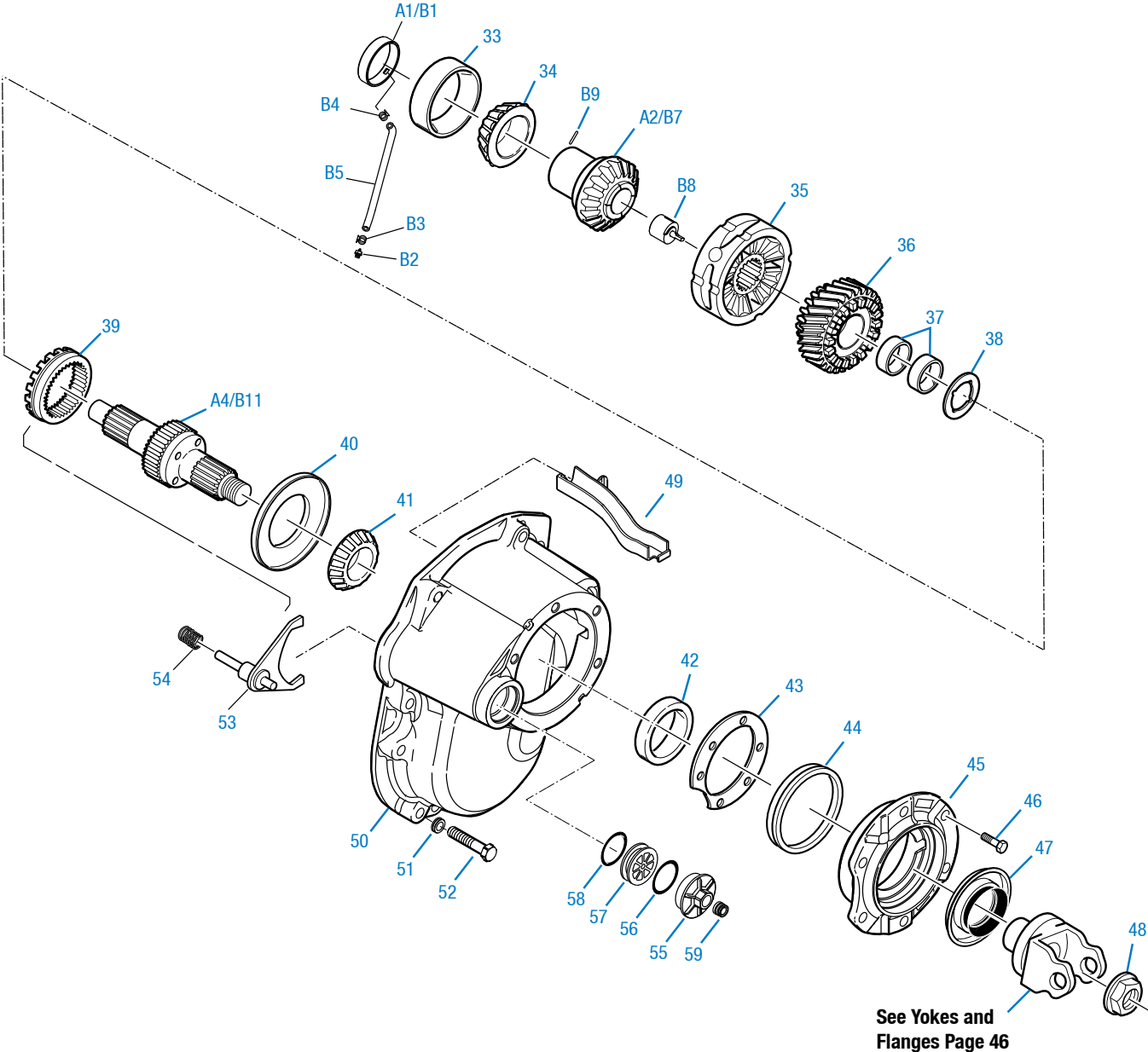
Single Reduction-Forward Axles After June 2008

Single Reduction-Forward Axles - After June 2008



Single Reduction-Forward Axles
After June 2008

Single Reduction-Forward Axles - After June 2008



Single Reduction-Forward Axles After June 2008

Item	Description	Qty	DS344	DS404(P) DS405(P)	DD404(P) DD405(P)	Notes
BASIC OVERHAUL KIT			504030	504030	504031	Contents Identified with •
1	Forward Carrier/Cap Sub-Assy					includes items 1-3 and 33
	Standard Mdls 132038-NSS	1	132466	132466	---	
	Diff-Lock Mdls 132043-NSS	1	---	---	132467	
2	Flat Washer	4	210288	210288	210288	
2A	Plug, O-Ring	1	131809	131809	131809	
3	Capscrew	4	210095	210095	210095	
4	Cotter Pin	2	090873	090873	090873	
5	Dowel Pin	2	007641	007641	007641	
6	Diff Brg Adjuster - Plain Half	1	129130	129130	128616	
7	Brg Cup - Plain Half	1	09803•	09803•	15092•	129566 can replace 09803
8	Brg Cone - Plain Half	1	027813•	027813•	128604•	129565 can replace 027813
9	Diff Brg Adjuster - Flange Half	1	129128	129128	129128	
10	Brg Cup - Flange Half	1	129564•	129564•	129564•	
11	Brg Cone - Flange Half	1	129563•	129563•	129563•	
WHEEL DIFF. CASE KITS						Includes items 12-14
12	Diff Case-RH (Flg Half)					
	133737 note-12	1	508653	508653	508724	Ratios 2.64 to 3.25
	133738 note-12		508654	508654	508725	Ratios 3.36 to 3.90
	133739 note-12		508655	508655	508726	Ratios 4.11 to 4.88
	133740 note-12		508656	508656	508727	Ratios 5.29 to 7.17
13	Diff Case-LH (Plain Half)	1	132437	132437	128607	see note-12 below
14	Capscrew	12	127465	127465	127465	
WHEEL DIFF SIDE GEAR KIT						
	39 Inv Spline		217461	---	---	Includes items 15-19
	41 Inv Spline		---	216229	216229	Includes items 15-19
WHEEL DIFF KIT w/o SIDE GEARS			216228	216228	216228	Includes items 16-19
15	Side Gear - 39 Inv Spline	2	127367	---	---	
	Side Gear - 41 Inv Spline	2	---	127368	127368	
16	Side Gear Thrust Washer	2	127386•	127386•	127386•	
17	Side Pinion Thrust Washer	4	129305•	129305•	129305•	
18	Side Pinion	4	133761	133761	133761	
19	Diff Spider	1	127359	127359	127359	
RING GEAR NUT & BOLT KIT			508652	508652	508652	Includes items 20-21
20	Nut - Ring Gear	16	126216	126216	126216	
21	Bolt - Ring Gear	16	129686	129686	129686	
22	Pinion Pilot Brg	1	127484•	127484•	127484•	
23	Pinion Brg Cone - Inner	1	129560•	129560•	129560•	

NSS - Not Sold Separately

NOTE 12: All differential case halves are now available separately. Design enhancements in the diff cases were released in 2007, refer to bulletin ABIB-0704.

Single Reduction-Forward Axles After June 2008

Item	Description	Qty	DS344	DS404(P) DS405(P)	DD404(P) DD405(P)	Notes
24	PINION BRG SPACER KIT	AR	504043	504043	504043	Individual Pinion Bearing Spacers Listed on pg 11
25	Pinion Brg Cage & Cup Assy	1	129767	129767	129767	Cage#127488C Includes item 25-27
26	Pinion Brg Cup - Inner	1	129561•	129561•	129561•	
27	Pinion Brg Cup - Outer	1	012495•	012495•	012495•	
28	Pinion Brg Cone - Outer	1	127535•	127535•	127535•	
29	Capscrew	6	210115	210115	210115	
30	Pinion Helical Gear	1	127523	127523	127523	
31	Roll Pin	1	118807	118807	118807	
32	Slotted Pinion Nut	1	126182	126182	126182	M42-1.5 (65mm socket)
A	Manifold Parts Kit - Non Pump	1	513880	513880	513880	NON PUMP - Includes 132435
A1	Seal Manifold Assy - Non Pump #132435-NSS	1	—	—	—	NON PUMP - Must order kit
A2	Output Side Gear - Non Pump	1	132443	132443	132443	NON PUMP
A3	Input Shaft Kit - Non Pump	1	504026	504026	504026	NON PUMP - Includes 132447,128049,132439
A4	Input Shaft-Non Pump #132447-NSS	1	—	—	—	NON PUMP - Must order kit
B	Manifold Parts Kit - Pump Model	1	—	504029	504029	PUMP MODELS - Includes 133964,134010,129338,134011,131366
B1	Seal Manifold Assy Pump #131366-NSS	1	—	—	—	PUMP MODELS - Must order kit
B2	Filter Screen Assy	1	—	133964	133964	PUMP MODELS
B3	Collar Lock	1	—	134010	134010	PUMP MODELS
B4	Clamp	1	—	129338	129338	PUMP MODELS
B5	Lube Hose	1	—	134011	134011	PUMP MODELS
B6	Lube Pump Kit	1	504028	504028	504028	PUMP MODELS - Includes 132060, 131541, 132061, 131368
B7	Output Side Gear - Pump Model #132061-NSS	1	—	504028	504028	PUMP MODELS
B8	Lube Pump #131368-NSS	1	—	504028	504028	PUMP MODELS
B9	Pump Locking Pin	1	—	131541	131541	PUMP MODELS
B10	Input Shaft Kit - Pump Model	1	504027	504027	504027	PUMP MODELS - Includes 132446, 128049, 132439
B11	Input Shaft-Pump Model #132446-NSS	1	—	—	—	PUMP MODELS - Must order kit
33	Bearing Race	1	110811•	110811•	110811•	
34	Bearing Cone	1	132060•	132060•	132060•	
35	Inter-Axle Diff Assy	1	134192	134192	134192	134192 replaces 128634, 129771
36	Helical Side Gear & Bushing Assy Gear Stamp#130906-NSS	1	130907	130907	130907	(Includes item 37)
37	Bushing - Helical Gear	2	129371	129371	129371	
38	Thrust Washer - Helical Gear	1	132439•	132439•	132439•	
39	Lockout Sliding Clutch	1	127510	127510	127510	

Single Reduction-Forward Axles After June 2008

Item	Description	Qty	DS344	DS404(P) DS405(P)	DD404(P) DD405(P)	Notes
40	Oil Retainer	1	128700	128700	128700	
41	Input Shaft Bearing Cone	1	129558•	129558•	129558•	
42	Bearing Cup	1	1008912•	1008912•	1008912•	can use 129559
For PDU Cover & Lockout Details See page 20						
	OIL SEAL & SHIM KIT	1	216224	216224	216224	Includes shims & oil seals 127591/127592
	PINION CAGE SHIM KIT	1	504032	504032	504032	Includes 5 each of shim listed below
43	Shim.003"	AR	127595•	127595•	127595•	
	Shim.005"		127596•	127596•	127596•	
	Shim.010"		127597•	127597•	127597•	
	Shim.020"		127598•	127598•	127598•	
	Shim.030"		127599•	127599•	127599•	
44	Oil Seal-V-Ring	1	128703•	128703•	128703•	
45	Input Brg Cover Assy	1	129575	129575	129575	Cast#129574C, Includes item 42
46	Bearing Cover Cap Screw	6	210115	210115	210115	
47	Oil Seal	1	127591•	127591•	127591•	
48	Locknut	1	128049	128049	128049	In 510593 Kit, M42-1.5 (55mm socket)
49	Lube Trough	1	129577	129577	129577	
50	Power Divider Cover	1	130823	130823	130823	11 hole design
51	Washer - Capscrew	11	128415	128415	128415	
52	Capscrew Long	11	210091	210091	210091	
	SHIFT FORK & COMPRESSION SPRING KIT	1	510870	510870	510870	Includes Items 53 & 54
53	Shift Fork Assy - NSS	1	129856	129856	129856	Order kit 510870
54	Compression Spring	1	129859	129859	129859	
55	Piston Cover Assy	1	129573	129573	129573	Includes Cover #129578 and item 56
56	O-Ring	1	129579	129579	129579	
57	Piston	1	129580	129580	129580	
58	O-Ring	1	210180	210180	210180	
59	Shipping Plug	1	599792	599792	599792	
60	Thrust Screw	1	—	126193	126193	
61	Jam Nut	1	—	210184	210184	
62	RTV - Sealant	1	107276S•	107276S•	107276S•	Not Illustrated

NSS - Not Sold Separately

Summary of Kits and Assemblies

Air L/O Kit - Complete	510052	Includes: 53-59
Repair Kit	510053	Includes: 55-58
Shift Fork & Compression Spring Kit	510870	Includes: 53-54

Pinion Bearing Spacers

Pinion Bearing Spacers

Note March 1 1995, Dana Spicer D344/404/405/454 series axles were built with a thicker variable pinion spacer different from the original design, axles built before this date used a “two” washer setup. This “two” washer setup is comprised of a spacer washer (127565) and a variable pinion bearing spacer (part number by thickness).

When servicing the above models, select a variable pinion bearing spacer from the list below to attain the correct pinion bearing preload. All procedures on “Pinion Bearing Preload” remain the same and the proper steps should be followed according to your Dana Spicer Service Manual. If you have an existing 127565 spacer washer, do not use it with the new variable pinion bearing spacers listed below.

Spacer washer 127565 is no longer available and has been removed from all service kits. The current variable pinion bearing spacers listed above are sold separately or available in listed pinion bearing spacer kit.

D344/404(P)/405(P)/454(P)

PINION BRG SPACER KIT: 504043 (includes items w/*)

New Spacers	Spacer Thickness
129079	0.797
129080	0.798
129081	0.800
129082	0.801
129083	0.802
129084	0.803
129085	0.804
129086*	0.806
129087	0.807
129088	0.808
129089	0.809
129090*	0.810
129091	0.811
129093	0.812
129097	0.814
129099*	0.815
129101	0.816
129103*	0.817
129105	0.818
129107	0.819
129109*	0.820
129111	0.821
129113	0.822
129115	0.823
129117*	0.824
129119	0.825
129120*	0.826
129121	0.828
129122	0.829
129123	0.830
129124*	0.831
129125	0.832
129126	0.833

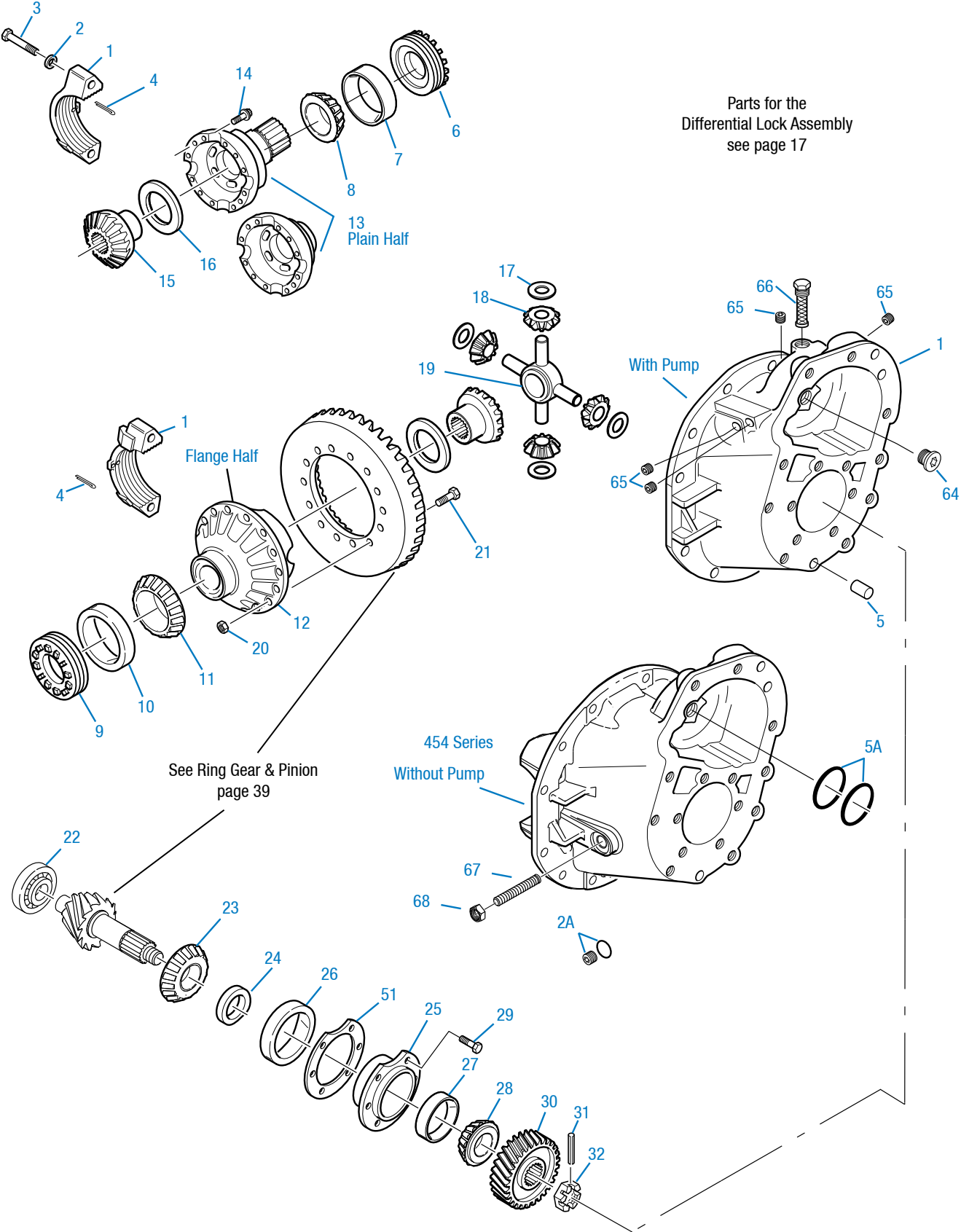
R344/404/405/454, 17/19/21/22060

PINION BRG SPACER KIT: 504016 (includes items w/*)

Bearing Spacers Part Number	Spacer Thickness
91552*	0.623
91553	0.624
91554	0.625
91555	0.626
91556*	0.627
91557	0.628
91558	0.629
91559*	0.630
91560	0.631
91561	0.632
91562	0.633
91564	0.634
91566	0.635
91568	0.636
91572*	0.637
91576	0.638
91580*	0.639
91584	0.640
91588	0.641
91592	0.642
91596*	0.643
91600	0.644
91602*	0.645
91604	0.646
91606	0.647
91608	0.648
91610	0.649
91611	0.650
91612	0.651
91613	0.652
91614*	0.653
91615	0.654

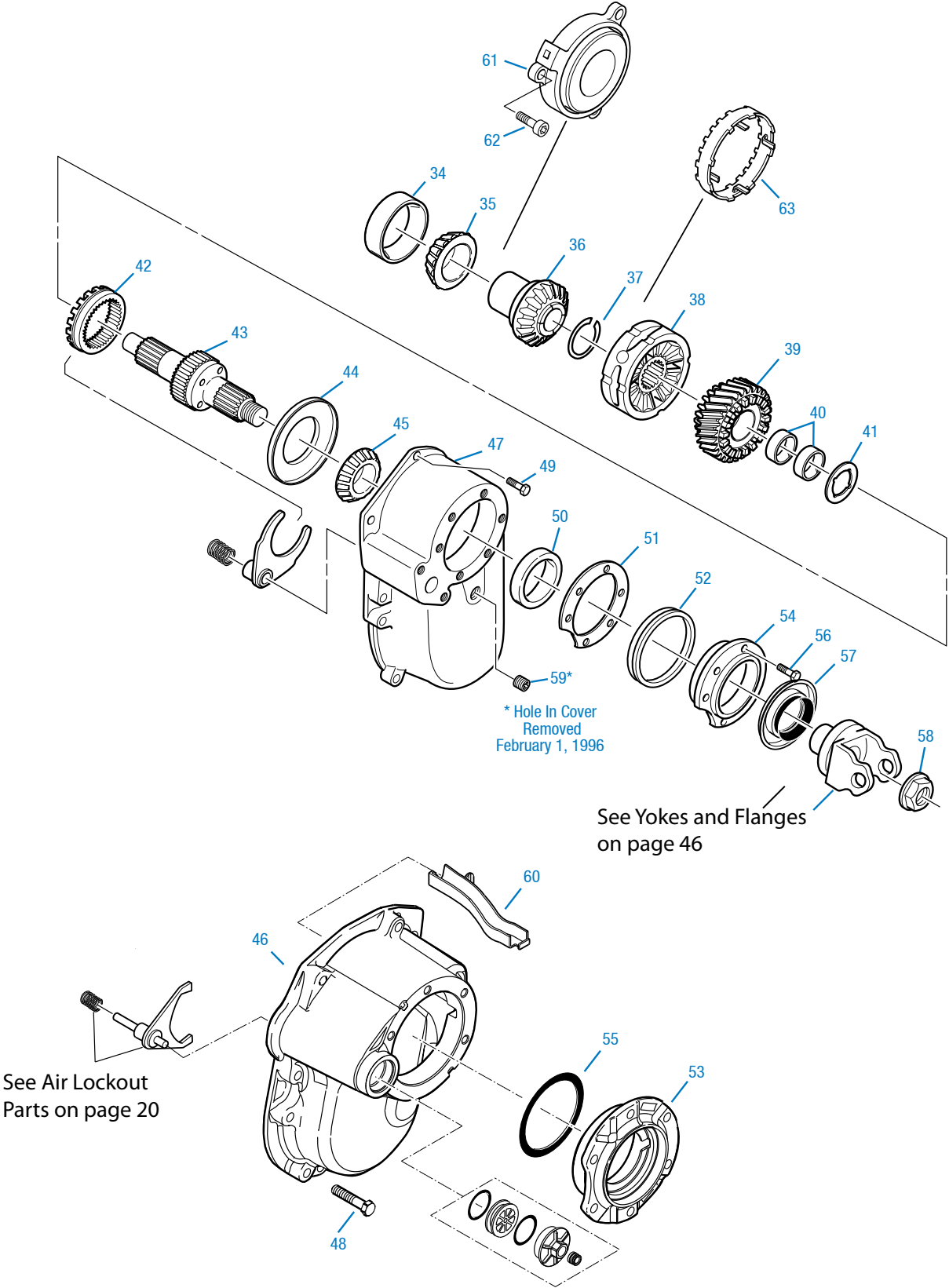
Single Reduction-Forward Axles Before June 2008

Single Reduction-Forward Axles - Before June 2008



Single Reduction-Forward Axles Before June 2008

Single Reduction-Forward Axles - Before June 2008



Single Reduction-Forward Axles Before June 2008

Item	Description	Qty	DA344 DS344 DA404(P) DS404(P) DA405(P) DS405(P)	DA454(P) DS454(P)	DD404(P) DD405(P)	DD454(P)	Notes																													
BASIC OVERHAUL KIT			216220	216220	217463	217463	Contents Identified with •																													
BEARING KIT			216234	216234	512800	512800	Contents Identified with *																													
1	Diff Carr & Brg Caps Kit		Kits NLA - See Chart and Notes Below																																	
	Includes 1-3, 5		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Model Type</th> <th style="text-align: left;">Part No.</th> <th style="text-align: left;">Casting No.</th> <th style="text-align: left;">Notes</th> </tr> </thead> <tbody> <tr> <td>DS344/404/405/454</td> <td>510023-NLA</td> <td>130809</td> <td>Replaces 129539, 129540</td> </tr> <tr> <td>DS404P/405P/454P</td> <td>510024-NLA</td> <td>130819</td> <td>Replaces 129551</td> </tr> <tr> <td>DD404/405/454</td> <td>510027-NLA</td> <td>130814</td> <td>Replaces 129550</td> </tr> <tr> <td>DD404P/405P/454P</td> <td>510028-NLA</td> <td>130814</td> <td>Replaces 129550</td> </tr> <tr> <td>DA344/404/405/454</td> <td>510031-NLA</td> <td>130809</td> <td>Replaces 129539, 129540</td> </tr> <tr> <td></td> <td>DA404P/405P/454P</td> <td>510032-NLA</td> <td>130819</td> <td>Replaces 129551</td> </tr> </tbody> </table>					Model Type	Part No.	Casting No.	Notes	DS344/404/405/454	510023-NLA	130809	Replaces 129539, 129540	DS404P/405P/454P	510024-NLA	130819	Replaces 129551	DD404/405/454	510027-NLA	130814	Replaces 129550	DD404P/405P/454P	510028-NLA	130814	Replaces 129550	DA344/404/405/454	510031-NLA	130809	Replaces 129539, 129540		DA404P/405P/454P	510032-NLA	130819	Replaces 129551
Model Type	Part No.	Casting No.						Notes																												
DS344/404/405/454	510023-NLA	130809						Replaces 129539, 129540																												
DS404P/405P/454P	510024-NLA	130819						Replaces 129551																												
DD404/405/454	510027-NLA	130814						Replaces 129550																												
DD404P/405P/454P	510028-NLA	130814						Replaces 129550																												
DA344/404/405/454	510031-NLA	130809	Replaces 129539, 129540																																	
	DA404P/405P/454P	510032-NLA	130819	Replaces 129551																																
	D454(P) Models also include items 67-68																																			
	NOTE: All Original Carr/Caps are NLA, Must Purchase Complete Carrier. Refer to bulletin abib-0805																																			
2	Flat Washer	4	210288	210288	210288	210288																														
2A	Plug, O-Ring	1	131809	131809	131809	131809	Not Illustrated																													
3	Capscrew	4	210095	210095	210095	210095																														
4	Cotter Pin	2	090873	090873	090873	090873	Replaces 126156																													
5	Dowel Pin	2	007641	007641	007641	007641																														
5A	Output Shaft O-Ring	2	127545	127545	127545	127545																														
6	Diff Brg Adjuster - Plain Half	1	129130	129130	128616	128616																														
	DA models see page 22	1	—	—	—	—																														
7	Brg Cup - Plain Half	1	09803•*	09803•*	015092•*	015092•*	129566 can replace 09803																													
8	Brg Cone - Plain Half	1	027813•*	027813•*	128604•*	128604•*	129565 can replace 027813																													
9	Diff Brg Adjuster - Flange Half	1	129128	129128	129128	129128																														
	DA models see page 22	—	—	—	—	—																														
10	Brg Cup - Flange Half	1	129564•*	129564•*	129564•*	129564•*	129564 Replaces 90943																													
11	Brg Cone - Flange Half	1	129563•*	129563•*	129563•*	129563•*	129563 Replaces 6082																													
WHEEL DIFF. CASE KITS							Includes items 12-14																													
12	Diff Case-RH (Flg Half)																																			
	133737 (was 129464)note-12	1	508653	508653	508724	508724	Ratios 2.64 to 3.25																													
	133738 (was 129465)note-12		508654	508654	508725	508725	Ratios 3.36 to 3.90																													
	133739 (was 129466)note-12		508655	508655	508726	508726	Ratios 4.11 to 4.88																													
	133740 (was 129467)note-12		508656	508656	508727	508727	Ratios 5.29 to 7.17																													
13	Diff Case-LH (Plain Half)	1	132437	132437	—	—	Was 127498 see note-12 below																													
	Diff Case-LH (Plain Half)		—	—	128607	128607																														
14	Capscrew	12	127465	127465	127465	127465																														
WHEEL DIFF SIDE GEAR KIT							Includes items 15-19																													
	All 344 models—39 Inv		217461	—	—	—																														
	All other models—41 Inv		216229	216229	216229	216229																														
WHEEL DIFF KIT w/o SIDE GEARS			216228	216228	216228	216228	Includes items 16-19																													
15	Side Gear																																			
	39 Inv spline	2	127367	—	—	—																														
	41 Inv spline	2	127368	127368	127368	127368																														
16	Side Gear Thrust Washer	2	127386•	127386•	127386•	127386•																														
17	Side Pinion Thrust Washer	4	129305•	129305•	129305•	129305•																														
18	Side Pinion	4	133761	133761	133761	133761	133761 replaces 127364																													
19	Diff Spider	1	127359	127359	127359	127359																														

NOTE 12: All differential case halves are now available separately. Design enhancements in the diff cases were released in 2007, refer to bulletin ABIB-0704.

Single Reduction-Forward Axles Before June 2008

Item	Description	Qty	DA344	DA454(P)	DD404(P)	DD454(P)	Notes
			DS344	DS454(P)	DD405(P)	DD454(P)	
	RING GEAR NUT & BOLT KIT		508652	508652	508652	508652	Includes items 20-21
20	Nut	16	126216	126216	126216	126216	
21	Bolt	16	129686	129686	129686	129686	129686 Replaces 128806 See bulletin ABIB-9701
22	Pinion Pilot Brg	1	127484●*	127484●*	127484●*	127484●*	
23	Pinion Brg Cone - Inner	1	129560●*	129560●*	129560●*	129560●*	129560 Replaces 85439
24	Pinion Brg Spacer (Svc Kit)	AR	504043	504043	504043	504043	Individual Pinion Bearing Spacers Listed on page 11
25	Pinion Brg Cage & Cup Assy Cage #127488C NSS	1	129767	129767	129767	129767	Includes item 25-27 129767 Replaces 127601
26	Pinion Brg Cup - Inner	1	129561●*	129561●*	129561●*	129561●*	129561 Replaces 14217
27	Pinion Brg Cup - Outer	1	012495●*	012495●*	012495●*	012495●*	
28	Pinion Brg Cone - Outer	1	127535●*	127535●*	127535●*	127535●*	
29	Capscrew	6	210115	210115	210115	210115	
30	Pinion Helical Gear	1	127523	127523	127523	127523	
31	Roll Pin	1	118807	118807	118807	118807	
32	Slotted Pinion Nut	1	126182	126182	126182	126182	
34	Output Shaft Brg Cup	1	127536●*	127536●*	127536●*	127536●*	
35	Output Shaft Brg Cone	1	110812●*	110812●*	110812●*	110812●*	
36	Output Shaft Side Gear	1	127645	127645	127645	127645	
37	Snap Ring	1	085997●	085997●	085997●	085997●	
38	Inter-Axle Diff Assy	1	134192	134192	134192	134192	134192 replaces 128634, 129771
39	Helical Side Gear & Bushing Assy Gear #130906 NSS	1	130907	130907	130907	130907	Was 127495 and 127494 - See Note 39; Includes Item 40
40	Bushing - Helical Gear	2	129371	129371	129371	129371	129371 Replaces 127543
41	Thrust Washer - Helical Gear	1	132439●	132439●	132439●	132439●	132439 replaces 128702
42	Lockout Sliding Clutch	1	127510	127510	127510	127510	
43	Input Shaft Kit shaft#129770-NSS (was 128704)	1	510593	510593	510593	510593	Includes Items 41, 43, 58 Was 216226 - See Note 43
44	Oil Retainer	1	128700	128700	128700	128700	
45	Input Shaft Bearing Cone	1	129558●*	129558●*	129558●*	129558●*	129558 Replaces 820643
For Items 46 through 49, See page 20							
50	Bearing Cup	1	1008912●*	1008912●*	1008912●*	1008912●*	Can use 129559

NOTE 39: Helical Gear part numbers 127495 & 130907 are totally interchangeable. The 130907 is an enhanced design and 127495 is no longer being produced. No other associated parts are affected by this change. These parts are used in ALL D404 family axles.

NOTE 43: Kit 510593 replaces kit 216226 in all situations. But kit 216226 cannot replace kit 510593 in the following specific models DSH40(P), DDH40(P), DSH44(P), and DDH44(P) unless it contains shaft number 129770. Kit 510593 contains input shaft p/n 129770, which is Induction Hardened for those model applications. Input shaft p/n 128704, which is NOT Induction Hardened, was originally included in kit 216226 up to April 22, 2003. Beginning April 22, 2003 Dana began using induction hardened input shaft 129770 in place of 128704.

Single Reduction-Forward Axles Before June 2008

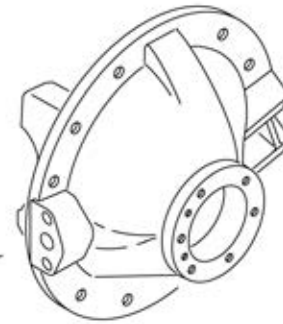
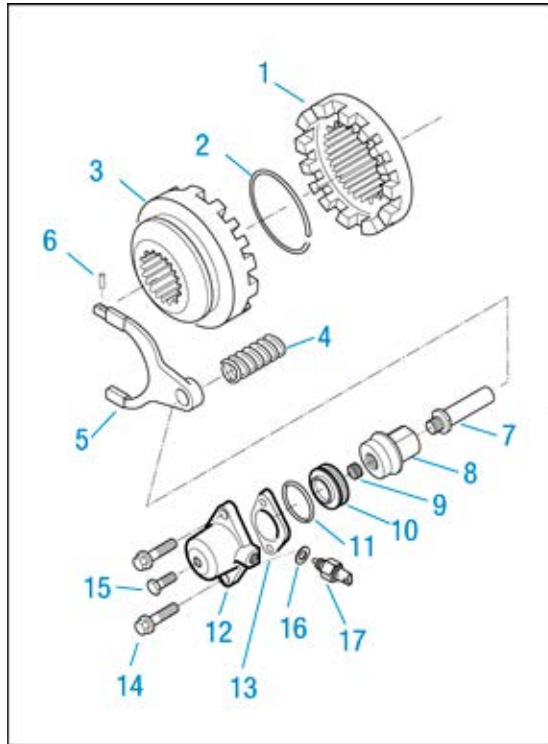
Item	Description	Qty	DA344	DA454(P)	DD404(P)	DD454(P)	Notes
			DS344	DS454(P)	DD405(P)		
			DA404(P)	DA405(P)	DD404(P)		
			DS404(P)	DS405(P)	DD405(P)		
	OIL SEAL & SHIM KIT	1	216224	216224	216224	216224	Includes items 51, 57 & 127592 Oil Seal
	PINION CAGE SHIM KIT	1	504032	504032	504032	504032	Includes 5 each of shims below
51	Shim.003"	AR	127595•	127595•	127595•	127595•	
	Shim.005"		127596•	127596•	127596•	127596•	
	Shim.010"		127597•	127597•	127597•	127597•	
	Shim.020"		127598•	127598•	127598•	127598•	
	Shim.030"		127599•	127599•	127599•	127599•	
52	Oil Seal-V-Ring	1	128703•*	128703•*	128703•*	128703•*	
53	Input Brg Cover Assy - #129574C		129575	129575	129575	129575	After 11/2/98 Includes Item 50
54	Input Brg Cover Assy - #127490C	1	127602	127602	127602	127602	Before 11/2/98 Includes Item 50
55	O-Ring (Refer to Note-55)		129576-NLA	129576-NLA	129576-NLA	129576-NLA	Used on mdl's made after 11/2/98 (NLA refer to Note-55)
56	Bearing Cover Cap Screw	6	210115	210115	210115	210115	
57	Oil Seal	1	127591•*	127591•*	127591•*	127591•*	
58	Locknut	1	128049	128049	128049	128049	In 216226 Kit (M42-1.5)
59	Plug	1	090325	090325	090325	090325	See bulletin AXIB-9510
60	Lube Trough	1	129577	129577	129577	129577	
61	Lube Pump Assembly	1	127534	127534	127534	127534	Pump Models Only
62	Capscrew	3	127551	127551	127551	127551	Pump Models Only
63	Drive Coupling - Service	1	128628	128628	128628	128628	Pump Models Only
64	Poppet Valve Plug	1	019411	019411	019411	019411	Pump Models Only Hole size changed 2/97 Same as 90897
65	Pipe Plug	4	090897	090897	090897	090897	Pump Models Only
66	Filter Screen Assy	1	127649	127649	127649	127649	Pump Models Only
67	Thrust Screw	1	—	126193	—	126193	
68	Jam Nut	1	—	210184	—	210184	
69	RTV - Sealant	1	107276S•*	107276S•*	107276S•*	107276S•*	Not Illustrated

NSS - Not Sold Separately

NOTE 55: This cage o-ring is no longer used in these models and is also no longer required when rebuilding the carrier. RTV can be used as replacement for this o-ring. The o-ring is no longer available through Dana.

Wheel Differential Lock Assembly

Wheel Differential Lock Assembly



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

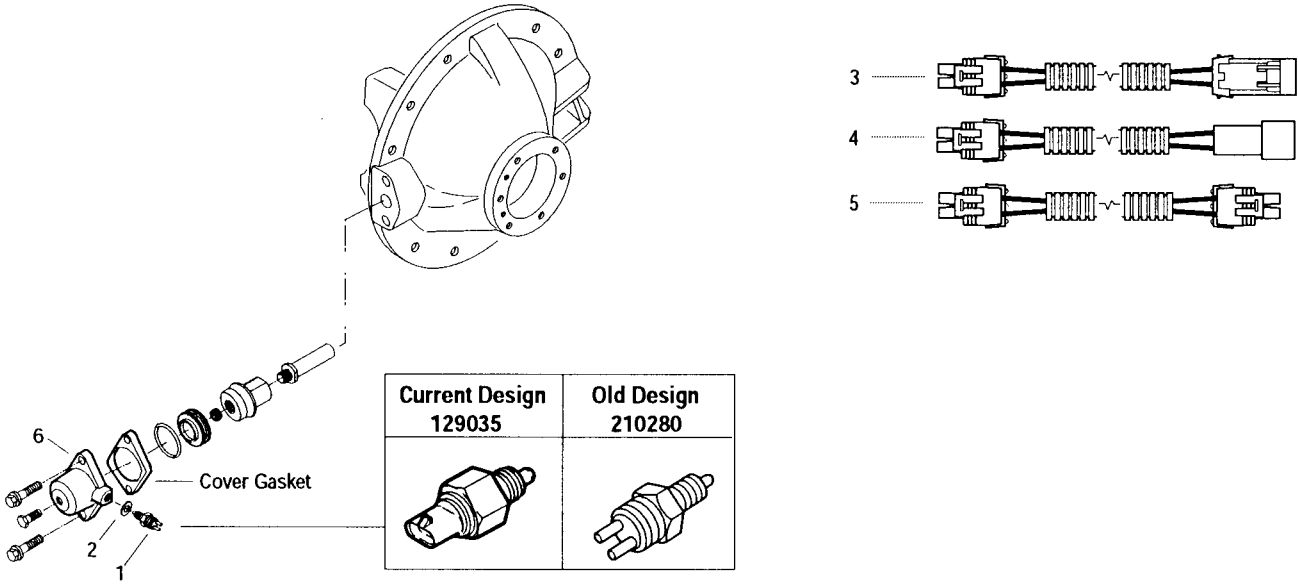
Item	Description	Qty	All D/R404 Diff Lock Mdls	Notes
1	Fixed Curvic Clutch Gear	1	128627	
2	Snap Ring	1	129433	Replaces 210299
3	SL Curvic Clutch Gear - 41 Inv spline	1	126840	
4	Compression Spring	1	128614	
SHIFT FORK ASSY			217465	Includes items 5-6
5	Shift Fork - 128611C NSS	1	—	128609 Fork – NSS
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	—	See page 18 & 19
13	Gasket	1	128643	
14	Capscrew - Flg Head	2	128744	
15	Capscrew	1	128274	M12 x 1.5
16	Washer	1	129034	See page 18 & 19
17	Switch	1	129035	See page 18 & 19
18	Fitting Assy.	1	128178	Note 18 - Not Illustrated
19	Wiring Harness	1	—	See page 18 & 19 - Not Illustrated
20	Washer	1	210288	Note 20 - Not Illustrated

NOTE 18: Used in clearance sensitive applications, fitting also converts Metric threads to English threads.

NOTE 20: A washer was used in some diff. lock carriers for a limited time. 3.90 ratios only, part is longer used or required.

Wheel Differential Lock Assembly

Wheel Differential Lock Assembly



Wheel Differential Lock Assembly

Wheel Differential Lock Assembly

After July 1, 1996, (Bulletin ABIB-9609) the diff lock selector switch is located on a piston cover that has a 14 mm threaded hole to accommodate the 129035 switch. The original piston covers are replaced by PISTON COVER UPGRADE KITS and the 129035 selector switch is now included with any Carrier Unit built after July 1, 1996 (date code H96183). When ordering a piston cover upgrade kit, it is important to select a kit that includes the proper wiring harness for the vehicle being repaired, reference charts below.

Item	Parts Used before 7/1/1996	Parts Used after 7/1/1996	Description	Notes	Order Upgrade Kit
1	210280 Note 1	129035	Selector Switch	Note 2	—
2	126618	129034	Nylon Washer - Black		—
3	128146 Note 1	129044	Wiring Harness	Metri-Pack 150 Series	508396
4	128445 Note 1	129046	Wiring Harness	Metri-Pack 280 Series	508291
5	128481 Note 1	129047	Wiring Harness	Weather Pack	508289
6	128641	129425	Piston Cover	Inch Thread Airline Hole	See Below
6	128612*	129424*	Piston Cover	Metric Thread Airline Hole	508290

NOTE 1: Part is no longer available, you must order upgrade kits

NOTE 2: Service carrier units built after 7/1/96 are built with 129425 Piston Covers and include a new selector switch.

Piston Cover Upgrade Kits

Description	Kit Contents			
	508289	508290	508291	508396
Selector Switch - 14 MM	129035	129035	129035	129035
Nylon Washer	129034	129034	129034	129034
Piston Cover*	129425	129424*	129425	129425
Wiring Harness	129047	129047	129046	129044
Cover Gasket	128643	128643	128643	128643

*Cover 129424 and 128612 have metric threaded airline hole for GMC applications.

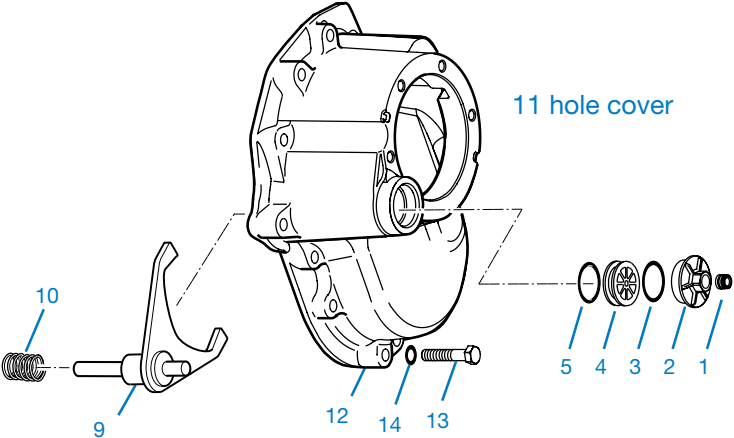
Wiring Harness Usage by OEM

OEM	Wiring Harness Part Numbers		Notes
	Before 7/1/96	After 7/1/96	
Volvo, GMC, Navistar Kenworth, Peterbilt	128481	129047	Item 5 Pg 18
Western Star, Freightliner Ford	128146	129044	Item 3 Pg 18
Mack	128445	129046	Item 4 Pg 18

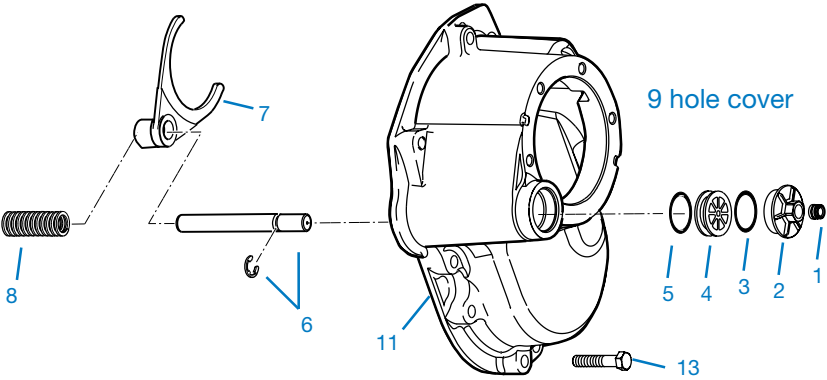
Air Lockout Parts - After 11/2/1998

Air Lockout Parts - After 11/2/1998

Lockout design after 2/2/00



Lockout design after 11/2/98



Air Lockout Parts - After 11/2/1998

Item	Description	Qty	Integral Shift Cylinder Models	Notes
1	Plastic Shipping Plug	1	599792	
2	Piston Cover Assy	1	129573	Cover 129578, Includes 3
3	O-Ring	1	129579	
4	Piston	1	129580	
5	O-Ring	1	210180	
6	Push Rod Assy	1	N/A	Order Kit 510870
7	Shift Fork Assy	1	129856	Order Kit 510870
8	Compression Spring	1	129859	
9	Shift Fork Assy - Welded	1	129856	Order Kit 510870
10	Compression Spring	1	129859	included in 510870 kit
11	PDU Cover - 9 hole	1	129572-NLA	Note 1
12	PDU Cover - 11 hole	1	130823	Note 1
13	Capscrew			
	After 11/2/98	9	210091	Note 1
	After 2/2/00	11	210091	Note 1
14	Washer - Capscrew	11	128415	

NSS - Not Sold Separately

NOTE 1: On June 3, 2002, the design of the power divider cover changed. The original PDU cover (P/N: 129572) had 9 holes and required 9 fasteners. The current design PDU cover (P/N: 130823) has 11 holes and requires the use of 11 long fasteners. The original 129572 covers are no longer available thru Dana.

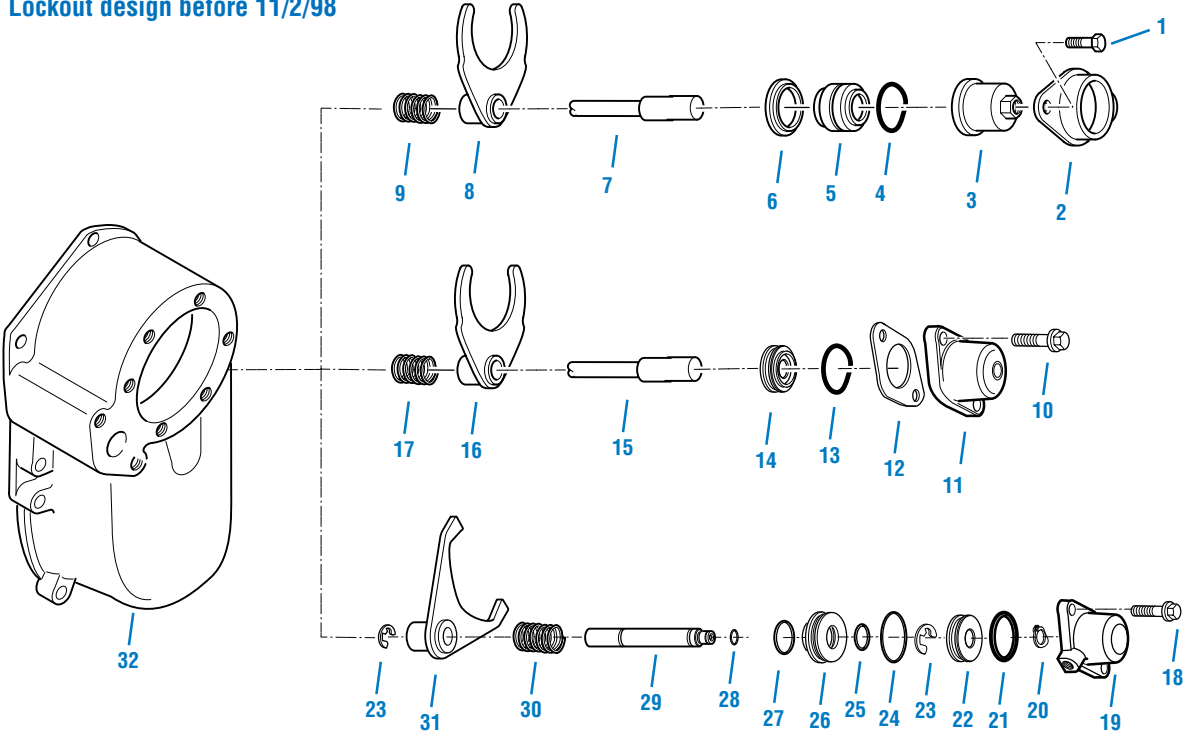
Summary of Kits and Assemblies

Air L/O Kit - Complete	510052	Includes: 53-59
Repair Kit	510053	Includes: 55-58
Shift Fork & Compression Spring Kit	510870	Includes: 53-54

Air Lockout Parts - Before 11/2/1998

Air Lockout Parts - Before 11/2/1998

Lockout design before 11/2/98



Air Lockout Parts - Before 11/2/1998

Air Lockout Parts - Before 11/2/1998

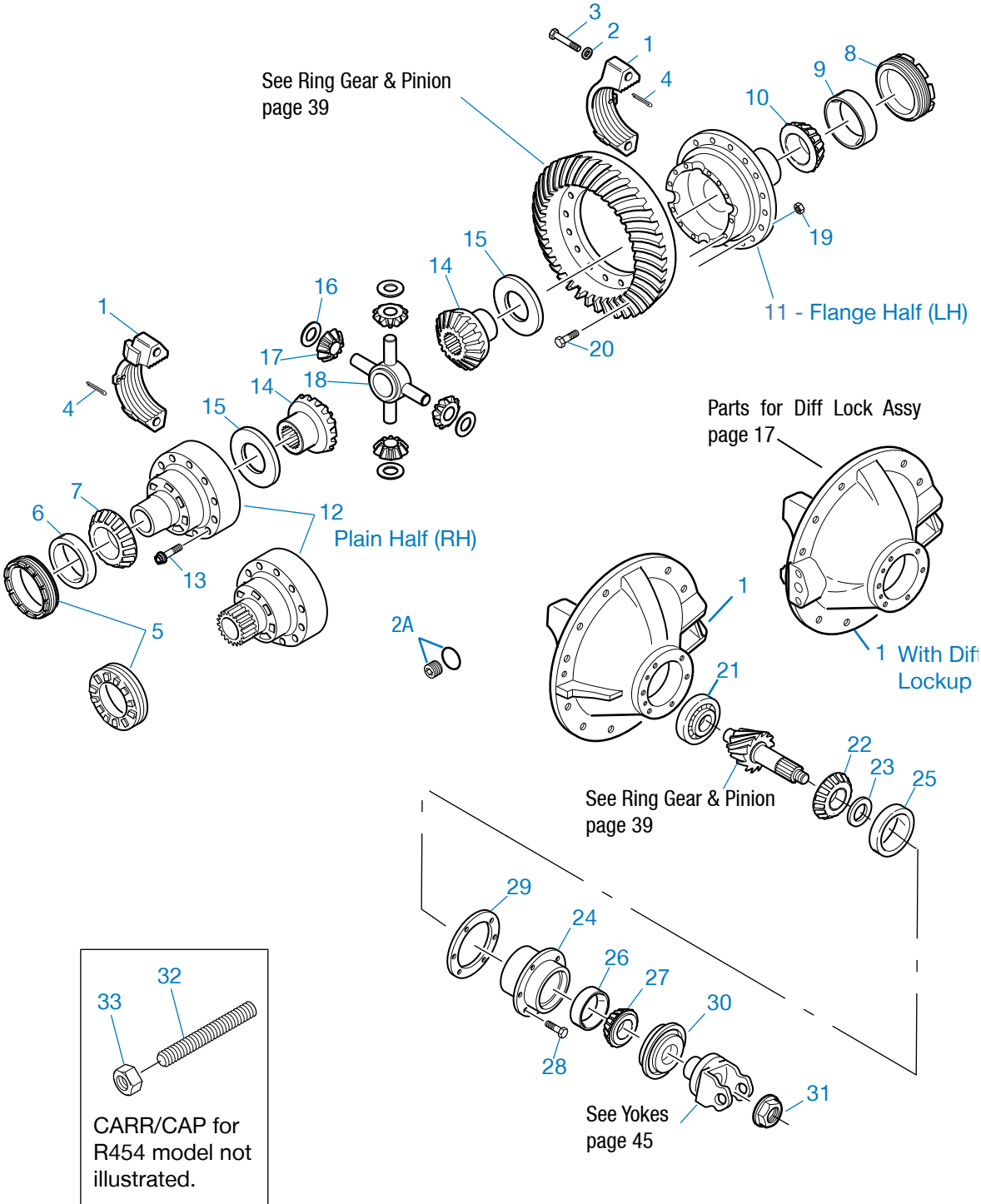
Item	Description	Qty	Straight Air Before 11/2/1996 (Cylindrical)	Straight Air 11/2/96 to 11/2/1998 (Cast Iron)	Navistar Rev Air	Notes
1	Capscrew	2	210381			
2	Mounting Bracket	1	NLA			Order: 507494
3	Piston Housing	1	NLA			Order: 507494
4	O-Ring	1	210180			
5	Piston	1	NLA			Order: 507494
6	Shoulder Washer	1	NLA			Order: 507494
7	Push Rod	1	127477			
8	Shift Fork Assy	1	129783			Replaces 127506
9	Compression Spring	1	127474			
10	Capscrew	2		128744		
11A	Piston Housing-Standard	1		129005		
11B	Piston Housing - GM Only	1		129004		
12	Gasket	1		128643		
13	O-Ring	1		210180		
14	Piston	1		129290		
15	Push Rod	1		129583-NLA		Replaced by 510840
16	Shift Fork Assy	1		129783		Replaces 127506
17	Compression Spring	1		129584		
18	Capscrew	1			128744	
19	Piston Housing	1			128733	
20	Snap Ring	1			128734	
21	O-Ring	1			210180	
22	Piston	1			128724	
23	Snap Ring	2			128725	
24	O-Ring	1			128728	
25	O-Ring	1			128729	
26	Pilot Plate	1			128726	
27	O-Ring	1			128727	
28	O-Ring	1			128331	
29	Push Rod	1			128730	
30	Compression Spring	1			128731	
31	Shift Fork Assy	1			129783	Replaces 127506
32	PDU Cover - Original Design	1	127605-NLA	129572-NLA	127605-NLA	

Summary of Kits and Assemblies

Air L/O Kit w/o Shift Fork	—	507494	—	Includes: 10, 11A, 12-14
Air L/O Kit - Complete	—	508121	—	Includes: 10, 11A, 12-17
Repair Kit	—	507709	—	Includes: 12-14
Air L/O Kit - w/o Shift Fork	—	—	216048	Includes: 18-30
Air L/O Kit - Complete - NLA	—	—	128735-NLA	Includes: 18-31

Single Reduction - Rear Axles

Single Reduction - Rear Axles



Single Reduction - Rear Axles

Item	Description	Qty	RA344 RS344 RA404 RS404 RA405 RS405	RS454 RA454	RD404 RD405	RD454	Notes	
	BASIC OVERHAUL KIT		216221	216221	217464	217464	Contents Identified with •	
	BEARING KIT		216248	216248	512805	512805	Contents Identified with *	
1	Diff Carr & Brg Caps Kit includes items 1-3, 32 & 33		See Chart Below					
			Model Type	Part No.	Casting No.	Notes		
			RS344/404/405/454	510018	129541C	replaces 216223, 131812		
			RA344/404/405/454-NLA	510020-NLA	129541C	replaced 510019		
			RD404/405/454	510017	128600C	replaces 217362/131828		
2	Flat Washer	4	210288	210288	210288	210288		
2a	Plug & O-Ring Assembly	1	131809	131809	131809	131809		
3	Capscrew	4	210095	210095	210095	210095		
4	Cotter Pin	2	090873	090873	090873	090873	Replaces 126156	
5	Diff Brg Adjuster - Plain Half RA models see page 28	1	129130	129130	128616	128616		
6	Bearing Cup - Plain Half	1	129566•*	129566•*	129566•*	129566•*	Replaces 9803	
7	Bearing Cone - Plain Half	1	129565•*	129565•*	129565•*	129565•*	Replaces 27813	
8	Diff Brg Adjuster - Flange Half RA models see page 28	1	129128	129128	129128	129128	Replaces 127410	
9	Bearing Cup - Flange Half	1	129564•*	129564•*	129564•*	129564•*	Replaces 90943	
10	Bearing Cone - Flange Half	1	129563•*	129563•*	129563•*	129563•*	Replaces 6802	
WHEEL DIFF. CASE KITS							Includes items 11-13	
11	Diff Case-LH (Flg Half)	1						
	133737 (was 129464) note-11	1	508653	508653	508724	508724	Ratios 2.64 to 3.25	
	133738 (was 129465) note-11		508654	508654	508725	508725	Ratios 3.36 to 3.90	
	133739 (was 129466) note-11		508655	508655	508726	508726	Ratios 4.11 to 4.88	
	133740 (was 129467) note-11		508656	508656	508727	508727	Ratios 5.29 to 7.17	
12	Diff Case-RH (Plain Half)	1	132437	132437	—	—	was 127498 see note-11 below	
	Diff Case-RH (Plain Half)	1	—	—	128607	128607		
13	Capscrew	12	127465	127465	128619	128619		
WHEEL DIFF SIDE GEAR KIT							Includes items 14-18	
	39 Inv Spline		217461	—	—	—		
	41 Inv Spline		216229	216229	216229	216229		
WHEEL DIFF KIT w/o SIDE GEARS							Includes items 15-18	
14	Side Gear							
	39 Inv spline	2	127367	—	—	—		
	41 Inv spline	2	127368	127368	127368	127368		
15	Side Gear Thrust Washer	2	127386•	127386•	127386•	127386•		
16	Side Pinion Thrust Washer	4	129305•	129305•	129305•	129305•	Replaces 127369	
17	Side Pinion	4	133761	133761	133761	133761	Replaces 127364	
18	Diff Spider	1	127359	127359	127359	127359		

NOTE 11: All differential case halves are now available separately. Design enhancements in the diff cases were released in 2007, refer to bulletin ABIB-0704.

Single Reduction - Rear Axles

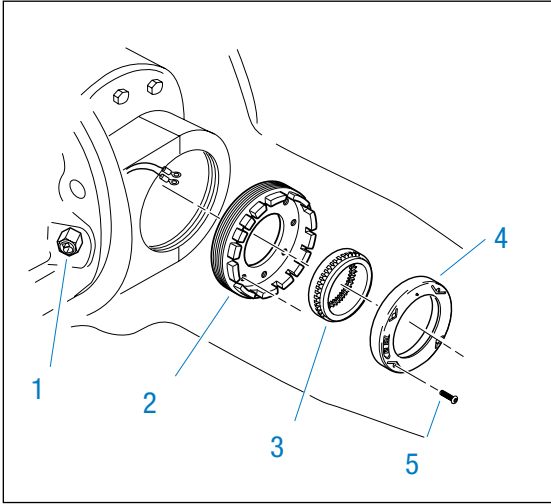
Item	Description	Qty	RA344	RS454	RD404	RD454	Notes
			RS344	RA404	RS404		
	RING GEAR NUT & BOLT KIT		508652	508652	508652	508652	Includes items 19-20
19	Nut	16	126216	126216	126216	126216	
20	Bolt	16	129686	129686	129686	129686	Replaces 128806 See bulletin ABIB-9701
21	Pinion Pilot Brg	1	127485•*	127485•*	127485•*	127485•*	
22	Pinion Brg Cone - Inner	1	129562•*	129562•*	129562•*	129562•*	Replaces 14218
23	PINION BRG SPACER KIT Individual Pinion Bearing Spacers Listed on page 11	AR	504016	504016	504016	504016	
24	Pinion Brg Cage & Cup Assy (includes items 24-26) Cage #127481C NSS	1	127600 129996	127600 —	127600 —	127600 —	standard design parking brake option
25	Pinion Brg Cup - Inner	1	129561•*	129561•*	129561•*	129561•*	Replaces 14217
26	Pinion Brg Cup - Outer	1	012495•*	012495•*	012495•*	012495•*	
27	Pinion Brg Cone - Outer	1	012496•*	012496•*	012496•*	012496•*	
28	Capscrew	6	210115	210115	210115	210115	
	OIL SEAL & SHIM KIT		216225	216225	216225	216225	Includes items 29-30, 34
	PINION CAGE SHIM KIT		504032	504032	504032	504032	Includes 5 each of shims below
29	Shim.003"	AR	127595•	127595•	127595•	127595•	
	Shim.005"		127596•	127596•	127596•	127596•	
	Shim.010"		127597•	127597•	127597•	127597•	
	Shim.020"		127598•	127598•	127598•	127598•	
	Shim.030"		127599•	127599•	127599•	127599•	
30	Oil Seal	1	127591•*	127591•*	127591•*	127591•*	
31	Pinion Nut	1	127589	127589	127589	127589	M36 x 1.5 (55mm socket)
32	Thrust Screw	1	126193	126193	126193	126193	
33	Jam Nut	1	210184	210184	210184	210184	
34	RTV - Sealant	1	107276S•*	107276S•*	107276S•*	107276S•*	Not Illustrated

NSS - Not Sold Separately

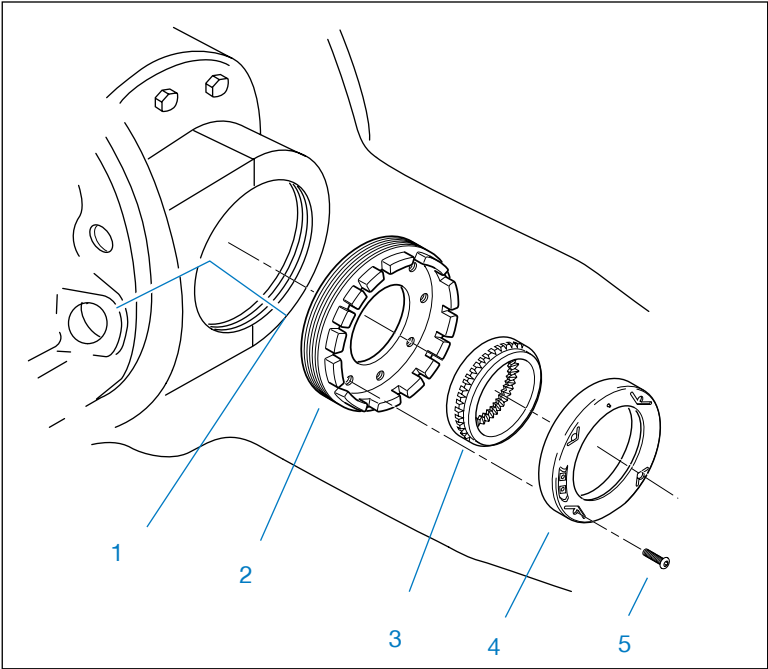
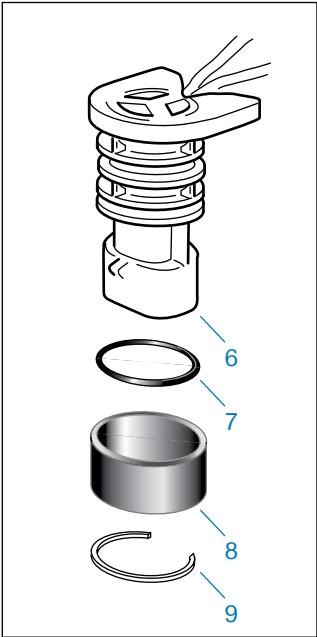
In Axle Speed Sensor

In Axle Speed Sensor

In Axle Speed Sensor Before 11/2/98



In Axle Speed Sensor After 11/2/98



NOTE Sensor connector installed up through carrier hole, reference bulletin ABIB-9901.

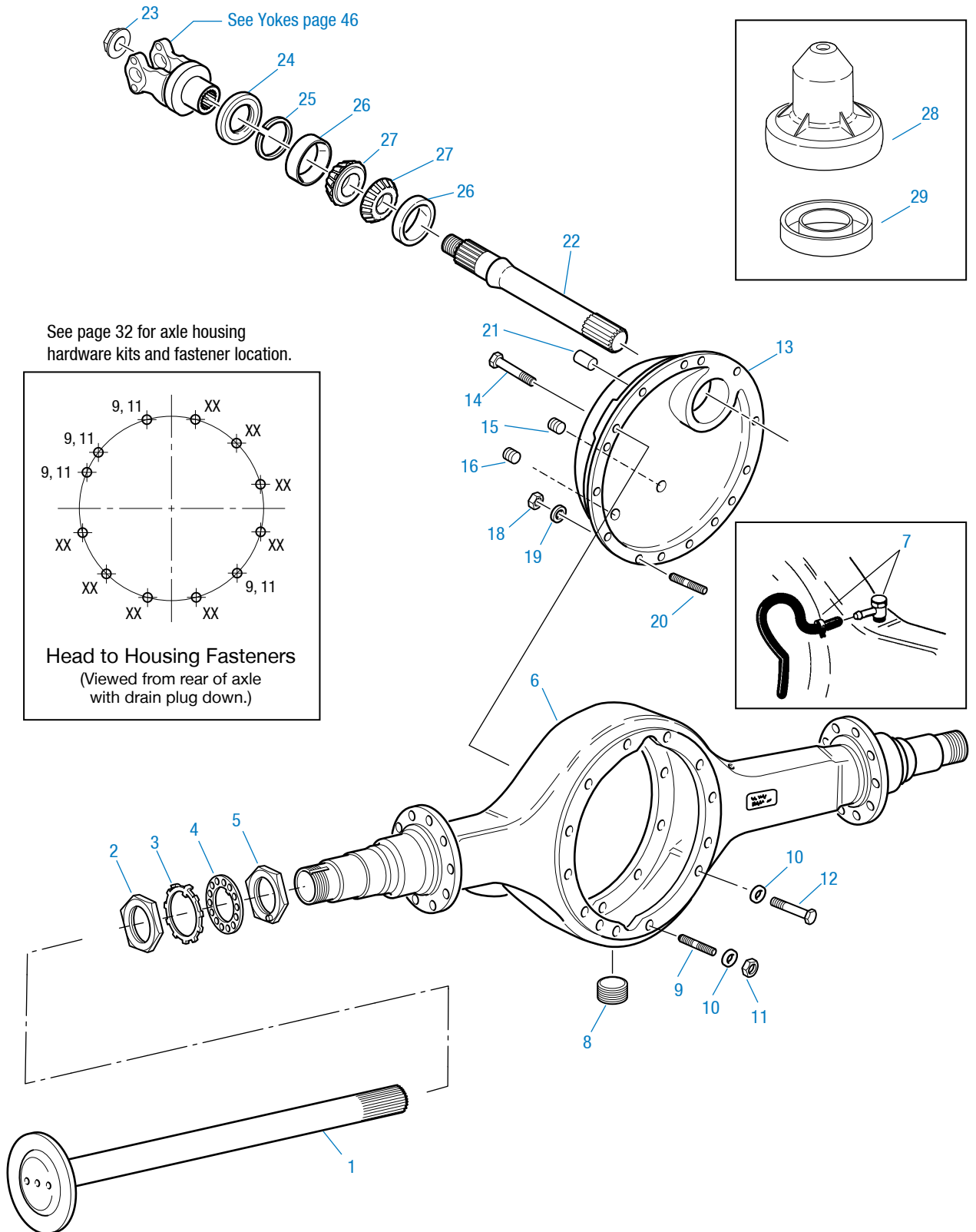
In Axle Speed Sensor

In Axle Speed Sensor

Item	Description	Qty	DA344	RA344	DA344	RA344	Notes	
			DA404-(P)	RA404	DA404-(P)	RA404		
			DA405-(P)	RA405	DA405-(P)	RA405		
			DA454-P	RA454	DA454-P	RA454		
			(Before 11-2-98)	(Before 11-2-98)	(After 11-2-98)	(After 11-2-98)		
1	Sensor Connector	2	128713	128713	—	—	See Note below	
2	Diff Bearing Adjusters							
	Plain Half - 344 series	1	129056-NLA	129056-NLA	129056-NLA	129056-NLA	See Note below	
	Flange Half - 344 series	1	129055-NLA	129055-NLA	129055-NLA	129055-NLA	See Note below	
	Plain Half - 404/405/454	1	128429 -NLA	128429 -NLA	128429 -NLA	128429 -NLA	See Note below	
	Flange Half - 404/405/454	1	128428 -NLA	128428 -NLA	128428 -NLA	128428 -NLA	See Note below	
3	Rotor Assembly							
	41 spline	2	128081 -NLA	128081 -NLA	128081 -NLA	128081 -NLA	All models except D/R344	
	39 spline	2	128993 -NLA	128993 -NLA	128993 -NLA	128993 -NLA	D/R344 models only	
4	Sensor Assembly	2	128082 -NLA	128082 -NLA	128082 -NLA	128082 -NLA	See Note below	
5	Fasteners	4	128074 -NLA	128074 -NLA	128074 -NLA	128074 -NLA	See Note below	
6	Sensor Connector Assy	2	—	—	129061 -NLA	129061 -NLA	Includes Item 7 - see note below	
7	O-ring	2	—	—	14033	14033	See Note below	
8	Bushing Sleeve	2	—	—	129059 -NLA	129059 -NLA	See Note below	
9	Snap Ring	2	—	—	129057 -NLA	129057 -NLA	See Note below	

NOTE Some IASS model parts are no longer manufactured or available and stock availability of individual items are limited. If key components for these models are not available, retrofitting the vehicle and ABS systems to more conventional system set up will be required. Consult your OEM for engineering help.

Output Shaft and Axle Housings



Output Shaft and Axle Housings

Output Shaft and Axle Housings

Item	Description	Qty	Part No.	Notes
1	Axle Shaft	2		Axle Shaft Chart page 34
2	Outer Bearing Adjuster Nut	2	119881	See Note 2
3	Lockwasher - w/Tab	2	129132	
4	Dowel-Type Lockwasher	2	119883	
5	Inner Bearing Adjuster Nut	2	119882	
6	Axle Housing Assy	1	Note: See page 36	See your OEM Catalog
7	U-Tube Breather Kit	1	507162	Contains items: 129340 & 302706
8	Magnetic Drain Plug - 3/4"	1	054254	All D/R models
9	Stud - Carrier to Hsg	4	127641	All D/R models M16 X 1.5
10	Washer - Carrier to Hsg	12	029804	All D models
10A	Washer - Carrier to Hsg	4	029804	All R models
11	Nut - Carrier to Hsg	4	127567	All R models
12	Capscrew - Carrier to Hsg	10	130836	All D/R models (was 210173 and 130158) M16 X 2.0
13	Axle Hsg Cover Kit Cover casting #127486C NSS Refer to note 13 below	1	217519-NLA	Includes 13, 15-16, 23-29 Replaces 129490/127487/129489/129037 Ref: Bulletin ABIB-9709
14	Capscrew - Hsg Cover to Hsg	8	210135	M12 x 1.75
15	Magnetic Plug - 1"	1	075130	See Bulletin ABIB-9709
15	Non-Magnetic Plug 3/4"	1	129492	See Bulletin ABIB-9709
15	Magnetic Plug - 3/4"	1	129491	See Bulletin ABIB-9709
16	Temperature Sensor Plug 1/2"	1	090898	
17	Lube Tag (for 3/4" Plug)	1	129486	See Bulletin ABIB-9709, Part - Not Illustrated
17	Lube Tag (for 1" Plug)	1	128288	See Bulletin ABIB-9709, Part - Not Illustrated
18	Nut - Hsg Cover to Hsg	4	127569	All Forward Axles
19	Lockwasher - Hsg Cover to Hsg	4	210140	All Forward Axles
20	Stud - Hsg Cover	4	127568	All Forward Axles
21	Dowel Pin - Hsg Cover	1	007641	All Forward Axles
OUTPUT SHAFT KIT		1	216227	Includes Items 22-23
22	Output Shaft - #127646 NSS			
23	Locknut - Hex	1	127588	M39 x 1.5 (55mm socket)
24	Oil Seal	1	127592•*	
25	Snap Ring .103"	1	129594•*	Replaces 127538, 127537
26	Bearing Cup	2	127539•*	
27	Bearing Cone	2	127540•*	
28	Seal Driver	1	126917	In Kit 217414
29	Adapter	1	128706	In Kit 217414
30	Loctite Adhesive	1	129293	Not Illustrated, .5 ml Tube
31	RTV - Sealant	1	107276S	Not Illustrated, 3 oz. Tube

NSS - Not Sold Separately

NOTE 2: All 404/405/454 models except 344. Use p/n 19186, 30714 for D/R344 series.

NOTE 13: In the 4th qtr of 1998 a design change was made to the FORWARD axle housings in the 404 family axles. The axle housing rear cover is no longer a bolt on cover but is a welded assembly. The bolt up cover are no longer manufactured or offered by Dana.

• included in basic overhaul kit

* included in bearing kit

Carrier Mounting Flange Design Change

Carrier Mounting Flange Design Change

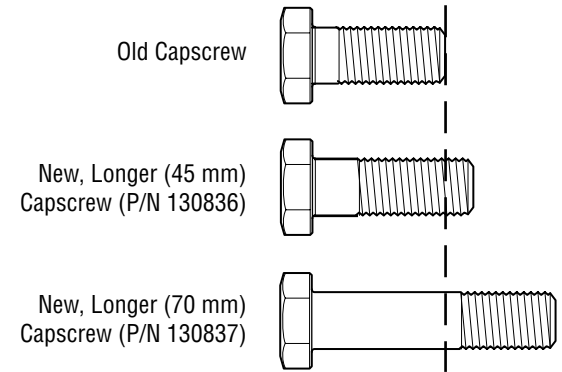
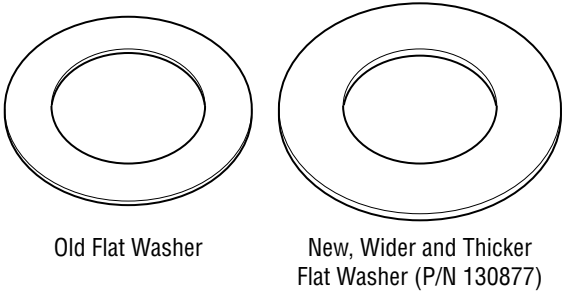
Beginning June 3rd, 2002, the nominal thickness of the carrier to housing flange was increased in the D/R404 family models. This change required the use of new fastener parts. A new (45mm) capscrew (P/N 130836) was released as it replaced both 210173 and 130158 old design capscrews. Additionally, a much 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.

SERVICE CARRIER NOTE:

Both “thin” flange and “thick” flange design carriers are still used by various OEM’s. If you have a vehicle that was originally equipped with a Dana carrier built with the “Thin Flange” carrier design, it can be universally serviced with an current (Thick Flange) Carrier Assembly. The repairing dealer must simply make sure to use the correct axle housing fasteners/hardware parts when re-installation of the replacement carrier is done.

- Differential Carriers with “THICK FLANGE” carrier use axle housing hardware kit (P/N 512087).
- Differential Carriers with “THIN FLANGE” carrier use axle housing hardware kit (P/N 511600).
- GM Vehicles use a double-ended capscrews at the housing fastener location. The hardware kits above can be used, but the unique capscrew must be purchased individually.

New Axle Housing Fasteners



IMPORTANT!

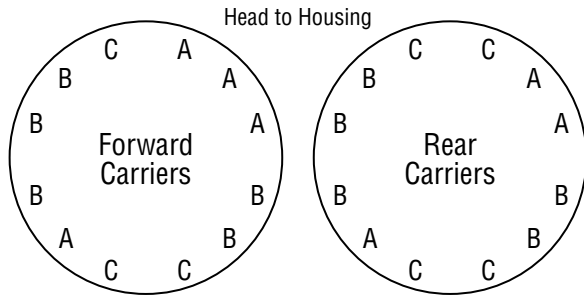
Dana does not recommend the mixing of various designs carrier-to housing capscrews on the same assembly. Whether mixing or not, torques must be measured using a calibrated torque wrench. Failure to re-torque bolts and nuts to proper specifications may lead to carrier to housing leaks and possible component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

Carrier Mounting Flange Design Change

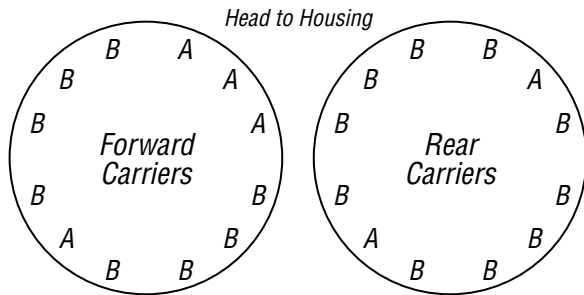
Axle Housing Fasteners

On June 3, 2002 the D/R404 family 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.

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

NOTE GM Vehicles use a double-ended capscrews at the housing fastener location. The hardware kits above can be used, but the unique capscrew must be purchased individually.

512087 Hardware Kit (Thick Flange)

Part No.	Qty.	Description
107276S	1	RTV Sealant 3 oz. Tube
127567	4	Nut
127641	4	Stud
130836	8	Capscrew (45 mm) - Short
130837	4	Capscrew (70 mm) - Long
130877	12	Washer
129293	1	Loctite 271 0.5 ml. Tube
shais136	1	Instruction Sheet - Thick Flange

511600 Hardware Kit (Thin Flange)

Part No.	Qty.	Description
127567	4	Nut
127641	4	Stud
130836	10	Capscrew (was 130158)
130877	12	Washer
129293	1	Loctite 271 0.5 ml. Tube
107276S	1	RTV Sealant 3 oz. Tube
shais131	1	Instruction Sheet

Carrier Mounting Flange Design Change

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	DA344, 404, 405, 454, DS344, 404, 405, 454
130814	129550	Diff. Carrier Casting	DD404, DD404P, DD454, DD454P
130819	129551	Diff. Carrier Casting	DA404P, 405P, 454P, DS404P, 405P, 454P
130822	129571	PDU Cover Casting	All “D” Forward Carriers - 11 hole
130824	129351C, 129541	Diff. Carrier Casting	RA344, 404, 405, 454, RS344, 404, 405, 454
130827	128600	Diff. Carrier Casting	RD404, RD454

Chart B: Part Number Cross-Reference - Service Parts

Service Part No.	Replaces Service Part No.	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)
029804	None	Flat Washer	Was used in various brake assemblies
130823		PDU Cover - 11 hole	All “D” Forward Carriers (new cover uses 11 capscrews)
129572	NLA	PDU Cover - 9 hole	Replaced in production by 130823 PDU Cover
510023	NLA	Carrier & Cap Kit DS344, 404, 405, 454	See note below
510024	NLA	Carrier & Cap Kit DS404P, 405P, 454P	See note below
510027	NLA	Carrier & Cap Kit DD404, 405, 454	See note below
510028	NLA	Carrier & Cap Kit DD404P, 405P, 454P	See note below
510017		Carrier & Cap Kit RD404, 405, 454	
510018		Carrier & Cap Kit RS344, 404, 405, 454	

NOTEAll Original design “Forward” Carrier & Cap kits (made BEFORE JUNE 2008) are no longer available thru Dana. Only New design carrier/cap kits are available and they are not interchangeable. Reference Dana Bulletin ABIB-0801 for more detailed information.

Axle Shafts

Axle Shafts

Dana Spicer 404 series axle shafts are used in “sets”, have unequal shaft lengths and may be “location specific” or “Wheel Equipment specific”. When replacing 404 axle shafts, locate the axle shaft part number (see Model Identification page 4) or select the correct axle shaft from the chart below, before placing your order.

DO NOT MISPLACE AXLE SHAFTS FROM THEIR INTENDED LOCATION.

NOTE STR - Straight, TPR - Tapered

Axle Shafts - Single Reduction Models

Model	Part No.	Qty	Spline	Body O.D.	Shaft Length	Spline Length	Flange O.D.	Flange Holes	OEM
17060S, 19060S, RS344	129010	1	39	1.81	38.500	4"	6.223	12(.781)TPR	2
	129479	1	39	1.81	42.750	4"	6.223	12(.781)TPR	2
	130911	1	39	1.81	42.875	4"	6.625	8(.635) STR	10
	130912	1	39	1.81	38.688	4"	6.625	8(.635) STR	10
DS404	127437	1	41	1.87	38.976	4"	8.500	8(.635) STR	6,5,3
	127438	1	41	1.87	43.307	4"	8.500	8(.635) STR	6,5,3
RS404	128514	1	41	1.87	38.130	4"	8.500	8(.773) STR	7,10
DS454	128515	1	41	1.87	42.460	4"	8.500	8(.773) STR	7,10
RS454	128516	1	41	1.87	38.976	4"	8.500	8(.948) TPR	2,4,7,9
	128517HX	1	41	1.87	43.307	4"	8.500	8(.948) TPR	2,4,7,9
	128521	1	41	1.87	38.130	4"	8.500	8(.948) TPR	1
	128522	1	41	1.87	42.460	4"	8.500	8(.948) TPR	1

- | | |
|------------------|------------------|
| 1 = Ford | 6 = Kenworth |
| 2 = GMC | 7 = Volvo White |
| 3 = Freightliner | 8 = Marmon |
| 4 = Mack | 9 = Western Star |
| 5 = Peterbilt | 10 = Navistar |

Axle Shafts - Diff Lock Models

Model	Part No.	Qty	Spline	Body O.D.	Shaft Length	Spline Length	Flange O.D.	Flange Holes	OEM
17060D, 19060D, RD344	132872	1	39	1.81	38.500	4"	6.625	8(.635) STR	10
	132878	1	39	1.87	42.750	11"	6.625	8(.635) STR	10
	129439	1	39	1.81	38.500	4"	6.223	12(.566)STR	6
	133659	1	39	1.87	42.750	11"	6.223	12(.566)STR	6
DD404	127437	1	41	1.87	38.976	4"	8.5	8(.635) STR	3,5,6
	128435	1	41	1.87	43.307	11"	8.5	8(.635) STR	3,5,6
RD404	128514	1	41	1.87	38.130	4"	8.5	8(.773) STR	7,10
DD454	128559	1	41	1.87	42.460	11"	8.5	8(.773) STR	7,10
RD454	128516	1	41	1.87	38.976	4"	8.5	8(.948) TPR	2,4,7,9
	128561HX	1	41	1.87	43.307	11"	8.5	8(.948) TPR	2,4,7,9
	128521	1	41	1.87	38.130	4"	8.5	8(.948) TPR	1,3
	128563	1	41	1.87	42.460	11"	8.5	8(.948) TPR	1,3

- | | |
|------------------|------------------|
| 1 = Ford | 6 = Kenworth |
| 2 = GMC | 7 = Volvo White |
| 3 = Freightliner | 8 = Marmon |
| 4 = Mack | 9 = Western Star |
| 5 = Peterbilt | 10 = Navistar |

Axle Shafts

Axle Shafts - Models having IASS (In Axle Speed Sensors) for ABS

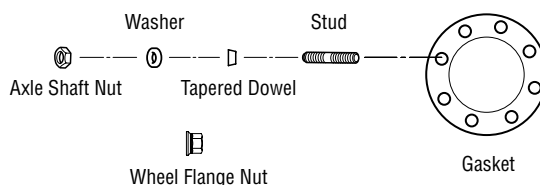
Model	Part No.	Qty	Spline	Body O.D.	Shaft Length	Spline Length	Flange O.D.	Flange Holes	OEM
RA344	129052-NLA	1	39	1.81	38.500	11"	6.125	12(.748)TPR	2
	129053	1	39	1.87	42.750	11"	6.223	12(.781)TPR	2
DA404	128434-NLA	1	41	1.87	38.976	11"	8.5	8(.635) STR	6,5,3
	128435	1	41	1.87	43.307	11"	8.5	8(.635) STR	6,5,3
RA404	128558	1	41	1.87	38.130	11"	8.5	8(.773) STR	7,10
DA454	128559	1	41	1.87	42.460	11"	8.5	8(.773) STR	7,10
RA454	128560	1	41	1.87	38.976	11"	8.5	8(.948) TPR	2,4,7,9
	128561HX	1	41	1.87	43.307	11"	8.5	8(.948) TPR	2,4,7,9
	128562-NLA	1	41	1.87	38.130	11"	8.5	8(.948) TPR	1
	128563	1	41	1.87	42.460	11"	8.5	8(.948) TPR	1

1 = Ford
 2 = GMC
 3 = Freightliner
 4 = Mack
 5 = Peterbilt
 6 = Kenworth
 7 = Volvo White
 8 = Marmon
 9 = Western Star
 10 = Navistar

Axle Shafts - Wide Track Models

Model	Part No.	Qty	Spline	Body O.D.	Shaft Length	Spline Length	Flange O.D.	Flange Holes	OEM
DS404	129388	1	41	1.87	43.887	4"	8.5	8(.773) STR	7
	129434-NLA	1	41	1.87	38.976	4"	8.5	8(.773) STR	7
RS404	129306	1	41	1.87	45.500	4"	8.5	8(.635) STR	9
DS454	128243	1	41	1.87	40.630	4"	8.5	8(.635) STR	9
RS454	128914-NLA	1	41	1.87	45.500	4"	8.5	8(.773) STR	7
	128912	1	41	1.87	41.313	4"	8.5	8(.773) STR	7
	128910	1	41	1.87	42.460	4"	8.5	8(.635) STR	5
	126684	1	41	1.87	46.156	4"	8.5	8(.635) STR	5
DD454	128910	1	41	1.87	42.460	4"	8.5	8(.635) STR	6
RD454	128504	1	41	1.87	46.156	11"	8.5	8(.635) STR	6

1 = Ford
 2 = GMC
 3 = Freightliner
 4 = Mack
 5 = Peterbilt
 6 = Kenworth
 7 = Volvo White
 8 = Marmon
 9 = Western Star
 10 = Navistar

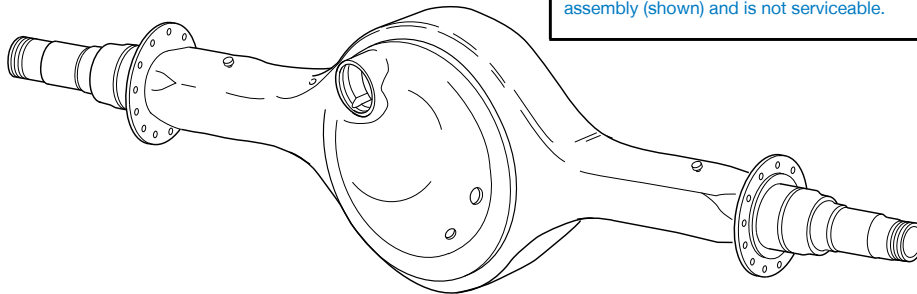


Axle Shaft Hardware

Part Number	Description	Dim. A	Dim. B	Dim. C	Notes
13885	Tapered Dowel	1.00"	.630"	.469"	For 5/8" studs - Split Dowel Design
132993	Tapered Dowel	1.00"	.630"	.469"	For 5/8" studs
13886	Gasket				8 hole
29804	Washer				
60600	Axle Shaft Nut				5/8", 18 thread
127794	Stud - Wheel				5/8", 18 thread

Axle Housing

Axle Housing



In the 4th quarter of 1998 a design change was made to the "FORWARD" axle housings in the 404 family axles. The axle housing rear cover is no longer a bolt on cover but is a welded assembly (shown) and is not serviceable.

Shown below is an axle housing part number cross reference listing for some common D/R housings used in production. If the part number on your tag is not listed below, consult your OEM, local OEM dealer or your Roadranger representative (1-800-826-HELP).

Axle Series	Tag I.D. Number	Old Service Part Number	Current Service Part Number	OEM	Notes
DS404	305828	216123, 319421	321501	Peterbilt	Bare Hsg.
DS404	305828	319157	319903	Peterbilt	Has Torque Rod Bkt & Spring Seats For Air Leaf Suspension
DS404	305828	319161	319905	Peterbilt	Has Torque Rod Bkt & Spring Seats For Air Trac Suspension
DS404	305828	—	320175	Peterbilt	Has Torque Rod Bkt & Spring Seats For Low Air Suspension
DS404	305920	217641	319623	Navistar	Has Torque Rod Bkt & Hanger Bkts
DS404	305924	216019	319413	Navistar	Has Torque Rod Bracket
DS405	306296	219144	319447	Peterbilt	Has Brackets For Hendrickson Suspension
DS405	306296	319157	319903-NLA	Peterbilt	Has Torque Rod Bkt & Spring Seats For Air Leaf Suspension
DS405	306296	216604, 319421	321501	Peterbilt	Bare Hsg.
DS404	306358	507322	319659	Peterbilt/KW	Bare Hsg.
DD404	306436	319423	321501	Peterbilt/KW/Volvo	Bare Hsg.
DD405	306460	319427	321501	Peterbilt/KW	Bare Hsg.
DS404	306492	218639	NONE	Peterbilt/KW	Housing w/ Brackets NLA - use Bare Service Hsg
DS404	306758	217672	321501	Peterbilt/KW	Bare Hsg.
DS404	307190	307191	319449	Volvo/GM	Housing w/ Brackets
DD404	307346	307347	NONE	Ford	Housing w/ Brackets NLA - use Bare Service Hsg
DD404	318646	318647	NONE	Ford	Housing w/ Brackets NLA - use Bare Service Hsg
DD404	318660	318661	NONE	Ford	Housing w/ Brackets NLA - use Bare Service Hsg
DD404	318664	318665	NONE	Ford	Housing w/ Brackets NLA - use Bare Service Hsg
DD405	319430	319431	NONE	Volvo	Has Torque Rod Bracket
DD404	319440	319441	321501	Western Star	Bare Hsg.
DD405	319494	—	319495	Mack	Has Tracking Rod Bracket
DS405	319622	319623	NONE	Navistar	Had Unique Brake Flange
DD405	319684	—	319419	Navistar	Has Brackets
DD404	319710	319711	321501	N/A	Bare Hsg.
DD404	319728	319729	319447	Freightliner	Has Torque Rod and Hanger Brackets
DD454	320112	—	320113	Terex	Has Torque Rod and Hanger Brackets, Wide Trac Design
DD405	320254	—	319649	Volvo	Has Brackets
DDH44	320300	—	319449	Volvo/GM	Has Brackets
DD405	321066	—	321067	Peterbilt	Has Brackets

Axle Housing

Axle Series	Tag I.D. Number	Old Service Part Number	Current Service Part Number	OEM	Notes
DD405	321220	—	321221	GM	Has Brackets
DD405	321248	321249	NONE	Sutphen	Has Torque Rod Bracket and Hanger Brackets
DD405	321262	—	321263	Freightliner	Has Hanger Brackets
DD405	321276	—	321277	Peterbilt	Has Torque Rod Bracket
DD405	321286	—	319447	Freightliner	Has Torque Rod and Hanger Brackets
DD405	321350	—	321351	Western Star	Has Brackets
DD405	321356	—	319475	Crane/Mack/GM	Has Brackets
DD405	321360	—	321361	Kenworth	Has Torque Rod Bracket and Hanger Brackets
DD405	321422	—	321501	Western Star	Bare Hsg.
DD405	321500	—	321501	Peterbilt	Bare Hsg w/ Diff Lock Cutout
DSH40	321548	—	321549	Sterling/FL/Paccar	Bare Hsg.
DD405	321552	—	321553	Paccar	Has Tracking Rod Bracket
DD454	321556	—	319659	Paccar/Terex	Bare Hsg, Wide Track Design
DD405	321634	—	319903	Paccar	Has Torque Rod and Hanger Brackets
DD405	321680	—	321681	Freightliner	Bare Hsg w/ Unique Brake Flange
DS404	322460	—	319419	Navistar	Bare Hsg w/ ABS Blocks
DD405	322578	—	320597	Navistar	Has Tracking Rod Bracket
DD405	322652	—	319847	Freightliner	Has Brackets
DD405	322730	—	322731	Service	Has Hanger Brackets
DD405	322734	322735	NONE	Service	Has Hanger Brackets
DD404	323398	—	502005	GM	Has Brackets
DD405	323529	—	502041	Peterbilt	Has Torque Rod Bracket and ABS Blocks
DD405	323619	—	502060	Navistar	Has Hanger Brackets
DD405	323797	—	502073	Volvo	Has Tracking Rod Bracket
DD405	323798	—	502072	Volvo	Has Tracking Rod Bracket
RS344	305482	—	214132	GM	Bare Hsg.
RS454	305700	—	214987	Peterbilt	Bare Hsg, Short Trac Length
RS404	305830	—	322557	Peterbilt	Bare Hsg.
RS404	305896	216128	322557	PB/Int/FL/KW	Bare Hsg.
RS404	306084	—	216126	Volvo	Has Torque Rod Bkt & Hanger Bkt
RS405	306298	—	322557	PB/Int/FL/KW	Bare Hsg.
RD454	306494	218640	NONE	N/A	Has Torque Rod and Hanger Brackets
RS404	306816	217663	NONE	Freightliner	Bare Hsg w/Unique Brake Flange
RS405	307030	—	218041	Mack	Has Torque Rod and Hanger Brackets
RS405	307044	219145	321429	Peterbilt/GM	Has Torque Rod and Hanger Brackets
RS405	307142	219387	NONE	Ford	Has Torque Rod and Hanger Brackets
RS344	307178	—	307179	GM	Has Torque Rod and Hanger Brackets, small spindle
RD405	307182	307183	321429	GM	Has Torque Rod and Hanger Brackets
RS404	307280	219800	NONE	Volvo	Bare Hsg w/Unique Brake Flange
RD404	307348	307349	NONE	Ford	Has Torque Rod and Hanger Brackets
RD405	307842	—	307843	Crane Carrier	Has Torque Rod and Hanger Brackets
RD405	307872	307873	319207	GM	Has Torque Rod and Hanger Brackets
RD454	318674	318675	NONE	Ford	Has Torque Rod and Hanger Brackets
RD405	319206	—	319207	GM	Has Torque Rod and Hanger Brackets
RD454	320156	320157	NONE	Peterbilt	Has Torque Rod and Hanger Brackets
RS404	320258	—	216126	Volvo	Bare Hsg.

Axle Housing

Axle Series	Tag I.D. Number	Old Service Part Number	Current Service Part Number	OEM	Notes
RD405	320264	—	307713	Volvo	Has Torque Rod Bracket
RS454	320444	320445	NONE	Linkbelt	Has Torque Rod and Hanger Brackets, Wide Trac Design
RD405	320452	—	320453	Mack	Has Torque Rod and Hanger Brackets
RS454	320462	—	320463	Linkbelt	Has Torque Rod and Hanger Brackets, Wide Trac Design
RS344	320572	—	320573	Navistar	Has Torque Rod and Hanger Brackets, ABS Blocks
RS344	320590	—	320591	Navistar	Has Torque Rod and ABS Blocks
RS404	320628	—	320629	Navistar	Has Brackets
RD405	321078	—	321079	Peterbilt	Has Brackets
RD405	321082	—	321083	Peterbilt	Has Tracking Rod Bracket
RS404	321091	—	321091	Peterbilt	Has Brackets
RD405	321264	—	507422	Freightliner	Has Hanger Brackets
RS404	321316	502052	321317	Peterbilt	Has Brackets
RD405	321362	321363	NONE	Kenworth	Has Torque Rod and Hanger Brackets
RD454	321550	—	321551	Freightliner	Bare Hsg w/Cut out for Diff Lock, 12.5mm Wall
RD405	321636	319159	NONE	Peterbilt	Has Torque Rod Bkt and Spring Seats For Air Leaf Suspension
RD405	321650	—	321651	Sutphen	Has Torque Rod Bkts and Hanger Brackets
RD405	321682	—	321683	Freightliner	Bare Hsg w/Unique Brake Flange
RD405	321826	—	321429	Peterbilt/Volvo	Has Torque Rod and Hanger Brackets and ABS Blocks
RD405	322270	307875	322271	GM	Has Torque Rod Brackets and Hanger Brackets
RD405	322556	—	322557	Volvo/PB/Int/FL/KW	Bare Hsg w/ Cut out for Diff Lock, 11mm Wall and ABS Blocks
RD405	322732	—	322733	Service	Has Torque Rod Brackets
RD405	322736	322737	NONE	Service	Has Hanger Brackets
RS344	323395	—	502043	GM	Has Torque Rod Bracket
RD404	323399	—	502006	GM	Has Torque Rod Brackets and ABS Blocks
RD405	323555	—	502039	Kenworth	Bare Hsg w/ Unique Brake Flange and ABS Blocks
RD405	323587	—	502016	GM	Has Torque Rod Bracket and ABS Blocks

Gear & Pinion Kits

Gear & Pinion Kits

D - Forward Axles

D344/404/405/454

15.4"-15.7" Hypoid

Pinion Nut Part-No 126182

Ratios	Spicer Kit	Current Gear (NSS)	Current Pinion (NSS)	Original Kit	Original Gear (NSS)	Original Pinion (NSS)
2.64	211462	127387 (37)	127439 (14)	NA	NA	NA
2.85	211463	127388 (37)	127440 (13)	NA	NA	NA
2.93	509423	129532 (41)	129531 (14)	NA	NA	NA
3.08	513386	127388 (37)	129716 (12)	211464	127388 (37)	127441 (12)
3.25	513385	127389 (39)	130120 (12)	211465	127389 (39)	127442 (12)
3.36	513384	127388 (37)	130121 (11)	211466	127388 (37)	127443 (11)
3.42	504056	134327 (41)	134328 (12)	NA	NA	NA
3.55*	513383	127389 (39)	130122 (11)	211467	127389 (39)	127444 (11)
3.70	513382	127388 (37)	130123 (10)	211468	127388 (37)	127445 (10)
3.90	513381	127389 (39)	130124 (10)	211469	127389 (39)	127446 (10)
4.11*	513380	127388 (37)	130125 (9)	211470	127388 (37)	127447 (9)
4.33	513379	130201 (39)	130126 (9)	211471	127389 (39)	127448 (9)
4.63	513378	130196 (37)	129733 (8)	211472	127390 (37)	127449 (8)
4.88	513377	130197 (39)	129735 (8)	211473	127391 (39)	127450 (8)
5.29	513376	130196 (37)	129816 (7)	211474	127390 (37)	127451 (7)
5.57	513375	130197 (39)	129820 (7)	211475	127391 (39)	127452 (7)
6.17	513374	127390 (37)	129843 (6)	211476	127390 (37)	127453 (6)
6.50	511571	129736 (39)	127454 (6)	211477	127391 (39)	127454 (6)
7.17	511572	130178 (43)	130177 (6)	NA	NA	NA

NSS – Not Sold Separately

Note: In mid-2004, the original design gearing kits were replaced by new gearing that contain design enhancements. In some cases when changing certain ratios (***ratios affected**) or using new design gearing kits to replace original gearing, a differential flange half case change may be required. All flange half differential cases are now available thru Dana as individual components.

Gear & Pinion Kits

Gear & Pinion Kits

R - Rear Axle - Standard Applications

R344/404/405/454, 17060/19060/21060/22060S/D/L

15.4"-15.7" Hypoid

Spline: 39-1.95" Involute

Pinion Nut Part-No 127589

Ratios	Spicer Kit	Current Gear (NSS)	Current Pinion (NSS)	Original Kit	Original Gear (NSS)	Original Pinion (NSS)
2.64	211478	127380 (37)	127420 (14)	NA	NA	NA
2.85	211479	127381 (37)	127421 (10)	NA	NA	NA
2.93	509424	129534 (41)	129533 (14)	NA	NA	NA
3.08	513373	127381 (37)	139737 (12)	211480	127381 (37)	127422 (12)
3.25	513372	127382 (39)	130127 (12)	211481	127382 (39)	127423 (12)
3.36	513371	127381 (37)	130128 (11)	211482	127381 (37)	127424 (11)
3.42	504055	134325 (41)	134326 (12)	NA	NA	NA
3.55*	513370	127382 (39)	130129 (11)	211483	127382 (39)	127425 (11)
3.70	513369	127381 (37)	130130 (10)	211484	127381 (37)	127426 (10)
3.90	513368	127382 (39)	130131 (10)	211485	127382 (39)	127427 (10)
4.11*	513367	127381 (37)	130132 (9)	211486	127381 (37)	127428 (9)
4.33	513366	130200 (39)	130133 (9)	211487	127382 (39)	127429 (9)
4.63	513365	130194 (37)	129748 (8)	211488	127383 (37)	127430 (8)
4.88	513364	130195 (39)	129750 (8)	211489	127384 (39)	127431 (8)
5.29	513363	130194 (37)	129818 (7)	211490	127383 (37)	127432 (7)
5.57	513362	130195 (39)	129822 (7)	211491	127384 (39)	127433 (7)
6.17	513361	127383 (37)	129844 (6)	211492	127383 (37)	127434 (6)
6.50	211493	127384 (39)	127435 (6)	NA	NA	NA
7.17	211494	127385 (43)	127436 (6)	NA	NA	NA

NSS – Not Sold Separately

Note: In mid-2004, the original design gearing kits were replaced by new gearing that contain design enhancements. In some cases when changing certain ratios (***ratios affected**) or using new design gearing kits to replace original gearing, a differential flange half case change may be required. All flange half differential cases are now available thru Dana as individual components.

Dana offers new highly developed Gen-Tech™ quiet gearing for single axle applications that require low noise resolution while maintaining the same high strength quality that Spicer® genuine gearing is known for. This gearing like all Spicer gearing is developed and machined in sets and specified by many customers in medium duty applications. Never mix gears and pinions from different sets within an axle. Shortened gearing life, noise and failure may occur. When replacing gearing check the drive pinion and ring gear numbers to the charts below to get the correct replacement service kit.

Gear & Pinion Kits

R - Rear Single Axle - Gen-Tech™ Quiet Gearing Applications

17060/19060/21060/22060S/D/L BC

15.4" Hypoid

39-1.95" Inv Spline

Pinion Nut Part-No 127589

Ratios	Spicer Kit	Current Gear (NSS)	Current Pinion (NSS)
4.30	508401	129449 (43)	129450 (10)
4.33	508366	129740 (39)	132455 (9)
4.63	504012	132132 (37)	132314 (8)
4.78	508402	129449 (43)	129451 (9)
4.88	508368	132135 (39)	132100 (8)
5.29	508367	132137 (37)	132103 (7)
5.57	511576	132139 (39)	132106 (7)
6.17	504013	132141 (37)	132311 (6)
6.50	504010	127384 (39)	132997 (6)
7.17	514337	127385 (43)	132998 (6)

NSS – Not Sold Separately

Note: Dana Spicer® Gen-Tech™ gearing is uniquely designed for single axle applications that specify quiet gearing. The use of replacement standard gearing in these applications or the use of any gearing in Dana carriers not manufactured by Dana could lead to noise complaints or failures and are not warranted by Dana.

Service Carrier Assemblies

DS404-(P)

Single Reduction
41 Inv Spline
Side Gear p/n 127368

Ratio	Non-Pump Service Carrier	Pump Service Carrier	Old Part Number Non-Pump	Old Part Number Pump
2.64	682861	682200	674861	675200
2.85	682862	682201	674862	675201
3.08	682863	682202	674863	675202
3.25	682864	682203	674864	675203
3.36	682865	682204	674865	675204
3.42	681572	681573	n/a	n/a
3.55	682866	682205	674866	675205
3.70	682867	682206	674867	675206
3.90	682868	682207	674868	675207
4.11	682869	682208	674869	675208
4.33	682870	682209	674870	675209
4.63	682871	682210	674871	675210
4.88	682872	682211	674872	675211
5.29	682873	682212	674873	675212
5.57	682874	682213	674874	675213
6.17	682875	682214	674875	675214
6.50	682876	682012	674876	N/A

RS404

Single Reduction
41 Inv Spline
Side Gear p/n 127368

Ratio	Service Carrier	Notes
2.64	674877	
2.85	674878	
3.08	674879	
3.25	674880	
3.36	674881	
3.42	681576	
3.55	674882	
3.70	674883	
3.90	674884	
4.11	674885	
4.33	674886	
4.63	674887	
4.88	674888	
5.29	674889	
5.57	674890	
6.17	674891	
6.50	674892	
7.17	674893	

DD404-(P)

Single Reduction w/Differential Lock
41 Inv Spline
Side Gear p/n 127368

Ratio	Non-Pump Service Carrier	Pump Service Carrier	Old Part Number Non-Pump	Old Part Number Pump
2.64	682510	682303	675510	675303
2.85	682251	682304	675251	675304
3.08	682252	682305	675252	675305
3.25	682253	682306	675253	675306
3.36	682254	682307	675254	675307
3.42	681574	681575	n/a	n/a
3.55	682255	682308	675255	675308
3.70	682256	682309	675256	675309
3.90	682257	682310	675257	675310
4.11	682258	682311	675258	675311
4.33	682259	682312	675259	675312
4.63	682260	682313	675260	675313
4.88	682261	682314	675261	675314
5.29	682262	682315	675262	675315
5.57	682263	682316	675263	675316
6.17	682264	682317	675264	675317
6.50	682265	682318	675265	675318

RD404

Single Reduction w/Differential Lock
41 Inv Spline
Side Gear p/n 127368

Ratio	Service Carrier	Notes
2.64	676013	replaces 675280
2.85	675281	
3.08	675282	
3.25	675283	
3.36	675284	
3.42	681577	
3.55	675285	
3.70	675286	
3.90	675287	
4.11	675288	
4.33	675289	
4.63	675290	
4.88	675291	
5.29	675292	
5.57	675293	
6.17	675294	
6.50	675295	
7.17	675296	

Service Carrier Assemblies

Supersession of D/R454 Models to New Generation Models

In 2003 the D/R454 models were discontinued and replaced by the DSH40/RSH40 family of carriers. In 2009 additional replacements were made and are reflected below. Reference Dana bulletin abib-0902 for specific details of those changes.

Ratio	DS454 NLA	Replaced By Model	Current Part Number
2.64	675657	NLA	none
2.85	675658	NLA	none
3.08	675659	DSH40	682740
3.25	675660	DSH40	682741
3.36	675661	DSH40	682742
3.55	675662	DSH40	682743
3.70	675663	DSH40	682744
3.90	675664	DSH40	682745
4.11	675665	DSH40	682746
4.33	675666	DSH40	682747
4.63	675667	DSH40	682748
4.88	675668	DSH40	682749
5.29	675669	DSP40	682977
5.57	675670	DSP40	682978
6.17	675671	DSP40	682979
6.50	675672	DSP40	682980
7.17	—	DSP40	682014

Ratio	RS454 NLA	Replaced By Model	Current Part Number
2.64	675673	NLA	none
2.85	675674	NLA	none
3.08	675675	RSH40	675780
3.25	675676	RSH40	675781
3.36	675677	RSH40	675782
3.55	675678	RSH40	675783
3.70	675679	RSH40	675784
3.90	675680	RSH40	675785
4.11	675681	RSH40	675786
4.33	675682	RSH40	675787
4.63	675683	RSH40	675788
4.88	675684	RSH40	675789
5.29	675685	RSP40	676041
5.57	675686	RSP40	676042
6.17	675687	RSP40	676043
6.50	675688	RSP40	676044
7.17	—	RSP40	681443

Ratio	DS454P NLA	Replaced By Model	Current Part Number
2.64	675641	NLA	none
2.85	675642	NLA	none
3.08	675643	DSH40P	682750
3.25	675644	DSH40P	682751
3.36	675645	DSH40P	682752
3.55	675646	DSH40P	682753
3.70	675647	DSH40P	682754
3.90	675648	DSH40P	682755
4.11	675649	DSH40P	682756
4.33	675650	DSH40P	682757
4.63	675651	DSH40P	682758
4.88	675652	DSH40P	682759
5.29	675653	DSP40P	682009
5.57	675654	DSP40P	682010
6.17	675655	DSP40P	682011
6.50	675656	DSP40P	682012
7.17	—	DSP40P	682013

Ratio	DD454 NLA	Replaced By Model	Current Part Number
2.64	675705	NLA	none
2.85	675706	NLA	none
3.08	675707	DDH40	682760
3.25	675708	DDH40	682761
3.36	675709	DDH40	682762
3.55	675710	DDH40	682763
3.70	675711	DDH40	682764
3.90	675712	DDH40	682765
4.11	675713	DDH40	682766
4.33	675714	DDH40	682767
4.63	675715	DDH40	682768
4.88	675716	DDH40	682769
5.29	675717	DDP40	682961
5.57	675718	DDP40	682962
6.17	675719	DDP40	682963
6.50	675720	DDP40	682964
7.17	—	DDP40	682016

Service Carrier Assemblies

Supersession of D/R454 Models to New Generation Models

In 2003 the D/R454 models were discontinued and replaced by the DSH40/RSH40 family of carriers. In 2009 additional replacements were made and are reflected below. Reference Dana bulletin abib-0902 for specific details of those changes.

Ratio	DD454P NLA	Replaced By Model	Current Part Number
2.64	675689	NLA	none
2.85	675690	NLA	none
3.08	675691	DDH40P	682770
3.25	675692	DDH40P	682771
3.36	675693	DDH40P	682772
3.55	675694	DDH40P	682773
3.70	675695	DDH40P	682774
3.90	675696	DDH40P	682775
4.11	675697	DDH40P	682776
4.33	675698	DDH40P	682777
4.63	675699	DDH40P	682778
4.88	675700	DDH40P	682779
5.29	675701	DDP40P	682993
5.57	675702	DDP40P	682994
6.17	675703	DDP40P	682995
6.50	675704	DDP40P	682996
7.17	—	DDP40P	682015

Ratio	RD454 NLA	Replaced By Model	Current Part Number
2.64	675721	NLA	none
2.85	675722	NLA	none
3.08	675723	RDH40	675790
3.25	675724	RDH40	675791
3.36	675725	RDH40	675792
3.55	675726	RDH40	675793
3.70	675727	RDH40	675794
3.90	675728	RDH40	675795
4.11	675729	RDH40	675796
4.33	675730	RDH40	675797
4.63	675731	RDH40	675798
4.88	675732	RDH40	675799
5.29	675733	RDP40	676025
5.57	675734	RDP40	676026
6.17	675735	RDP40	676027
6.50	675736	RDP40	676028
7.17	—	RDP40	681444

Service carriers for “Reverse Air” DA/RA models and models with “In Axle Speed Sensors” IASS, are no longer offered by Dana. Contact your Roadranger representative at 1-800-826-HELP for additional assistance.

Service Carrier Assemblies

DS344

Single Reduction
39 Inv Spline
Side Gear p/n 127367

Ratio	Service Carrier	Old Part Number
2.64	682883	675883
2.85	682884	675884
2.93	682885	675885
3.08	682886	675886
3.25	682887	675887
3.36	682888	675888
3.55	682889	675889
3.70	682890	675890
3.90	682891	675891
4.11	682892	675892
4.33	682893	675893
4.63	682894	675894
4.88	682895	675895
5.29	682896	675896
5.57	682897	675897
6.17	682898	675898
6.50	682899	675899

RS344

Single Reduction
39 Inv Spline
Side Gear p/n 127367

Ratio	Service Carrier
2.64	N/A
2.85	N/A
2.93	N/A
3.08	675914
3.25	N/A
3.36	675565
3.55	675566
3.70	675623
3.90	675564
4.11	675414
4.33	675415
4.63	675416
4.88	675417
5.29	675418
5.57	675419
6.17	675420
6.50	675421
7.17	675422

DL344

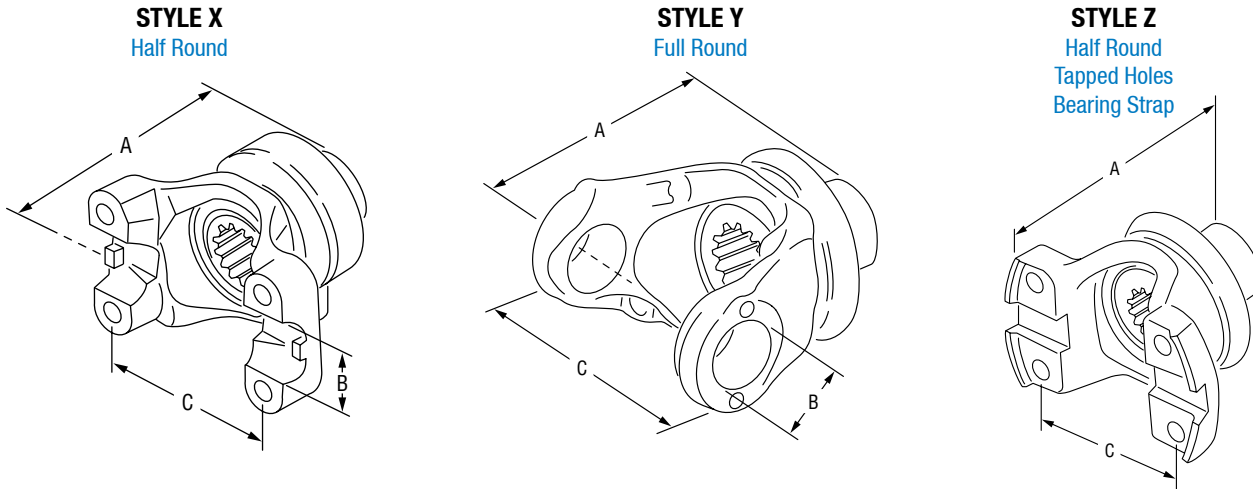
Single Reduction w/Differential Lock
39 Inv Spline
Limited Slip p/n 130141

Ratio	Service Carrier	Old Part Number
4.33	call Dana	N/A
4.63	call Dana	N/A
4.88	call Dana	N/A
5.29	call Dana	N/A
6.17	682163	676163
6.50	682164	676164

Yokes and Flanges

Yokes and Flanges

The following yoke reference information can be used for ordering replacement yoke assemblies for new service carriers. Shown below are original production part numbers and shown next to them are how those Yoke & Slinger Assy's are serviced thru the Dana's aftermarket. Always double check part supersession and options before ordering product.



Forward Axle - Input / 44 - 2.250 Involute Spline

Production Yoke & Slinger Assy#	Service Part Number	Series	Joint Angle	Style	Dimensions (in inches):		
					A	B	C
127550	6-4-8981-1X	1710	23°	Y	5.19	1.94	6.09
127617	6-4-8981-1X	1710	30°	X	5.19	1.94	6.19
127618	6.3-4-5221X	1760	30°	Y	5.25	1.94	7.00
127619	6.5-4-4571X	1810	30°	Y	5.25	1.94	7.55
127620	5-4-9261-1X *	1610	35°	X	5.00	1.88	5.31
127621	6.5-4-4571-1X	1810	30°	X	5.25	1.94	7.64
127622	6.3-4-5221-1X	1760	30°	X	5.25	1.94	7.09
210831	170-4-201-1X	SPL170	25°	X	5.27	2.16	5.51
210833	250-4-81-1X	SPL250	25°	X	5.49	2.36	5.31

* Call for availability

Forward Axle - Output / 39 - 1.950 Involute Spline

Production Yoke & Slinger Assy#	Service Part Number	Series	Joint Angle	Style	Dimensions (in inches):		
					A	B	C
127558	6-4-9041X	1710	30°	Y	5.25	1.94	6.09
127624	6-4-9001X	1710	45°	Y	6.12	1.94	6.09
127638	5-4-9271X*	1610	45°	Y	6.00	1.88	5.31
128722	6-4-9001-1X	1710	39.5°	X	6.12	1.94	6.19
128737	6-4-9041-1X	1710	30°	X	5.25	1.94	6.19
210835	170-4-221-1X	SPL170	25°	X	5.27	2.16	5.51
210837	170-4-241-1X	SPL170	45°	X	6.50	2.16	5.51

* Call for availability

Yokes and Flanges

Yokes and Flanges

Rear Axle - Input / 39 - 1.95 Involute Spline

Production Yoke & Slinger Assy#	Service Part Number	Series	Joint Angle	Style	Dimensions (in inches):		
					A	B	C
127415	6-4-9031X	1710	30°	Y	5.25	1.94	6.09
127637	6-4-8991X	1710	45°	Y	6.12	1.94	6.09
128720	5-4-8261	1610	45°	Y	6.00	1.88	5.31
128721	128721*	1610	22°	Y	4.72	1.88	5.31
128745	6-4-9031-1X	1710	30°	X	5.25	1.94	6.19
128746	6-4-8991-1X	1710	39.5°	X	6.12	1.94	6.19
129019	5-4-9241-1X	1610	45°	X	6.00	1.88	5.31
129043	5-4-9231-1X	1610	23°	X	4.88	1.88	5.31
129164	3-4-13081-1X	1480	19°	X	4.34	1.38	3.69
129166	4-4-7571-1X	1550	24.5°	X	4.30	1.38	4.47
210839	170-4-261-1X	SPL170	25°	X	5.16	2.16	5.51
210841	170-4-281-1X	SPL170	45°	X	6.24	2.16	5.51
210875	210875*	RPL20	30°	X	4.85	N/A	5.30
210877	210877*	RPL20	42°	X	5.69	N/A	5.30
210923	90-4-251-1X	SPL90	15°	X	4.75	1.61	4.53

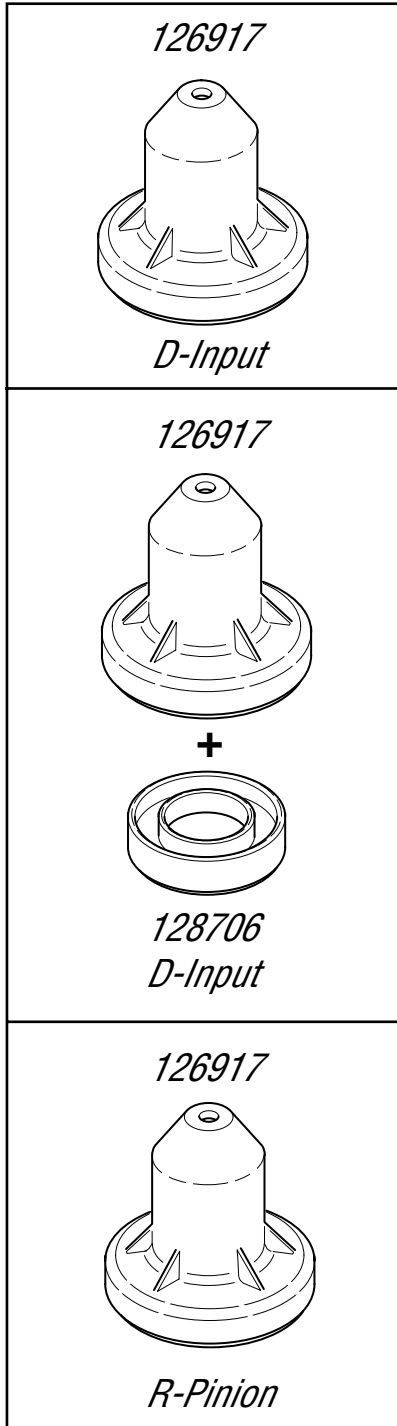
* Call for availability

Kits and Assemblies

Oil Seal Installation Tools

This kit contains installation tools used for installing driveline 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



Service Kits and Assemblies

Axle Housing Hardware Kit - Thick Flange Carriers	512087
Axle Housing Hardware Kit - Thin Flange Carriers	511600
Basic Overhaul Kit - DD Models BEFORE June 2008	217463
Basic Overhaul Kit - RD Models BEFORE June 2008	217464
Basic Overhaul Kit - DS Models BEFORE June 2008	216220
Basic Overhaul Kit - RS Models BEFORE June 2008	216221
Basic Overhaul Kit - D40K Standard mdl's AFTER June 2008	504030
Basic Overhaul Kit - D40K Diff-Lock mdl's AFTER June 2008	504031
Bearing Kit - DS Models BEFORE June 2008	216234
Bearing Kit - RS Models BEFORE June 2008	216248
Bearing Kit - DD Models BEFORE June 2008	512800
Bearing Kit - RD Models BEFORE June 2008	512805
Cage & Cup Assy - All "D" series	129767
Cage & Cup Assy - All "R" series	127600
Cage & Cup Assy - All "R" series - Parking Brake Option	129996
Input Brg Cover Assy - After 11/2/98	129575
Input Brg Cover Assy - Before 11/2/98	127602
Input Shaft Kit - All "D" Models - BEFORE June 2008	510593
Input Shaft Kit - D40K PUMP Models - AFTER June 2008	504027
Input Shaft Kit - D40K NON-PUMP Models-AFTER June 2008	504026
Inter-Axle Diff Assy - All "D" Models	134192
Lube Pump Assembly - All Models BEFORE June 2008	127534
Lube Pump Parts Kit - All Models AFTER June 2008	504028
Manifold Parts Kit - Pump Mdls AFTER June 2008	504029
Oil Seal Driver Installation Kit - All Models	217414
Oil Seal & Shim Kit - All "D" series	216224
Oil Seal & Shim Kit - All "R" series	216225
Output Shaft Kit - All "D" Models	216227
Pinion Brg Spacer Kit - All "D" Models	504043
Pinion Brg Spacer Kit - All "R" Models	504016
Pinion Brg Cage Shim Kit - All "D"/"R" Models	504032

Service Kits and Assemblies

Ring Gear Nut & Bolt Kit	508652
Shift Fork & Spring Kit	510870
Wheel Diff Case Kit - 2.64 to 3.25 - All DS/RS Models	508653
Wheel Diff Case Kit - 3.36 to 3.90 - All DS/RS Models	508654
Wheel Diff Case Kit - 4.11 to 4.88 - All DS/RS Models	508655
Wheel Diff Case Kit - 5.29 to 7.17 - All DS/RS Models	508656
Wheel Diff Case Kit - 2.64 to 3.25 - All DD/RD Models	508724
Wheel Diff Case Kit - 3.36 to 3.90 - All DD/RD Models	508725
Wheel Diff Case Kit - 4.11 to 4.88 - All DD/RD Models	508726
Wheel Diff Case Kit - 5.29 to 7.17 - All DD/RD Models	508727
Wheel Diff Side Gear Kit - 41 Inv	216229
Wheel Diff Side Gear Kit - 39 Inv	217461
Wheel Diff Kit - w/o side gears - All Models	216228

Quick Part Number Replacement Listing

Quick Part Number Replacement Listing

Old Part Number	Current Replacement Part Number	Notes
006082	129563	
009803	129566	
014217	129561	
027813	129565	
085439	129560	
090943	129564	
121753	508652	See bulletin ABIB-9701
126156	090873	
126841	—	See bulletin ABIB-9609 for replacement kits
127369	129305	
127410	129128	
127412	129130	
127487	217519	See bulletin ABIB-9709
127494	130907	
127495	130907	
127506	129783	127506 cannot be used in axle designs built after 11-2-99
127601	129767	
127648	127628	
128146	129044	See bulletin ABIB-9609
128445	129046	See bulletin ABIB-9609
128481	129047	See bulletin ABIB-9609
128612	508290	See bulletin ABIB-9609
128806	508652	See bulletin ABIB-9701
128926	126840	
129037	217519	See bulletin ABIB-9709
129056	NONE	Never released
129489	217519	See bulletin ABIB-9709
129490	217519	See bulletin ABIB-9709
129859	129584	
210280	—	See bulletin ABIB-9609 for replacement kits
210299	129433	
216222	510021	DS344/404/405
216230	508653	See bulletin ABIB-9701
216231	508654	See bulletin ABIB-9701
216232	508655	See bulletin ABIB-9701
216233	508656	See bulletin ABIB-9701
217166	508724	See bulletin ABIB-9701
217168	508726	See bulletin ABIB-9701
217169	508727	See bulletin ABIB-9701
217360	510022	DS404P/405P
217361	510025	404/405
217536	510029	DA344/404/405
217537	510026	404P/405P

Quick Part Number Replacement Listing

Quick Part Number Replacement Listing

Old Part Number	Current Replacement Part Number	Notes
218167	508725	See bulletin ABIB-9701
219704	508652	See bulletin ABIB-9701
820643	129558	
216223	510018	
217362	510017	
510019	510020	



SPICER®

Drivetrain Products

Copyright Eaton Corporation and Dana Limited, 2011. Eaton and Dana hereby grant their customers, vendors, or distributors permission to freely copy, reproduce and/or distribute this document in printed format. It may be copied only in its entirety without any changes or modifications. THIS INFORMATION IS NOT INTENDED FOR SALE OR RESALE, AND THIS NOTICE MUST REMAIN ON ALL COPIES.



National Institute for
**AUTOMOTIVE
SERVICE
EXCELLENCE**

Roadranger®



EATON

For specifying or service assistance, call 1-800-826-HELP (4357) 24 hours a day, 7 days a week (Mexico: 001-800-826-4357), for more time on the road. Or visit our web site at www.roadranger.com.

Roadranger: Eaton, Dana and other trusted partners providing the best products and services in the industry, ensuring more time on the road.