



DA042018R2

POWER DIVIDER GEAR CHANGES NEW SPICER® SERVICE KIT RELEASE PART NUMBER INFORMATION

DATE: 6/09/2019

TO: All Dana Aftermarket Group Spicer® Heavy Axle Customers

Affected Models DS404, DSH40, D170, D190 & D590

In March 2018, Dana changed the design of our power divider gearing in all current production tandem drive axles. Changes were made to the bevelled teeth of the helical side gear, inter axle differential and output side gear to increase durability.



DRIVE AXLE INFO

Because of this gear design change, Spicer® power divider gears made before March 13th, 2018 will **NOT** be interchangeable with the newly designed gears. When performing a service repair, it's important to identify when the drive axle was manufactured to insure you don't mismatch the two different gearing designs. The carrier serial number can be used to determine which gearing is installed. Spicer carriers with serial numerically higher than HN05303133 were built after March 13th, 2018. Use the chart on the following page to identify the proper service parts to complete your repair.

Important Note: If you need to replace one of the three power divider gears on carrier assemblies manufactured before March 13th 2018 you must replace all three gears with the new design. Mismatching gear designs will cause premature failures that will not be covered under Dana warranty. Because of this Spicer® service kits of the 3 parts are released and presented on page three of this bulletin.



The information below will help to determine which generation of gearing is in the PDU that you may be servicing.

Part Number Change – Helical Side Gear



Before March 2018 – 6 Digit Part Number



After March 2018 – 10 Million Part Number

Part Number Change – Output Side Gear



Before March 2018 – 6 Digit Part Number



After March 2018 – 10 Million Part Number

Tooth Profile Change – Inter-Axle Differential Side Pinion Gears



Before March 2018 – Square Tooth



After March 2018 – Round Tooth

DRIVE AXLE INFO



Important Note: The on-demand Lube pump has been removed from the output side gear assembly (Lube Pump Kit).

Therefore, when ordering a new PDU conversion kit, and a new lube pump is required be sure to order the correct lube pump kit as per the table below

Lube Pump Kits

New Kit Number	Old Kit Number	Kit Description	Axle Model	Old PDU Part Removed from New Kit
504028-1	504028	Lube Pump Kit	DSH40 / DS404	132061
504364-1	504065	Lube Pump Kit	D170/190/590P	131466

504028-1 Kits include: Lube pump, Lock pin, Output side gear bearing cone.
 504364-1 Kits include: Lube pump and lock pin. **Bearing 139975 not included**

Lube pump Kit 504028-1



Lube pump Kit 504364-1



PDU Conversion Service Kits

New Kit Chart - D404 / DSH40P			
Spicer PDU Conversion Parts Kit			
Spicer Kit Part - No		504389-A	504394-A
Part Description	Qty	All DS404 / DSH40P (After June 2008) Pump Models	All DS404 / DSH40P (Before June 2008) Pump Models
Inter Axle Diff Assembly	1	10085729	10085729
Helical Gear & Bushing Assembly	1	10000528	10000528
Output Side Gear	1	10026796	10026797
Thrust Washer	1	132439-A	132439-1

DRIVE AXLE INFO



PDU Conversion Service Kits

New Kit Chart - D170P / D190P		
Spicer PDU Conversion Parts Kit		
Spicer Kit Part - No		504397-A
Part Description	Qty	D170P / D190P Pump Models
Inter Axle Diff Assembly	1	10094013
Helical Gear & Bushing Assembly	1	10011380
Output Side Gear	1	10005175
Thrust Washer	1	132440-A

New Kit Chart – D590P		
Spicer PDU Conversion Parts Kit		
Spicer Kit Part - No		505052-A
Part Description	Qty	D590P Pump Models
Inter Axle Diff Assembly	1	10094013
Helical Gear & Bushing Assembly	1	10051032
Output Side Gear	1	10005175
Thrust Washer	1	132440-A

PDU Conversion Kit



DRIVE AXLE INFO



Individual Service Parts

Spicer® Models	Old Gear Design Part Number	New Gear Design Part Number	Part Description
DS404 / DSH40P	130907	10000528	Helical Side Gear & Bushing
DS404 / DSH40P	134192	10085729	IAD Assembly
DS404 / DSH40P	127645	10026797	Output Side Gear - Before 2008
DS404 / DSH40P	132061	10026796	Output Side Gear - After 2008 - Pump Models
D170 / D190P	131345	10011380	Helical Side Gear & Bushing
D170 / D190P	135015	10094013	IAD Assembly
D170 / D190P	131466	10005175	Output Side Gear - Pump Models
D590P	131346	10051032	Helical Side Gear & Bushing



Helical Gear & Bush



IAD Assembly



Output Side Gear

DRIVE AXLE INFO

If you need additional information, please contact your Dana Aftermarket representative.