## Spicer® Drive Axles



# **Illustrated Parts List**

Spicer® Drive Axles AXIP-00321 July 2011

Two-Speed-Planetary Double Reduction 15040T and 19050T Models

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#### **General Information**

#### **How To Use Illustrated Parts List**

#### **Ordering Parts**

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

#### **Kits and Assemblies**

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

#### **Abbreviations**

- · 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
- Inv Involute
- N/A Not Applicable

OIL SEAL & SHIM KIT

 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.

identify Part Number	quantity for servicing	•	art number el indicated	Indicates information important to ordering or use
Description	Qty	15040T	19050T	Notes
LOCKWASHER	1	119857	119857	
STUD NUT	1	63028	63028	
	Part Number Description LOCKWASHER	Part Number servicing Description Qty  LOCKWASHER 1	Part Number Descriptionservicing Qtyby mode 15040TLOCKWASHER1119857	Part Number Descriptionservicing Qtyby model indicated 15040TLOCKWASHER1119857119857

N/A

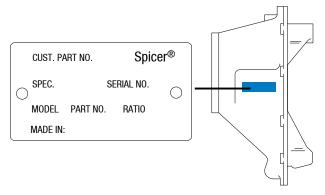
114104

#### **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**



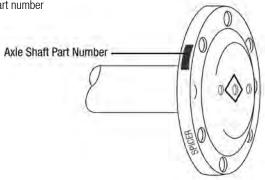
• Model Number, Part Number and Serial Number are located on the data plate on the axle centerline

#### **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.



## Models

## **Models**

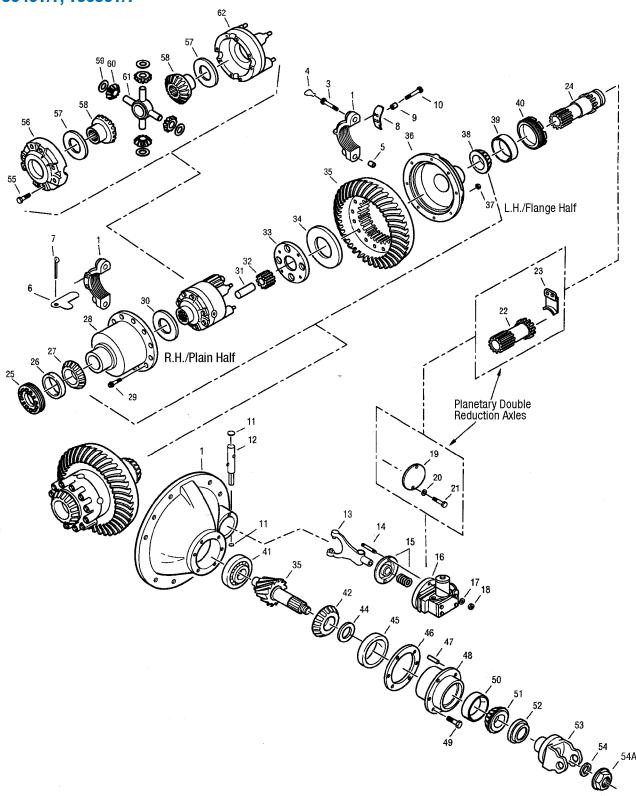
The following models are included in this publication:

## **Single Reduction Models**

Single Axle*	Axle Capacity	Gear Size	
15040T/P	15,000 lbs	14.25" Hypoid Gear, Nom.	
19050T/P	19,000 lbs	15.50" Hypoid Gear, Nom.	

<sup>\*</sup>carrier options include T=Two Speed, P=Planetary Double Reduction

# Two-Speed-Planetary Double Reduction 15040T/P, 19050T/P



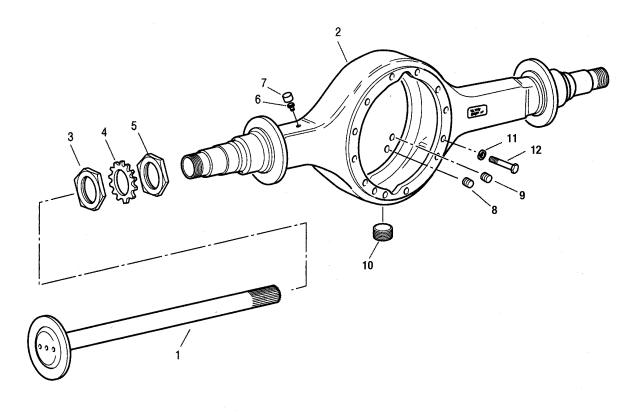
## **Two-Speed-Planetary Double Reduction**

Item		Qty.			
Item		Per	15040T	19050T	
No.	Description	Axle	15040P	19050P	Notes
	SIC OVERHAUL	1	121799*	121806*	Contents identified with *
1	KIT - DIFF. CARRIER & BEARING CAPS	1	76929 - NLA	85995	
	CARRIER CASTING NO. (NSS)	1	113641 - NLA	113643	
3	BEARING CAP SCREW	2	90036	14970	flange half
	BEARING CAP SCREW	2	90036	127181	plain half
4	LOCKWIRE	4	90538	90536	
6	BEARING ADJUSTER LOCK - RH	1	90186	13377	
7	COTTER PIN - RH	1	90873	90873	
8	BEARING ADJUSTER LOCK - LH	1	10602	14949	
10	CAP SCREW - LH	2	9820	9820	
11	EXPANSION PLUG	2	9797*	9797*	
12	SHIFT FORK SHAFT ASSY.	1	113800	113800	
13	SHIFT FORK AND ROLLER ASSY.	1	32326	32425	
14	SHIFT FORM MOUNTING STUD	2	119863	119863	
15	SHIFT FORK SEAL AND SPRING ASSY.	1	119855*	119855*	
16	SHIFT UNIT ASSY.	1			See page 16-17
17	LOCKWASHER	1	119857	119857	
18	STUD NUT	1	63028	63028	
19	SHIFT UNIT OPENING COVER	1	45521	45521	metal
20	LOCK WASHER	2	90415	90415	
21	CAP SCREW	2	20807	20807	
	I GEAR SERVICE	1	N/A	99552 - NLA	(Incl. items 19LH, 23 32LH, 35)
22	SUN GEAR	1	113601 - NLA	113631 - NLA	
23	SUN GEAR RETAINER	1	45615	45325	
	DING CLUTCH SERVICE	1	98089 - NLA	95371 - NLA	(Incl. items 24, 33, 34, 40)
24	SLIDING CLUTCH	1	113599	113629	
25	DIFF. BEARING ADJUSTER - RH	1	10524	110243	
26	DIFF. BEARING CUP - RH	1	24328*	9803*	
27	DIFF. BEARING CONE - RH	1	24330*	15094*	
28	GEAR SUPPORT CASE - RH	1	127834	126009	
29	BOLT-SUPPORT CASE	8	44355* - NLA	44356	15040 mdl use 6 bolts only
30	GEAR SUPPORT THRUST WASHER - RH	1	127837*	126004*	
31	IDLER PINION PIN	4	20821	126008	
32	IDLER PINION	4	74057	27875	
33	HIGH SPEED CLUTCH PLATE	1	74056	74023	
34	GEAR SUPPORT THRUST WASHER - LH	1	43268*	43269*	
35	RING & GEAR AND DRIVE PINION SET	1			Refer to matched parts on pages 12
	G GEAR NUT & BOLT	1	121448 - NLA	121449	
36	GEAR SUPPORT CASE - LH	1	13385	27859	
37	NUT	8	60597	67592	Note qty 6 used on 15040T mdls
38	DIFF. BEARING CONE - LH	1	9804*	27876*	
39	DIFF. BEARING CUP - LH	1	9803*	15092*	
40	DIFF. BEARING ADJUSTER - LH	1	74055	74022	
41	PINION PILOT BEARING	1	13224*	830398*	830398 replaces 015828 bearing
42	PINION BEARING CONE - INNER	1	49848	33699*	

## **Two-Speed-Planetary Double Reduction (Continued)**

		Qty.			
Item		Per	15040T	19050T	
No.	Description	Axle	15040P	19050P	Notes
44	PINION BEARING SPACER	AR			See page 11
45	PINION BEARING CUP - INNER	1	49849*	12495*	
46	PINION BEARING CAGE SHIMS	AR			
	0.003"	1	75968*	107567*	
	0.005"	1	75969*	107568*	
	0.010"	1	75970*	107569*	
	0.020"	1	75971* - NLA	107570*	
	0.030"	1	75972*		
47	BEARING CAGE DOWEL PIN	1	90654		
48	PINION BEARING CAGE & CUP ASSY.	1	76897	75110	Incl. items 45, 50
	CAGE - NSS	1	76896	75109	
49	CAP SCREW	6	113325	113325	
50	PINON BEARING CUP - OUTER	1	49849*	12495*	
51	PINION BEARING CONE - OUTER	1	49848	33699*	
KIT - OIL	SEAL & SHIM	1	121800	114104	
52	OIL SEAL	1	935735*	119427*	935735 is for 2.625" pinion
53	INPUT YOKE	1			See page 14
54	FLAT WASHER	1	210114	210114	
54A	PINION NUT	1	210133	210133	
55	DIFF. CASE CAP SCREW	8	109237	109238	
	DIFF. CASE CAP SCREW	4		118739	
KIT - WHI	EEL DIFF SIDE GEAR KIT	1	114467	121748	
KIT - WHI	EEL DIFF. KIT - LESS SIDE GEAR	1	118746	121749	
56	DIFF CASE - RH - NSS	1	71881	126007	Order Wheel Diff Case Kit
57	SIDE GEAR THRUST WASHER	2	127837*	126004*	
58	DIFF. SIDE GEAR - 34 INV SPLINE	2	110522		
	DIFF. SIDE GEAR - 36 INV SPLINE	2		126000	
59	SIDE PINION THRUST WASHER	4	25968*	126003*	
60	SIDE PINION	4	102512	126001	
61	SPIDER	1	127836	126002	
KIT - WHI	EEL DIFF CASE	1	52112	121807	Incl. items 56, 57, 63
62	DIFF. CASE - LH NSS	1	71880	126005	Order Wheel Diff Case Kit
	DIFF. CASE W/CLUTCH PLATE PIN - NSS	1	408237	126006	Order Wheel Diff Case Kit
63	RTV - GASKET COMPOUND	AR	107276*	107276*	Not IllustratedAxle

## **Axle Housing Parts and Hardware**



Item No.	Description	Qty. Per Axle	15040T/P	19050T/P	Notes
1	AXLE SHAFT	2			See Page 10
2	AXLE HOUSING ASSY.	1	NLA	NLA	Refer to OEM Catalog
3	OUTER NUT	2	215109 - NLA	19186	
4	LOCK WASHER	2	215112	30714	
5	INNER NUT	2	215109 - NLA	19186	
6	Valve (Breather)	1	809560	809560	
7	CAP (BREATHER)	1	126980	126980	
8	Plug - 1/2" PLUG	1	90898	90898	1/2"
9	Plug - MAGNETIC FILL PLUG	1	75130	75130	1"
10	Plug - Magnetic Drain Plug	1	54254	54254	3/4"
11	LOCKWASHER	12	210140	210140	
12	CAPSCREW - CARRIER TO HSG.	12	210135	210135	
	DBL. ENDED CAPSCREW (GM ONLY)	2	210377	210377	Not Illustrated
	CAPSCREW - CARRIER TO HSG.	10	210135	210135	

## **Axle Shafts**

## **Axle Shafts**

				BODY	SHAFT	SPLINE	FLANGE	BOLT	FLANGE	
MODEL	PART NO.	QTY	SPLINE	0.D	LENGTH	LENGTH	0.D.	CIRCLE	HOLES	OEM
15040T/P	111544	1	34	1.61	38.843	4.00	6.223	5.313	8(.781)TPR	Ford, GMC
19050T/P	129331	1	36	1.75	41.313	4.00	6.125	5.250	12(.748) TPR	GMC
	128375	1	36	1.75	40.906	4.00	6.223	5.250	12(.781) TPR	GMC

## **Pinion Bearing Spacers**

## **Pinion Bearing Spacers**

The pinion bearing spacers shown below come in a variety of different thickness's for use in re-assembly. All are available individually.

#### 15040T/P

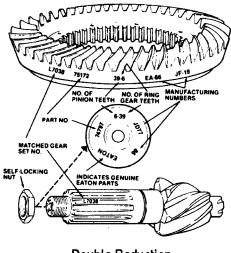
Diameter	Part No.
.525	91631
.526	91633
.527	91637
.528	91641
.529	91645
.530	91649
.531	91653
.532	91657
.533	91661
.534	91665
.535	91667
.536	91669
.537	91671
.538	91672
	<u>.                                      </u>

#### 19050T/P

Diameter	Part No.
.634	91511
.635	91513
.636	91515
.637	91519
.638	91523
.639	91527
.640	91531
.642	91535
.643	91539
.644	91541
.645	91542
.646	91543
	·

## **Ring Gear & Pinion Identification**

Ring Gear and Drive Pinion are matched parts and must be replaced in sets. Complete identification is stamped on both parts as shown in the adjacent drawing. Order the Dana kit by the ratio required from the chart below.



Double Reduction 2-Speed

### 15040T/P Drive Pinion Spline-34 1.750" Diameter 14.25" Hypoid

Ratio	Service Kit (NSS)	Ring Gear (NSS)	Pinion No.	Teeth
4.56/6.34	122011	74044	126093	41/9
5.14/7.16	121801	74046	126094	36/7
5.75/7.75	121802	110164	126101	39/7
5.86/8.15	121803	113444	126102	41/7
6.29/8.75	121804	113446	126103	44/7

## 19050T/P Drive Pinion Spline-34 1.750" Diameter

15.50" Hypoid Gearing

Ratio	Service Kit (NSS)	Ring Gear (NSS)	Pinion No.	Teeth
4.56/6.34	121545	83868	126112	41/9
4.88/6.78	121546	74008	126115	39/8
5.29/7.35	121547	118925	126117	37/7
7.57/7.75	121548	74010	126106	39/7
6.14/8.55	121549	74012	126107	43/7
6.57/9.14	121550	113452	126116	46/7
7.17/9.97	121551	74016	126109	43/6

#### **Service Carriers**

## **Service Carriers**

#### 15040T

Ratio	Side Gear Spline	Side Gear	Carrier
4.56/6.34	34 Inv	110522	674680 - NLA
5.14/7.16	34 Inv	110522	674681 - NLA
5.57/7.75	34 Inv	110522	674682 - NLA
5.86/8.15	34 Inv	110522	674401 - NLA
6.29/8.75	34 Inv	110522	674405 - NLA

#### 15040T HYB.

Ratio	Side Gear Spline	Side Gear	Carrier
5.86/8.15	16 Ang.	102509	675411 - NLA
6.29/8.75	16 Ang.	102509	674403 - NLA
5.86/8.15	16 Str.	120510	674858 - NLA
6.29/8.75	16 Str.	102510	674404 - NLA
5.86/8.15	16 Ang.	102511	674400 - NLA
6.29/8.75	16 Ang.	102511	674402 - NLA

#### 19050T

Ratio	Side Gear Spline	Side Gear	Carrier
4.56/6.34	36 Inv	126000	674406 - NLA
4.88/6.78	36 Inv	126000	674409 - NLA
5.29/7.75	36 Inv	126000	674802 - NLA
5.57/7.75	36 Inv	126000	674412 - NLA
6.14/8.54	36 Inv	126000	674415 - NLA
6.57/9.14	36 Inv	126000	674418 - NLA
7.17/9.97	36 Inv	126000	674630 - NLA

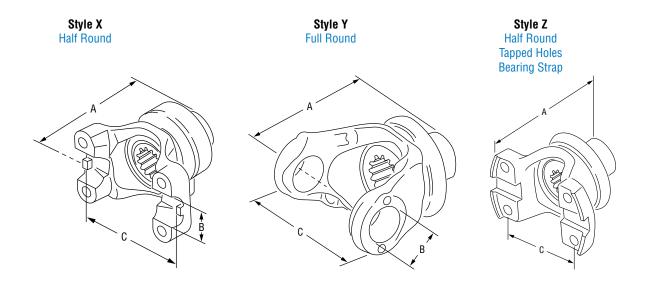
#### 19050T HYB.

Ratio	Side Gear Spline	Side Gear	Carrier
4.88/6.78	16 Ang.	210387	674408 - NLA
5.57/7.75	16 Ang.	210387	674411 - NLA
6.14/8.54	16 Ang.	210387	674414 - NLA
6.57/9.14	16 Ang.	210387	674417 - NLA
7.17/9.97	16 Ang.	210387	674420 - NLA
4.56/6.34	16 Str.	210388	675447 - NLA
4.88/6.78	16 Str.	210388	674407 - NLA
5.57/7.75	16 Str.	210388	674410 - NLA
6.14/8.54	16 Str.	210388	674413 - NLA
6.57/9.14	16 Str.	210388	674416 - NLA
7.17/9.97	16 Str.	210388	674419 - NLA

#### **19050T MACK-MIDLINER**

Ratio	Side Gear Spline	Side Gear	Carrier
4.56/6.34	30 Inv	210386	674538 - NLA
4.88/6.78	30 Inv	210386	674539 - NLA
5.29/7.21	30 Inv	210386	674540 - NLA

## **Yokes & 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.

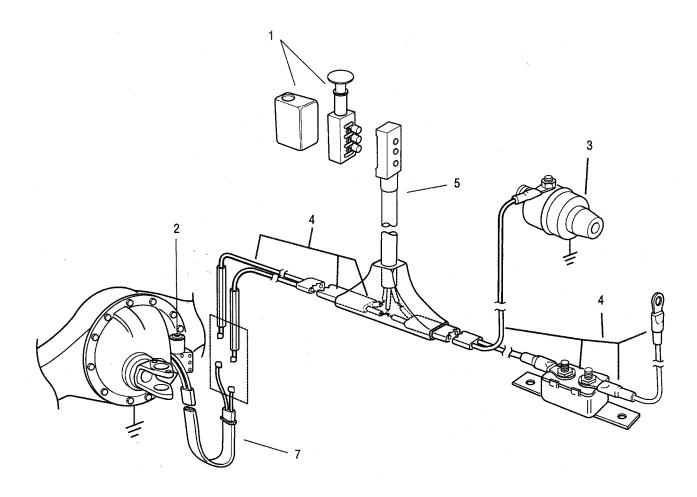
#### 15040T/P, 19050T/P

#### Rear Axle - 34 - 1.75 Involute Spline

#### 2.625" Seal Dia.

Production	Service						
Yoke & Slinger	Part	Dimensions (in inches):					
Slinger Assy	Number	Series	Style	Α	В	C	Replacement Notes
126425	3-4-10461-1X	1410	Χ	4.025	1.88	4.19	
126427	3-4-10471-1X	1480	Χ	4.275	1.38	4.19	
126429	4-4-5611-1X	1550	Χ	4.275	1.38	4.97	
126469	5-4-7301X	1610	Υ	4.750	1.88	5.31	
126531	5-4-7301-1X	1610	Χ	4.750	1.88	5.31	
126533	3-4-10471-1X	1480	Χ	4.275	1.38	4.19	
126535	6-4-7581-1X	1710	Χ	5.440	1.94	6.19	
128594	128594HX	6C	Z	3.250	N/A	4.5	
129227	90-4-841-1X	SPL 90	Χ	4.000	1.61	4.25	

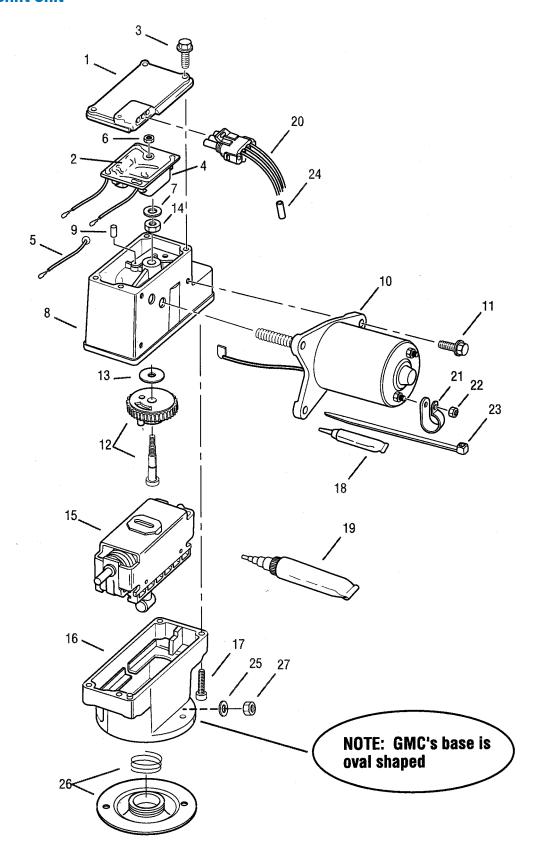
## **Electric Shift System**



		Qty. Per		
Item No.	Part Name	Axle	Part Number	Notes
1	Electric Shift Switch-Original Design	1	32861 - NLA	
2	Electric Shift Unit Assy - Current Design	1	120750	12 Volt - Standard
			113752	GM Design
			127773	Waterous
	Electric Shift Unit Retrofit Kit (includes items 2 & 7)		113743	12 Volt - Standard
3	Speedometer Adapter	1		See OEM Catalog
4	Forward Wiring Harness-Original Design	1		See OEM Catalog
5	Plug and Cable (3-wire to shift Switch)-Original Design	1	42401 - NLA	11" long
		1	49810 - NLA	20" long
6	Circuit Breaker	1		See OEM Catalog
7	Rear Wiring Harness-Original Design	1		See OEM Catalog

Note 1: For Ford models with shock absorbers original units were 041058 and 041059. Those are nla now. Order the 113743 Retrofit Kit.

## **Electric Shift Unit**



## **Electric Shift Unit**

## **Electric Shift Unit**

Item No.	Part Name	Qty. Per Axle	Part Number	Notes
KIT - ELECTI	RIC SHIFT	1	113752	12-Volt (GMC) - shift mtr is #127770
	(Includes Items 1-19, 25-28)		120750	12-Volt Standard - shift mtr is #127772
KIT - ELECTI	RIC SHIFT RETROFIT	1	113743	12-Volt Standard - shift mtr is #127772
	(Includes Items 1-28)			
ELECTRIC SI	HIFT UNIT	1	127773	Waterous - Note 2
1	Cover Assembly	1	113786	NSS (Use 211319)
2	Cover Gasket	1	113764-NLA	Replace by 113771 item#19
3	Cover Hex Screw	3	113726	
		1	113788	Long
4	KIT - CIRCUIT BOARD & COVER	1	211319	Includes 1-3, 5-7, 18-19
5	Ground Wire	1	113775	NSS
6	Circuit Board Locknut	1	113772	NSS
7	Circuit Board Washer	1	113773	NSS
8	Motor Housing Assembly	1	113742	
9	Cam Pin	1	113721	
10	KIT - SHIFT MOTOR & LUBE	1	124650	Includes 18
			130115	Waterous - Note 2
11	Head Hex Screw	4	113725	
12	Drive Gear & Camp Pin Kit	1	113746	Includes 5, 9, 13-14, 18
13	Gear Washer	1	113774	NSS
14	Gear Locknut	1	113729	NSS
15	Slide Block & Lube Kit	1	113759	Includes 18
			113781	Waterous - Note 2
16	Base Housing	1	113750	12-Volt (GMC)
	· ·		113701	12-Volt standard
17	Hex Head Screw	4	113725	
18	Lubricant - Shift Unit 1/4oz	AR	113741	
19	Gasket Compound - shift unit	AR	113771	
KIT - WIRING	HARNESS & CONNECTOR	1	113753	Includes 20-26
20	Connector & Harness Asembly	1	113738	NSS
21	Cable Clip	1	113747	NSS
22	Nut (10-24)	1	113748	NSS
23	Tie Wrap (nylon)	2	113749	NSS
24	Wire Connector	3	113739	NSS
25	Flat Washer	2	119857	
26	Seal & Spring Assembly	1	119855	
27	Stud Nut	2	63028	
28	Fit Up Card (not illustrated)		128039	
	1 \/	· · · · · · · · · · · · · · · · · · ·		

Note: If replacing 41058 or 41059 unit, you must order 113743 retrofit kit

If you are replacing a newer design shift unit, you can order 120750 unit.

Note 2: Parts are associated with special design shift unit for Waterous (Firetrucks)

## **Kits and Assemblies**

## **Kits and Assemblies**

Description	15040T 15040P	19050T 19050P
BASIC OVERHAUL KIT	121799	121806
CARRIER & CAP ASSY.	76929 - NLA	85995
CAGE & CUP ASSY.	76897	75110
OIL SEAL & SHIM KIT	121800 - NLA	114104
RING GEAR NUT & BOLT KIT	121448	121449
WHEEL DIFF CASE KIT	52112	121807
WHEEL DIFF SIDE GEAR KIT	114467	121748
WHEEL DIFFERENTIAL KIT, W/O SIDE GEARS	118746	121749





Drivetrain Products

Axles

Driveshafts

Off-Highway Transmissions



Thermal Products

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