

Technical Service Information



TSI-04-14-07

Date: November, 2004

Subject File: REAR AXLE

Subject: Service Parts for Dana D170 Tandem Axle

Model: 5500i

Model: 5600i

Model: 5900i

Model: 7300

Model: 7400

Model: 7500

Model: 7600

Model: 9200i

Model: 9400i

Model: 9900i

Model: 9900ix

Unit Code: 14GJH

Unit Code: 14GJJ

Unit Code: 14GJK

Unit Code: 14GJL

Unit Code: 14GJM

Unit Code: 14GJN

DESCRIPTION

NOTICE

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Dana® Spicer® Axles & Brakes

ABIB-0405

Information Bulletin

Bulletin Type: Parts/Service Information

Topic: Service Parts Released for Dana's New D170 Series Heavy Tandem Drive Axles

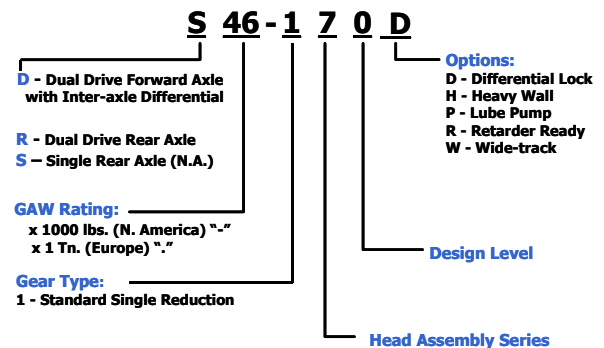
Affected Models: D170 Series (refer to model chart below)

A new series of Heavy Tandem Single Speed Axles have been released into production. The individual models for the D170 series tandem axles are shown in the chart below. Like the D190 series, specific service parts for these new models have been released for common repairs such as Pinion Seals, Axle Shaft and Driveline Yoke replacements.

In the unlikely event of an "internal" axle failure, the axle will be serviced as a complete carrier assembly until further notice. For further questions regarding these models or the service parts outlined below, contact your local Roadranger representative.

Dana's D170 Heavy Tandem Model Line-Up

Specific Model	Description / Options
D40-170	40K, 170 series - no pump
D40-170P	40K, 170 series w/ lube pump
D40-170D	40K, 170 series w/ diff-lock
D40-170DP	40K, 170 series w/ diff-lock & lube pump
D46-170	46K, 170 series - no pump
D46-170P	46K, 170 series w/ lube pump
D46-170H	46K, 170 series w/ heavy wall
D46-170HP	46K, 170 series w/ heavy wall & lube pump
D46-170D	46K, 170 series w/ diff-lock
D46-170DP	46K, 170 series w/diff-lock & lube pump
D46-170DHP	46K, 170 series w/ diff-lock, heavy wall & lube pump
D50-170	50K, 170 series - no pump
D50-170P	50K, 170 series w/ lube pump
D50-170D	50K, 170 series w/ diff-lock
D50-170DP	50K, 170 series w/diff-lock & lube pump



Note: D50-170 series axles are standard w/ "Heavy Wall" housings

Ordering Replacement Carrier Assemblies for Service

If the differential carrier requires replacing, record the information from the tag of the carrier and call your local Roadranger representative or Roadranger Call Center 1-800-826-4357. Replacement differential carriers should be ordered through normal OEM channels. A separate information bulletin with all of the exchange carrier service part numbers will be released at a later date.

Dana Tandem Drive Axle D170 Service Parts – Power Divider Lockout & Housing Fastener Kits

Owners and Fleets bring in vehicles for regularly scheduled maintenance intervals and certain parts are identified as the most commonly used by Dealerships for these type repairs. Shown on the next several pages are the available service parts specific to Dana's new D170 series models that should be stock at local repairing facilities.

Power Divider Air Lockout Parts				
Dana P/N	Description	Notes	Item#	Qty Used
512892	AIR LOCKOUT REPAIR KIT		KIT	Includes 1, 3-5
512893	AIR LOCKOUT KIT - COMPLETE W/ SHIFT FORK		KIT	Includes 1-5
131232	Piston	Air Lockout Cylinder - Forward Axle	1	1
510870 - SHIFT FORK & SPRING KIT				Includes 2-3
129856	Shift Fork Assy - NSS		2	1
129859	Compression Spring		3	1
131096	Diff Lock Cap		4	1
210180	O-Ring		5	1

Carrier to Housing Fastener Kits			
Dana P/N	Description	Notes	Qty Used
512896	AXLE HSG HARDWARE KIT - FORWARD AXLE		
131105	Carrier to Hsg Capscrew - Short	55mm	9
131106	Carrier to Hsg Capscrew - Long	85mm	3
130901	Double Ended Stud		2
130877	Washer		2
127567	Hex Nut		2
107276S	RTV - .5ml Tube		1
SHAIS155	Instruction Sheet		1
512897	AXLE HSG HARDWARE KIT - REAR AXLE		
131105	Carrier to Hsg Capscrew - Short	55mm	10
131106	Carrier to Hsg Capscrew - Long	85mm	4
129293	Loctite .5ml		1
107276S	RTV - .5ml Tube		1
SHAIS155	Instruction Sheet		1

Dana Tandem Drive Axle D170 Service Parts – Wheel Diff-Lock Parts & Axle Shafts

Wheel Differential Lock Service Parts

Dana P/N	Description	Notes	Item#	Qty Used
512947	DIFF-LOCK CONVERSION KIT - Ratios: 2.93, 3.31-3.73, 4.56 (includes shift fork assy 512945)		KIT	Includes 1-7, 9A
512946	DIFF-LOCK CONVERSION KIT - Ratios: 3.07-3.21, 3.91-4.30, 4.78-7.17 (includes shift fork assy 512944)		KIT	Includes 1-7, 8A
512895	DIFF-LOCK REPAIR KIT		KIT	Includes 2-4, 7
131104	Sliding Clutch		1	1
131096	Diff Lock Cap		2	1
131237	Piston Push Rod		3	1
210180	O-Ring		4	1
129035	Selector Switch	14mm	5	1
129034	Switch Washer		6	1
131102	Compression Spring		7	1
512944	Shift Fork Assy - Ratios: 3.07-3.21, 3.91-4.30, 4.78-7.17		8A	Includes 8B, 11
131099	Shift Fork - NSS	(3.07-3.21, 3.91-4.30 & 4.78-7.17 ratios only)	8B	1
512945	Shift Fork Assy - Ratios: 2.93, 3.31-3.73, 4.56		9A	Includes 9B-11
131101	Shift Fork - NSS	(2.93, 3.31-3.73 & 4.56 ratios only)	9B	1
210020	Roll Pin - Shift Fork	Part of shift fork assy above	11	1

Axle Shafts - For Standard Models

Model	Dana P/N	Qty	Spline	Body O.D.	Shaft Length	Spline Length	BC Dim.	Flange O.D.	Flange Holes
40-50K	131428	1	46	2.06	37.00	3.70	7.244	8.500	.948-TPR
	131429	1	46	2.06	46.00	3.70	7.244	8.500	.948-TPR
	131804	1	46	2.06	45.15	3.70	7.000	8.500	.773-STR
	131805	1	46	2.06	36.15	3.70	7.000	8.500	.773-STR

Axle Shafts - For Models w/ Diff-Lock Option

Model	Dana P/N	Qty	Spline	Body O.D.	Shaft Length	Spline Length	BC Dim.	Flange O.D.	Flange Holes
40-50K	131245	1	46	2.25	46.00	11.70	7.244	8.500	.948-TPR
	131246	1	46	2.25	37.00	3.70	7.244	8.500	.948-TPR
	131806	1	46	2.25	45.15	11.70	7.000	8.500	.773-STR
	131807	1	46	2.25	36.15	3.70	7.000	8.500	.773-STR

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Dana Tandem Drive Axle D170 Service Parts – Yoke/Slinger & Nut Kits

If the need to replace the driveline yoke on any of the Dana D170 series axles described in this bulletin, simply order a Spicer Yoke & Slinger Kit from the chart below. Each Yoke Replacement kit maintains the original part number of the yoke itself for identity purposes, but also includes a new replacement nut along with very important installation instructions and torque figures. (Refer to page 5 of this bulletin for details on the replacing pinion nuts).

Spicer Yoke/Slinger & Nut Kits - Service

All Spicer Yoke kits listed below includes a new replacement nut and important installation information!

Dana P/N	Nut P/N	Series	Joint Angle	Type	Vendor P/N
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Input Yoke Kits - 49 Inv

131447K	131095	1810	30 Deg	Half Rd	6-5-4-5101-1
131448K		1810	30 Deg	Full Rd	6-5-4-5101
131446K		SPL250	25 Deg	Half Rd	250-4-1031-1

Output Yoke Kits - 41 Inv

131449K	128049	1710	38 Deg	Full Rd	6-4-10301
131450K		1710	39 Deg	Half Rd	6-4-10301-1
131451K		SPL170	45 Deg	Half Rd	170-4-1901-1

R-Pinion Yoke Kits - 49 Inv

131442K	131095	1710	30 Deg	Full Rd	6-4-10291
131439K		1710	45 Deg	Full Rd	6-4-10311
131437K		1710	30 Deg	Half Rd	6-4-10291-1
131438K		1710	45 Deg	Half Rd	6-4-10311-1
131441K		1760	30 Deg	Full Rd	6-3-4-1861
131440K		1760	30 Deg	Half Rd	6-3-4-1861-1
131444K		1810	30 Deg	Full Rd	6-5-4-5091
131443K		1810	30 Deg	Half Rd	6-5-4-5091-1
131436K		Companion Flange	-----	Comp Flg	6-1-6281
131433K		SPL170	25 Deg	Half Rd	170-4-1891-1
131434K		SPL170	45 Deg	Half Rd	170-4-1911-1
131435K		SPL250	25 Deg	Half Rd	250-4-1021-1

Installation Information Sheet - Dana P/N: SHAIS154

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Dana Tandem Drive Axle D170 Service Parts – Pinion Nut & Oil Seal Kits

On Dana's new D170 Heavy Tandem models, the pinion nuts at the Forward Input location and Rear-Rear pinion location are staked in place by design. Customers should follow specific instructions as outlined in service literature and instructions sheets when replacing these type pinion nuts. For service Dana will service the pinion nuts and oil seals as kits, which include Loctite and specific instructions for installation, refer to the parts chart below for kit details.



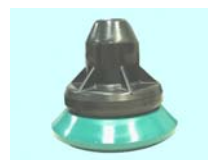
CAUTION: If reinstalling any driveline yoke and the associated pinion nut after it has been removed, it is imperative that exact replacement instructions are followed. Failure to follow complete instructions may cause component damage or malfunction. Refer to Dana's installation instruction sheet SHAIS154, which is included in every Pinion Nut, Oil Seal and Yoke kit.

Pinion Nut & Oil Seal Kits

Dana P/N	Description	Notes	Item#
131008K	Kit - Pinion Seal & Nut	Forward Input & Rear Pinion Locations (includes items 1-4)	
131095K	Kit - Pinion Nut Kit - Staked	Forward Input & Rear Pinion Locations (includes items 2-4)	
131008	Pinion Seal - NSS	Must purchase kit above	1
131095	Pinion Nut - NSS	Must purchase kit above	2
129293	Loctite .5ml Tube		3
SHAIS154	Installation Sheet	Has torque requirements and special installation instructions	4

Pinion Seal Driver Kit: Order Service Kit: 513349

- Input Insert 131472
- R-Pinion Driver 210749
- Output Driver 131471



210749 Driver
131472 Insert



131471 Driver

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Miscellaneous Parts			
Dana P/N	Description	Notes	Qty Used
507162	U-Tube Breather Kit	Both D/R axles	1
119881	Spindle Nut - Outer		1
119882	Spindle Nut - Inner		1
119883	Spindle Locknut Washer	Dowel Type	1
129492	Axle Hsg Fill Plug	3/4" non-magnetic	1
54254	Hsg Drain Plug	3/4" magnetic design	1



For spec'ing or service assistance, call 1-800-826-HELP (4357) 24 hours a day, 7 days a week, (Mexico: 8-332-1515). Or visit our web site at: <http://www.roadranger.com>

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