

INSTALLATION - SERVICE INSTRUCTIONS



Bulletin NO. SB0117

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August 2021

765 South Pierce Avenue, Louisville, CO 80027

(303) 665-6901 / 800-525-1963

www.markwilliams.com

Part Numbers

50225-KITC4 Corvette 1988 to 1996 Rear Axle Hub and Yoke Shaft Upgrade

Parts Included:

- 2 ea 50225 Yoke, 32 Spline
- 2 ea 50227 Timken™ Unit hub 32 spline
- 2 ea 50225-2 Washers
- 2 ea 16-74-101 Nut, Flanged type Self locking
- 4 ea 39112-1 Cap, 1350 Joint Size
- 8 ea 39112-3 Studs, for U-Joint Cap
- 8 ea AJN12-1 nut, 3/8-24 Reduced Hex
- 1 ea 2701 Retaining Compound



Primary Applications:

C4 Corvette '88-'96 Model Rear Axle with Timken™ Unit Wheel Hubs

Installation Overview:

This kit is a bolt in replacement. If utilizing the ABS braking system it will be necessary to install the ABS tone ring on the Yoke Shafts first. The flange nut is self-locking but we recommend using 2701 retaining compound also.

Note: If using this kit of the earlier 1984 to 1987 C4 Corvette without the ABS brake system this is not a bolt in conversion. It would be necessary to modify or use later model brake components to make this work. This would include, shortening the tubular u-joint axle shafts.

Torque Specs:

The 1"-20 Flange Nut on the Yoke end is 250 ft lbs with 2701 compound. The 3/8"-24 reduced hex nuts for the u-joint cap is 17-22 ft lbs . Over tighteing will cause the universal joint cap to deform and destroy the joint.

Maintenance Requirements:

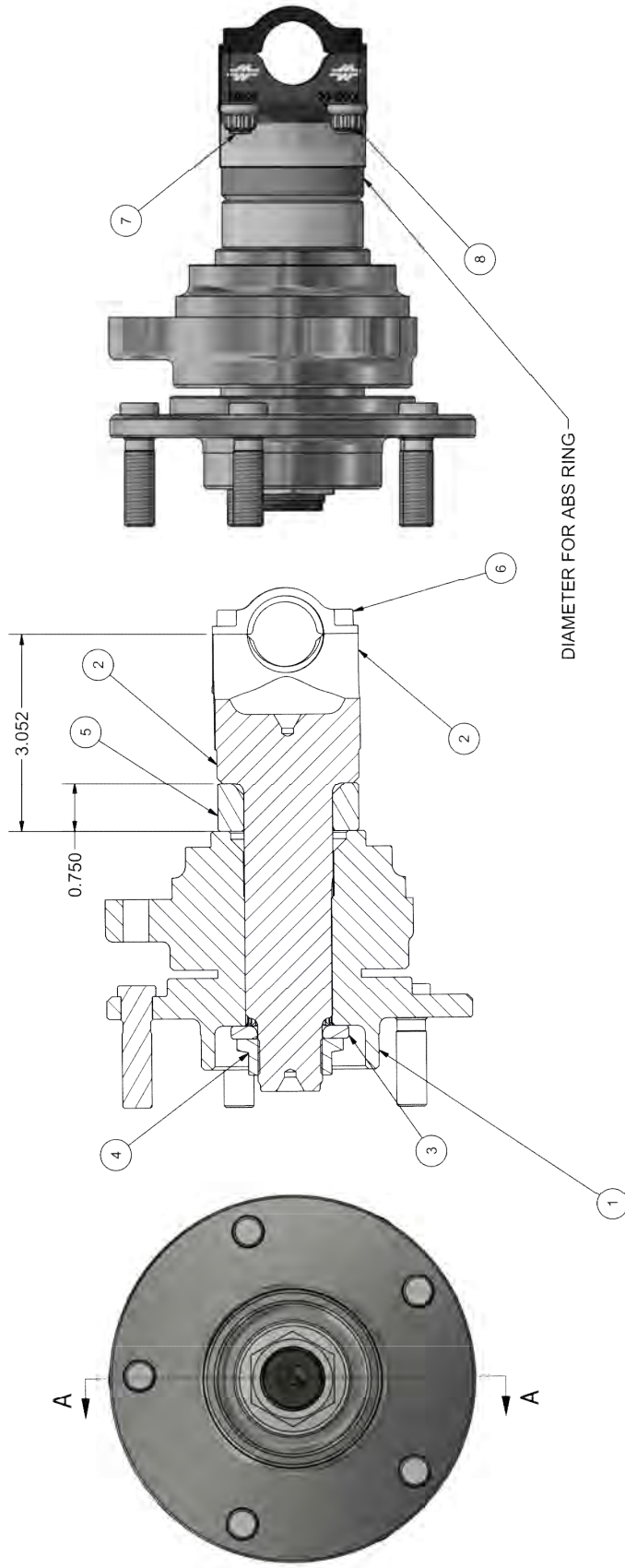
No lubrication is required to the unit hub. Checking the universal joints for smooth operation is recommended.

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REVISION HISTORY



ITEM	QTY	PART NUMBER	DESCRIPTION	FILE NAME
1	2	50227	HUB, IMKEN, C4 CORVETTE, 3/2 SPLINE	004987N1.jpt
2	2	50225	AXLE, VETTE OUTER, 3/2 SPLINE C4	004973N1.jpt
3	2	50225-1	BUSHING, 50225 YOKER CORVETTE YOKER	005015N1.jpt
4	2	16-74-101	NUT, 1" 20 FLANGE LOCKING	16-74-101.jpt
5	2	50225-2	WASHER, LOCATE HUB 88-96 CORVETTE	005038N1.jpt
6	2	39112-1	CAP, FOR MW STANDARD PINION YOKER (ONE)	001851N1.jpt
7	8	39112-3	STUD, CAP 50231 YOKER	004924N1.jpt
8	8	AJN12-1	NUT, 3/8-24	AJN12-1.jpt

MATERIAL	HEAT TREAT
	PROTECTIVE FINISH
<p>THIS IS A SOURCE CONTROLLED DRAWING. PART REPRODUCTION BY OTHERS NOT PERMITTED.</p>	
<p>785 SOUTH PIERCE AVE. LOUISVILLE, CO 80077 PHONE: (303) 441-1111 FAX: (303) 441-1112 WWW.SPARTANENTERPRISES.COM</p>	
<p>Z:\Inventory\FlexAssembly_Files\AS004987N1.dwg</p>	
<p>STOCK INFORMATION</p>	
AS004987N1.dwg	
XX	XXXX
XX	XXXX
.015	.0005
.005	.012
<p>SURFACE FINISH UNLESS NOTED V.P.F.</p>	
DATE PLOTTED	DATE PLOTTED
01/13/2021 09:29 PM	50225-KIT
1	1

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CORVETTE RACING QUALITY COMPONENTS

ADDITIONAL PARTS FOR IMPROVING THE CORVETTE RELIABILITY



50230-KIT • C2-C3 Corvette Next-Step Rear Axle-Yoke Assembly • Replaces the weak 17-spline axles with 31-spline, and a one-piece u-Joint flange yoke.



50245-KIT • C2-C3 Rear Inner Yoke Shafts (2) • 30 Spline. Uses 12-Bolt car axle side gear to increase strength, and replaces the bolt on u-joint flange. This is the solution for the failure prone 17-spline OEM flange yokes.



50248-KIT • C2-C3 Rear Inner Yoke Shafts for modified C2-C3 Differentials for rears that have the Tom's Gears modified 12 bolt carrier and special ring and pinion gears.



ACG-020 • C2-C3 Corvette Front Lower Control Pivot Shaft • Heat-treated and shot peened alloy steel, modified design for a slight roll center change.

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CORVETTE RACING QUALITY COMPONENT



ACG-030 • C2-C3 Replacement Case for the Eaton™ 19670 Positraction • The is Case produced from thru-hardened alloy steel that solves the problem with cracked and failed cases while increasing gear life. It use 12 Bolt GM axle side and pinion gears for the 30 spline inner shafts.



58100 • C2-C3 Steel Main Cap Replacement for Cast Iron Cap.



39038 • C2-C3 Pinon Yoke 1350 Seies u-joint upgrade.



Cross Pin for C2-C3 M/W Case Uses 12 Bolt Spiders .809 Dia.



39800-VETT AXLE DRIVE SHAFT 4130 TUBE AND END FITTINGS SPICER JOINTS



50225-KIT • C4 '88-'96 Corvette Rear Hub and Yoke Shaft Kit • Features new Timken™ hubs with a larger 32-spline and matching 300M Yoke with Billet Caps.



50210 • C5 Corvette 300M Intermediate Shaft • Replaces GM part number 88893900.



50220 • C5 Corvette CV Shaft • 300M steel replaces GM part number 10311201.

For more information on these parts go to www.markwilliams.com/corvette-parts.html