

Spicer® Drive Axles

**SPICER**®

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# Illustrated Parts List

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**AXIP-0487**

**May 2023**

S140 Model



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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 coloured 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

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

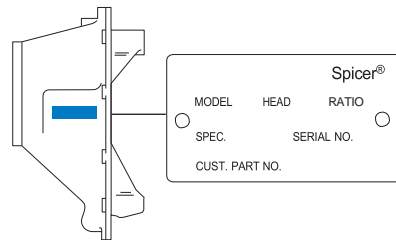
*Other pertinent information is listed in tables or parts listings as required.*

## Model Identification

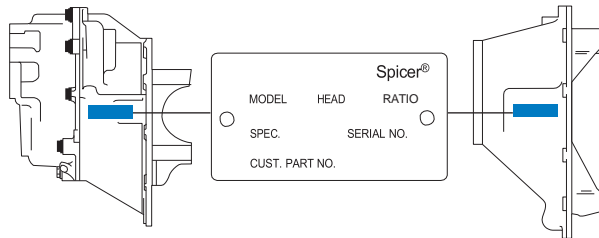
### Locating Model Designation Information

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

### Drive Axles



**Single Drive Axles**

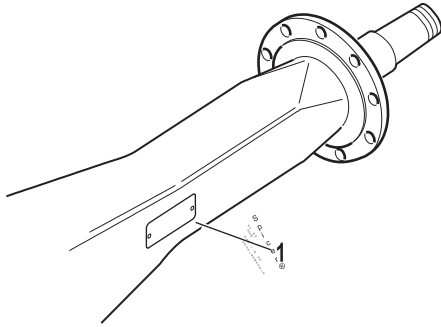


**Tandem Drive Axles**

- 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**

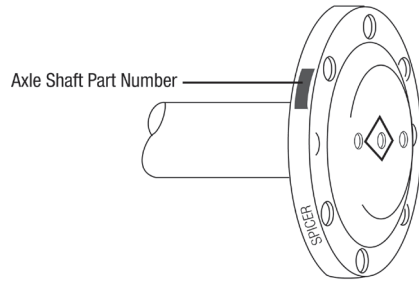
# Model Identification

## Axle Housing



1 - ID Tag

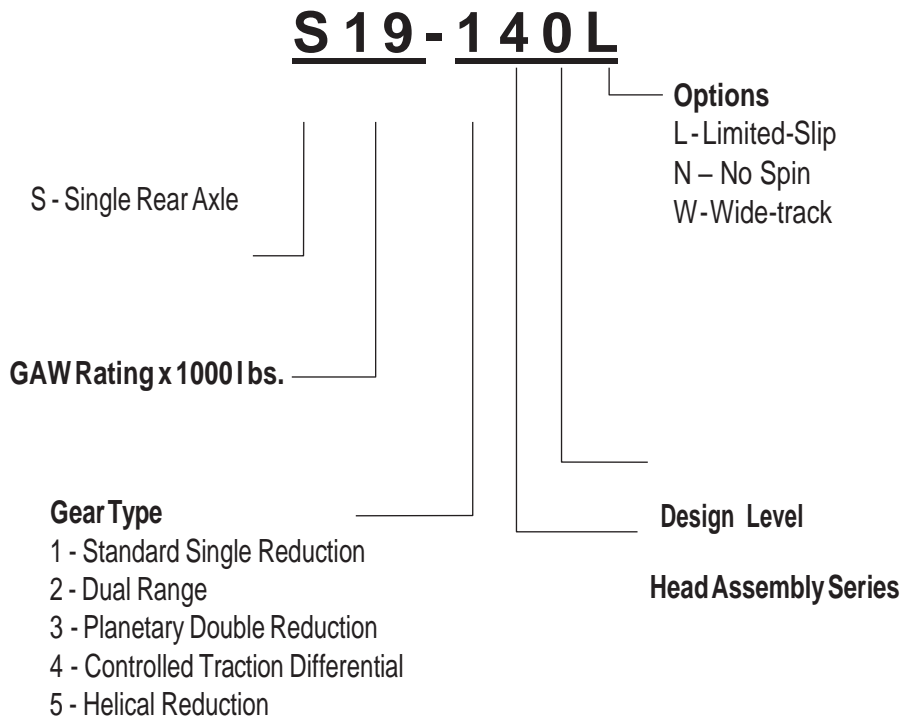
## Axle Shaft



2 - Axle shaft part number

### 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 Dana Aftermarket representative.



## Model Identification

### 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		Indicated information important to ordering or use
Item	Part Name	Qty	MODEL1	MODEL2	Notes
1	Axle Shaft	2	xxxxxx	xxxxxx	See Axle Shaft Chart
2	Flat Washer	4	xxxxxx	xxxxxx	

#### Kits and Assemblies

Item	Part Name	Qty	MODEL1	MODEL2	Notes
Bearing Kits		1	xxxxxx	xxxxxx	Contents Identified with *

## Models

The following models are included in this publication:

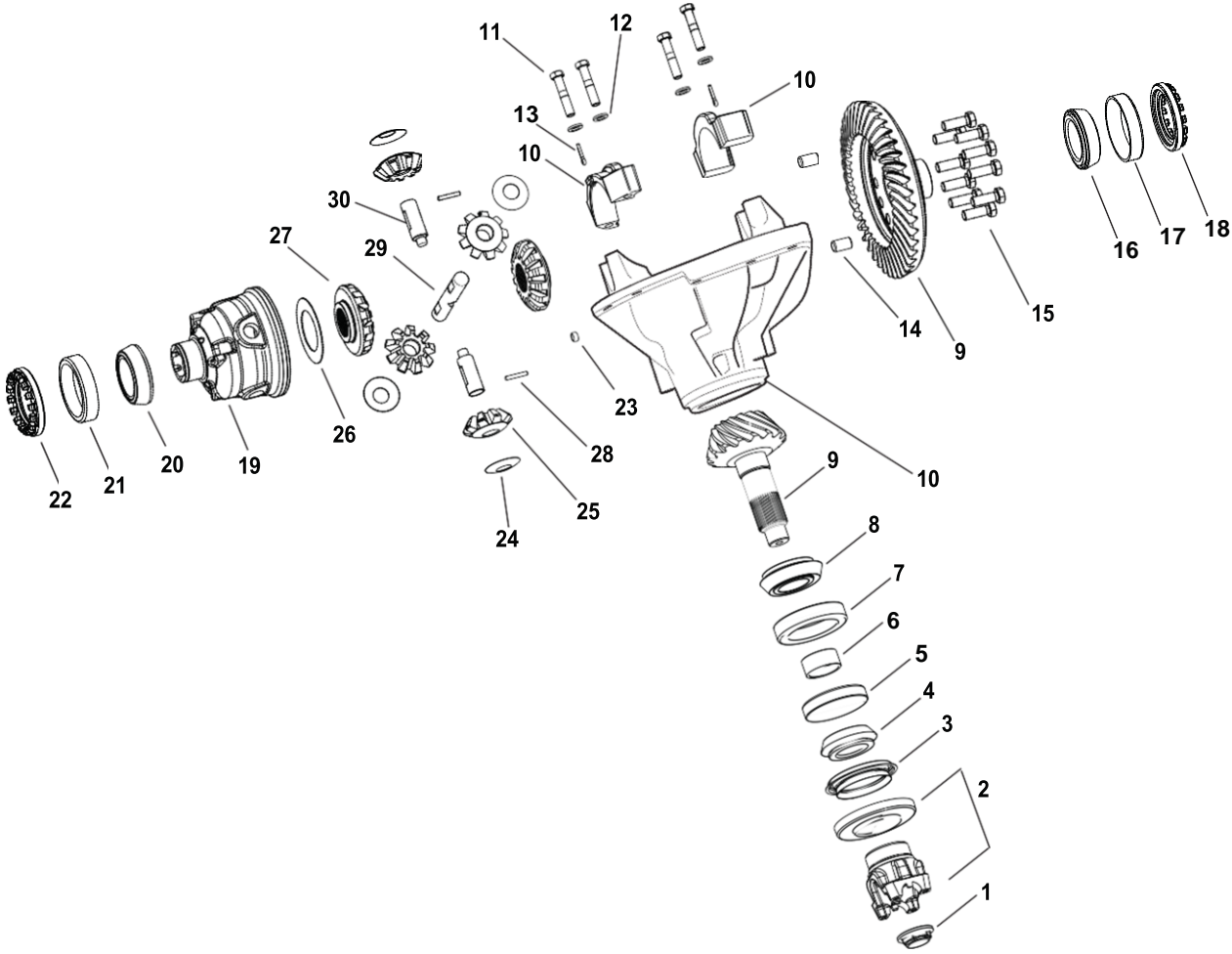
### Single Reduction Models

Model	Axle Capacity	Gear Size
S17-140	17,000 Lbs	13.4" Hypoid
S19-140	19,000 Lbs*	13.4" Hypoid

\*Note: Up to 19,800 lbs. GAWR for approved school bus applications.

# Axle Parts Explode

## Axle Parts Explode





## Axle Parts List

### Axle Parts List

Item	Part Name	Qty	S140	Notes
<b>KIT - BEARING</b>			<b>505064</b>	Contents Identified with *
1	Pinion Nut	1	127589	
2	End Yoke & Slinger Assy	1	---	See page 16 for individual part numbers
3	Oil Seal-Pinion	1	10226476	Replaces 127591
4	Outer Pinion Bearing Cone	1	012496*	can use 134308
5	Outer Pinion Bearing Cup	1	012495*	can use 134295
6	<b>KIT - PINION BEARING SPACER</b>	<b>1</b>	<b>504039</b>	<a href="#">Ref page 8 for individual part numbers and kit contents</a>
7	Inner Pinion Bearing Cup	1	10222228*	Replaces 133897
8	Inner Pinion Bearing Cone	1	10222227*	Replaces 133898
9	Ring Gear & Drive Pinion - NSS	1	---	See page 9 for individual Ring Gear & Pinion Kits
10	Diff Carrier-n-Cap Assy.	1	134154	Casting#134153 (includes items 10-12)
11	Capscrew - Carrier Cap	4	134481	Replaces 210095
12	Washer - Carrier Cap	4	210288	
13	Cotter Pin	2	090873	
14	Pin - Dowel	2	132821	
15	Ring Gear Bolts	12	133896	
16	Bearing Cone - Flange Half	1	10330052*	Replaces 099906
17	Bearing Cup - Flange Half	1	10330055*	Replaces 031824
18	Diff Bearing Adjuster - Flange Half	1	133873	
19	Differential Case - Plain Half	1	134051	
20	Bearing Cone - Plain Half	1	10079935*	Replaces HB105
21	Bearing Cup - Plain Half	1	10079936*	Replaces HA102
22	Diff Bearing Adjuster - Plain Half	1	360HR101	
23	Fill Plug - Magnetic 3/4"	1	054254	Carrier fill hole plug
<b>KIT - WHEEL DIFF SIDE GEAR</b>			<b>504115</b>	<a href="#">includes items 24-30</a>
24	Thrust Washer - Side Pinion	4	129305	
25	Side Pinion	4	10014706	Replaces 133761
26	Thrust Washer - Side Gear	1	127386	
27	Side Gear - 39 Inv	2	10021095	Replaces 127367
28	Dowel Pin	2	130605	2.25" (57mm)
29	Differential Shaft - Long	1	134151	6.75" (172mm)
30	Differential Shaft - Short	2	134152	3.07" (78mm)
31	RTV - Sealant 3oz Tube	1	107276S*	Not Illustrated
<b>NO SPIN SERVICE KIT</b>			<b>505069</b>	<a href="#">Contains items 14, 15, 20, 21, 26 &amp; 32</a>
32	No Spin - NSS	1	10150820 NSS	Sold in Kit 505069; Not illustrated
<b>TRAC LOK SERVICE KIT</b>			<b>505004</b>	<a href="#">Contains items 14, 15, 20, 21 &amp; 33</a>
33	Trac-Lok - NSS	1	10101132 NSS	Sold in Kit 505004; Not illustrated

## Pinion Bearing Spacers

### Pinion Bearing Spacer Kit P/N: 504039

Part Number	Spacer (mm)	Thickness (in)
130543	27.230	1.072
130545	27.280	1.074
130547	27.330	1.076
130549	27.390	1.0783
130551	27.440	1.0803
130553*	27.490	1.0823
130555	27.540	1.0843
130557	27.590	1.0862
130559	27.610	1.0872
130561	27.640	1.0881
130563*	27.660	1.0891
130565*	27.690	1.0902
130567*	27.720	1.0911
130569	27.740	1.0922
130571	27.770	1.0931
130573*	27.790	1.0941
130575*	27.820	1.0952
130577*	27.840	1.0961
130579	27.870	1.0972
130581	27.890	1.0981
130583*	27.920	1.0991
130585	27.940	1.1002
130587	27.970	1.1011
130589	28.000	1.1022
130591	28.050	1.1043
130593	28.100	1.1063

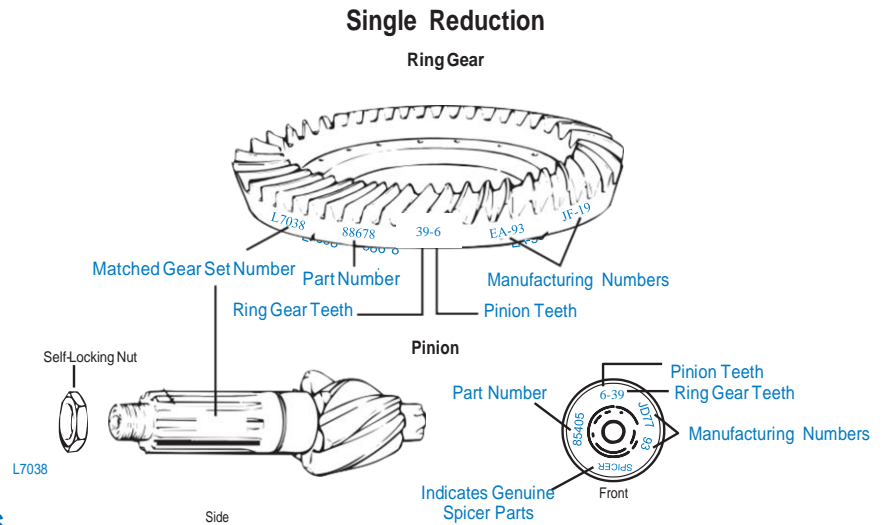
\*Most Popular used spacers. Brg Spacer kit 504039 contains qty 1 each of these.

# Gear & Pinion Kits

## Ring Gear & Pinion Identification

Dana has highly developed primary axle gearing which is only used in matched sets. These sets are identified by the mating parts listed below. Within any Dana production drive axle or genuine Spicer® Gear & Pinion service kits, these mated part numbers will appear. Because they are developed as a set with precision machining, never mix gears and pinions from different mated sets within an axle. Shortened gearing life, noise and failure may occur. Always use genuine Spicer® products.

- Ring Gear and Drive Pinion are matched parts and must be replaced in sets.
- Complete Identification is stamped on both parts as shown on the drawing below.



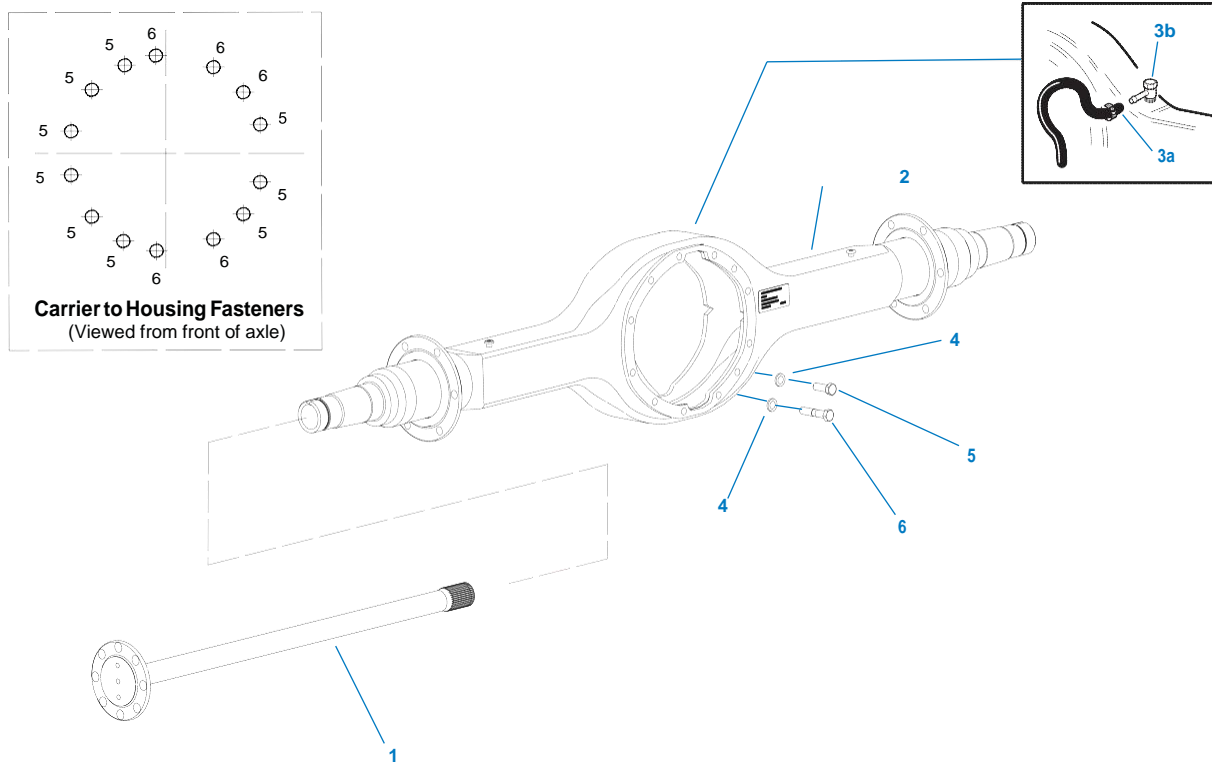
## Gear & Pinion Kits - S140 Models

**39 Inv. 1.95" Spline**  
**13.40" (340mm) Hypoid Gearing**  
**Pinion Nut Part No. 127589**

Ratio	Spicer Kit Part-No	Mated Gear/Pinion Set		Tooth Combo	Set# Ref Only
		Gear (NSS)	Pinion (NSS)		
3.31	504100	134025	133922	43/13	134038
3.58	504101	134026	133923	43/12	134039
3.73	504102	134027	133924	41/11	134040
3.91	504103	134028	133925	43/11	134041
4.10	504104	134029	133926	41/10	134042
4.30	504105	134030	133927	43/10	134043
4.56	504106	134031	133928	41/9	134044
4.88	504107	134032	133929	39/8	134045
5.29	504116	134140	134139	37/7	134141
5.57	504110	134035	133932	39/7	134048
6.14	504111	134036	133933	43/7	134049
6.50	504112	134037	133934	39/6	134050

## Axle Housing Parts and Hardware

### Axle Housing Parts and Hardware



Item	Description	Qty	Part No.	Notes
1	Axle Shaft - 39 Inv	2	---	See chart page 13
2	Axle Housing	1	---	See chart page 11
3	<b>KIT-U-TUBE BREATHER</b>	1	507162	Includes items 3a & 3b
3a	Hose & Clamp Assy - NSS	1	129340 NSS	Must order kit 507162
3b	Vent Tube - NSS	1	302706 NSS	Must order kit 507162
<b>AXLE HOUSING HARDWARE KIT</b>			504113	Includes items 4-6
4	Washer	14	128415HX	
5	Capscrew, Carrier to Hsg - Long	9	210091	70mm - M14 X2
6	Capscrew, Carrier to Hsg - Short	5	210115	40mm - M14 X2
<b>KIT - SPINDLE NUT (does 1 side)</b>			504158	Includes 1 each - items 7-10
7	Wheel Brg Nut - Outer	2	119881	not illustrated
8	Wheel Brg Nut - Inner	2	119882	not illustrated
9	Washer - Wheel Brg Lock	2	119883	not illustrated
10	Washer - Wheel Brg Tanged	2	129132	not illustrated
11	Thread Adhesive Loctite 271 .5ml	1	129293	not illustrated
12	RTV Sealant - 3oz Tube	1	107276S	not illustrated

## Axle Housings

### Axle Housings

<b>Axle Series</b>	<b>PART NUMBER</b>	<b>REPLACED BY</b>	<b>SERVICE P/N - BARE</b>	<b>SERVICE P/N - w/BRACKETS</b>	<b>CUSTOMER</b>
S140	323891				FORD
S140	323937				NAVISTAR
S140	323938				NAVISTAR
S140	323939				NAVISTAR
S140	323940				NAVISTAR
S140	323941				NAVISTAR
S140	323942				NAVISTAR
S140	323943				NAVISTAR
S140	323945				NAVISTAR
S140	323946				NAVISTAR
S140	323947				NAVISTAR
S140	323948				NAVISTAR
S140	324582				FORD
S140	324584				FORD
S140	324596				FORD
S140	324597				FORD
S140	324624				FORD
S140	324625				FORD
S140	10019301				FORD
S140	10019302				FORD
S140	10019303				FORD
S140	10019304				FORD
S140	10019305				FORD
S140	10019306				FORD
S140	10021228				FORD
S140	10021229				FORD
S140	10022614				ISUZU
S140	10025746				NAVISTAR
S140	10050413				FORD
S140	10064433				
S140	10086975				ISUZU
S140	10089739				ISUZU
S140	10095559				ISUZU
S140	10095560				ISUZU
S140	10097693				FORD
S140	10100368				ISUZU
S140	10116669				NAVISTAR
S140	10166414				FORD
S140	10169815				ISUZU
S140	10169816				ISUZU
S140	10178042				PACCAR
S140	10172787				NAVISTAR
S140	323741-OBS	323941	502100	502101	INTERNATIONAL
S140	323742-OBS	323742			INTERNATIONAL
S140	323743-OBS	323743			INTERNATIONAL
S140	323745-OBS	323745			INTERNATIONAL
S140	323748-OBS	323748			INTERNATIONAL
S140	323707-OBS	323937			AIL - VALIDATION
S140	323738-OBS	323938			INTERNATIONAL

## Axle Housing

### Axle Housings

<b>Axle Series</b>	<b>PART NUMBER</b>	<b>REPLACED BY</b>	<b>SERVICE P/N - BARE</b>	<b>SERVICE P/N - w/BRACKETS</b>	<b>CUSTOMER</b>
S140	323765-OBS	323939			INTERNATIONAL
S140	323740-OBS	323940			INTERNATIONAL
S140	323746-OBS	323946			INTERNATIONAL
S140	323747-OBS	323947			INTERNATIONAL
S140	323861-OBS				GM
S140	323862-OBS				GM
S140	323863-OBS				GM
S140	323864-OBS				GM
S140	323865-OBS				GM
S140	10063007-OBS				FORD

## Axle Shafts

### Axle Shafts

Part No.	Qty	Spline	Body O.D.	Shaft Length	Spline Length	Flange O.D.	Bolt Circle	Flange Holes	OEM
133963	2	39	1.81	40.118	3.84	6.625	5.500	8(.635) STR	NAV
133961	2	39	1.81	40.118	3.84	6.223	5.250	12 (.781) TPR	

## Service Carriers

### S140 Standard Carrier

39 Involute Splines  
 Side Gear # 127367  
 13.40" (340mm) Hypoid Gearing  
 Weight: 220 lbs

Ratio	New Carrier	Old P/N Carrier
3.31	S140331CF	681500
3.58	S140358CF	681501
3.73	S140373CF	681502
3.91	S140391CF	681503
4.10	S140410CF	681504
4.30	S140430CF	681505
4.56	S140456CF	681506
4.88	S140488CF	681507
5.29	S140529CF	681513
5.57	S140557CF	681510
6.14	S140614CF	681511
6.50	S140650CF	681512

### S140 Standard Carrier

39 Involute Splines  
 Side Gear # 127367  
 13.40" (340mm) Hypoid Gearing  
 Weight: 220 lbs

Ratio	New Carrier	Old P/N Carrier
5.29	S140F529CF	
6.14	S140F614CF	
6.50	S140F650CF	

### S140L Limited Slip

39 Involute Splines  
 Side Gear # 127367  
 13.40" (340mm) Hypoid Gearing  
 Weight: 220 lbs

Ratio	New Carrier	Old P/N Carrier
3.31	S140L331CF	
3.58	S140L358CF	
3.73	S140L373CF	
3.91	S140L391CF	
4.10	S140L410CF	
4.30	S140L430CF	
4.56	S140L456CF	
4.88	S140L488CF	
5.29	S140L529CF	
5.57	S140L557CF	
6.14	S140L614CF	
6.50	S140L650CF	



## S140 Rolled Over/ No Spin

39 Involute Splines  
 Side Gear # 127367  
 13.40" (340mm) Hypoid Gearing  
 Weight: 220 lbs

Ratio	New Carrier	Old P/N Carrier
3.31	S140FNR331CF	
3.36	S140FNR336CF	
3.42	S140FNR342CF	
3.58	S140FNR358CF	
3.73	S140FNR373CF	
3.91	S140FNR391CF	
4.10	S140FNR410CF	
4.30	S140FNR430CF	
4.56	S140FNR456CF	
4.88	S140FNR488CF	
5.29	S140FNR529CF	
5.57	S140FNR557CF	
6.14	S140FNR614CF	
6.50	S140FNR650CF	

## S140 No Spin

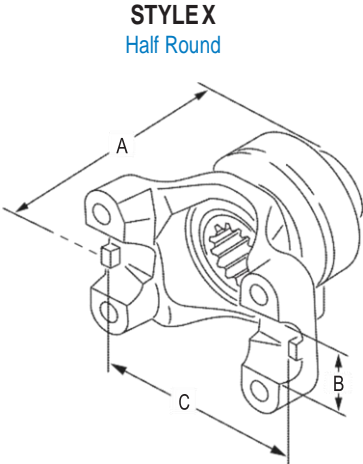
39 Involute Splines  
 Side Gear # 127367  
 13.40" (340mm) Hypoid Gearing  
 Weight: 220 lbs

Ratio	New Carrier	Old P/N Carrier
3.31	S140NR331CF	
3.36	S140NR336CF	
3.42	S140NR342CF	
3.58	S140NR358CF	
3.73	S140NR373CF	
3.91	S140NR391CF	
4.10	S140NR410CF	
4.30	S140NR430CF	
4.56	S140NR456CF	
4.88	S140NR488CF	
5.29	S140NR529CF	
5.57	S140NR557CF	
6.14	S140NR614CF	
6.50	S140NR650CF	

# Yokes & Flanges

## Yokes & Flanges

Spicer yoke part numbers shown below are PRODUCTION part numbers and are for reference only. The part numbers needed for service may vary. Please contact Driveshaft Division for price & availability of service yokes.

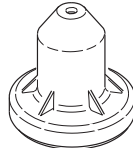


### S110 Series - 39 Inv. Spline

Production Yoke & Slinger	Service Part Number	Series	Style	Dim. A	Dim. B	Dim. C	Notes
100-4-1431-1X		SPL90	X	4.750"	1.625"	5.375"	
6-4-10321-1X		1710	X	5.250"	1.938"	6.190"	

## Oil Seal Installation Tools

Oil seal installation tools are available for installing drive axle pinion seals. Using these tools ensures proper installation of the seal. Failure to use these tools may result in an improperly installed or damaged seal.



126917

## Service Kits Quick Reference

### Service Kits Quick Reference

Description	Part Number
Axle Housing Hardware Kit (carrier-to-housing)	504113
Bearing Kit	505064
Diff Carrier & Bearing Cap Assy	134154
Oil Seal Driver Installation Tool	126917
Pinion Bearing Spacer Kit	504039
Pinion Oil seal	127591
RTV Sealant - 3oz Tube	107276S
Spindle Nut Kit (1 kit does 1 side)	504158
U-Tube Breather Kit	507162
Wheel Diff Side Gear Kit -39inv	504115





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