

## DANA 170/190/590 CARRIER SUB-ASSY DESIGN CHANGE AND NEW BEARING KITS RELEASED

### PART NUMBER INFORMATION

DATE: March 17, 2022

TO: All Dana Aftermarket Group Spicer® Heavy Axle Customers

Dana Aftermarket Group is pleased to announce a product design change and release of new Carrier Sub-Assy Kits and Bearing Kits for the 3rd Generation 170/190/590 family of axles.

All forward & rear carrier sub assembly parts for the 170/190/590 models were dimensionally redesigned at the bearing cup bore section. As part of the design change new larger differential flange half and plain half case bearing cups are being introduced.

Dana has release 9 new Bearing Kits and 8 Carrier Sub-Assy Kits. The various 170/190/590 generations builds are identified by dates below.

**Generation-1 - Models built from 2003 thru June 10, 2013**

**Generation-2 - Models built Between June 11, 2013 and December 20, 2016**

**Generation-3 - Models currently built After December 21, 2016**

All production drive axles and service carriers built and shipped on or after December 21, 2016 now use new designed Carrier Sub-Assemblies, which requires the use of larger differential bearing cups.



Larger Bore & Larger Differential  
Bearing Cups - Gen-3

The Gen-2 design Carrier Sub-Assemblies have now been discontinued. If rebuilding any of the Gen-2 design models and you require a replacement Carrier Sub-Assy, simply order one of the new Carrier Sub-Assy Kits. The new carrier sub-assemblies have a larger bore and require the (larger) bearing cups which are included as part of the kits.

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## Replacement Part Chart - **UPDATED**

New Dana Part Number	Description	Related Discontinued Item	Description / Models	Gen-3 carrier Sub Assy	Flange Half Diff Brg Cup	Plain Half Diff Brg Cup
504197	Carrier Sub-Assy Kit	132483-NLA	Carrier Sub-Assy D170	10035420	140012-1	140012-1
504198	Carrier Sub-Assy Kit	132484-NLA	Carrier Sub-Assy D170D	10035421	140012-1	140020-1
504199	Carrier Sub-Assy Kit	132485-NLA	Carrier Sub-Assy D190/D190D	10035422	140012-1	140020-1
504190	Carrier Sub-Assy Kit	132480-NLA	Carrier Sub-Assy S170	10035417	140012-1	140012-1
504193	Carrier Sub-Assy Kit	132481-NLA	Carrier Sub-Assy S170D	10035418	140012-1	140020-1
504194	Carrier Sub-Assy Kit	132482-NLA	Carrier Sub-Assy S190/S190D	10035419	140012-1	140020-1
504195	Carrier Sub-Assy Kit	132486-NLA	Carrier Sub-Assy S170R	10035423	140012-1	140020-1
504196	Carrier Sub-Assy Kit	132487-NLA	Carrier Sub-Assy S190R	10035424	140012-1	140020-1
504380	Bearing Kit	new gen-3	D170, S170E	see chart for individual BOM		
504381	Bearing Kit	new gen-3	D170D, S170DE			
504382	Bearing Kit	new gen-3	D190, D190D, D/R590, S190E, S190DE			
504383	Bearing Kit	new gen-3	S170 2.69-3.91			
504384	Bearing Kit	new gen-3	S170 4.10 - 7.17			
504385	Bearing Kit	new gen-3	S170D 2.69 - 3.91			
504386	Bearing Kit	new gen-3	S170D 4.10 - 7.17			
504385	Bearing Kit	new gen-3	S190, S190D 2.53 - 4.78			
504387	Bearing Kit	new gen-3	S190, S190D 5.25 - 7.83			

### Inter-Changeability Notes:

**Service Carriers:** No affect as all old design and new design service carriers are totally interchangeable. When it comes to the repairs of a carrier, customers should identify the generation of carrier being worked on and use the correct service parts.

**Carrier Sub-Assy's:** The original Gen-2 carrier sub-assemblies are now discontinued. Customers can only use the new design Gen-3 carrier sub-assy kits to repair Gen-2 designed original carriers. The internal components from Gen-2 are compatible to the Gen-3 new carrier sub-assy.

- If needing to replace a Gen-1 design carrier sub-assy, you must order a complete new service carrier.

**Bearing Kits and Cups:** Bearing kits unique to Gen-3 have now been released. These are for use only on models built on or after December 21, 2016.

- **DO NOT mix the bearing cups from Generation-2 with those designed for Generation-3 models. The dimensions of the brg cups are different and premature failures could occur.**

**NOTE:** Customers should always be sure to identify the carrier design before ordering replacement parts. Failure to use the proper parts or mixing of parts could result in an improperly built or reassembled carrier or a carrier that will not assemble correctly resulting in a potential pre-mature carrier failure which would be non-warrantable.



## New Generation 3 Bearing Kit Bills of Materials:

Gen-3 Bearing Kits - Forward Models			
New Dana Part-No	504380	504381	504382
Models	D170, S170E	D170D, S170DE	D190, D190D, D590, D590D, S590, S590D, S190E, S190DE
Ratio	All Ratios	All Ratios	All Ratios
Bearing Cone-Inner Pinion	139968	139968	139968
Bearing Cup-Inner Pinion	139969	139969	139969
Bearing Cone-Outer Pinion	139971	139971	139971
Bearing Cup-Outer Pinion	139972	139972	139972
Bearing Cone-Input Shaft	139973	139973	139973
Bearing Cup-Input Adjuster	139974	139974	139974
Bearing Cone-O/P Side Gear	139975	139975	139975
Bearing Cup-O/P Side Gear	139976	139976	139976
Bearing Cup-Flange Half	140012-1	140012-1	140012-1
Bearing Cone-Flange Half	140014	140014	140014
Bearing Cone-Plain Half	140014	140019	140019
Bearing Cup-Plain Half	140012-1	140020-1	140020-1
Bearing - Pilot	-----	-----	129947
V-Ring <i>*Note 1</i>	131333*	131333*	131333*
Washer <i>*Note 1</i>	132440*	132440*	132440*
Oilseal	134323	134323	134323
Carrier Pinion Cover	10039186	10039186	-----
RTV Sealant 3oz	107276S	107276S	107276S

*\*Note 1* - The S590, S590D and High Entry S170E, S170DE, S190E, S190DE models do not use a v-ring or thrust washer simply discard it when rebuilding.

Gen-3 Bearing Kits - Single & Rear Rear Models						
New Dana Part-No	504383	504384	504385	504386	504385	504387
Models	R170, S170		R170D, S170D		R190, R190D, S190, S190D	
Ratio	2.69-3.91	4.10-7.17	2.69-3.91	4.10-7.17	2.53-4.78	5.25-7.83
Bearing Cone-Inner Pinion	139968	139968	139968	139968	139968	139968
Bearing Cup-Inner/outer Pinion	139969 (2)	139969 (2)	139969 (2)	139969 (2)	139969 (2)	139969 (2)
Bearing Cone-Outer Pinion	139970	139970	139970	139970	139970	139970
Bearing Cup-Flange Half	140012-1	140012-1	140012-1	140012-1	140012-1	140012-1
Bearing Cone-Flange Half	140014	140014	140014	140014	140014	140014
Bearing Cone-Plain Half	140014	140014	140019	140019	140019	140019
Bearing Cup-Plain Half	140012-1	140012-1	140020-1	140020-1	140020-1	140020-1
Bearing - Pilot	129947	-----	129947	-----	129947	126187
Oilseal	134323	134323	134323	134323	134323	134323
RTV Sealant 3oz	107276S	107276S	107276S	107276S	107276S	107276S

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If you need additional assistance, please contact your Spicer® products representative or our tech service team at (877) 777-5360 (option 1).

Thank you for your continued support of Spicer® products

Bernie Powers  
Product Manager  
Spicer® Heavy Axle Products

Encl:

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