

# INSTALLATION INSTRUCTIONS

RACE SERIES STOCK LENGTH CHROMOLY BOXED L.C.A.'S

**86500R**  
**86500R-10FJ**

DATE: 8/1/2013  
REV.: 01  
SCALE:  
PAGE: 1 OF 4  
DRAWN: SW

INSTALLATION DRAWINGS FOR:

PART# 86500-R

2005+ TOYOTA TACOMA PRERUNNER/4WD

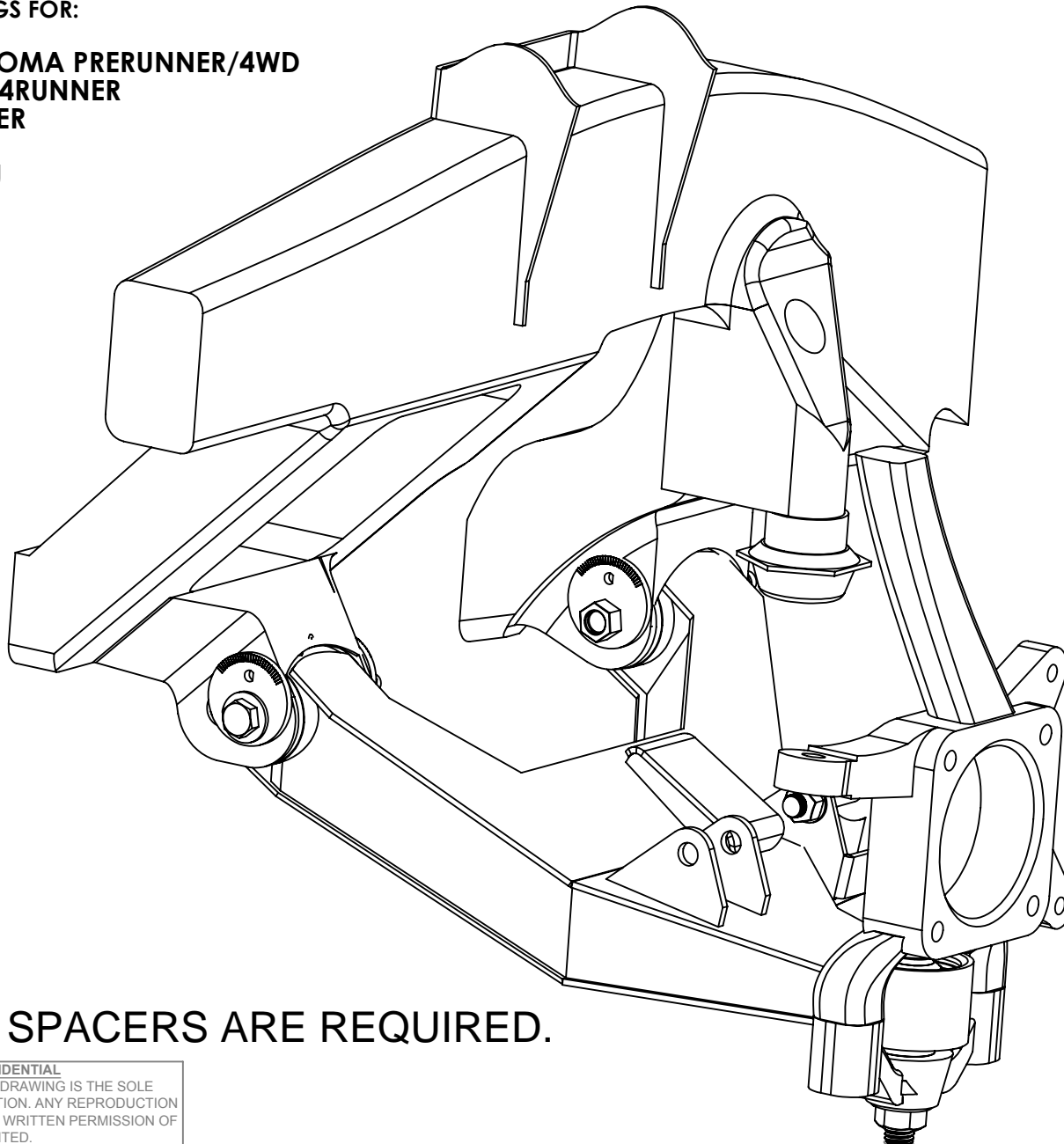
2003-2009 TOYOTA 4RUNNER

2007-2009 FJ CRUISER

PART# 86500-R-10FJ

2010+ 4RUNNER

2010+ FJ CRUISER



**1.25" WHEEL SPACERS ARE REQUIRED.**

**PROPRIETARY AND CONFIDENTIAL**

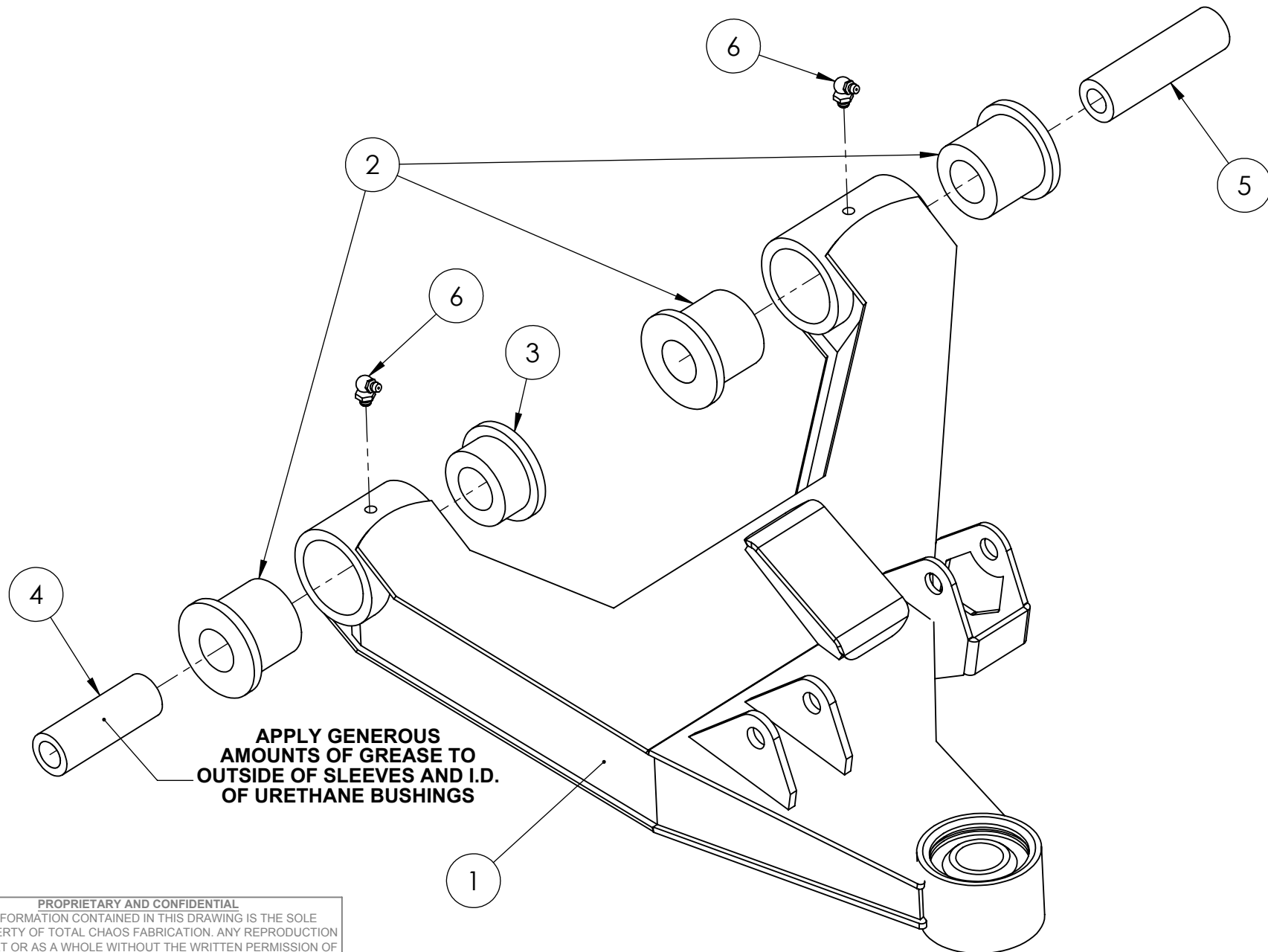
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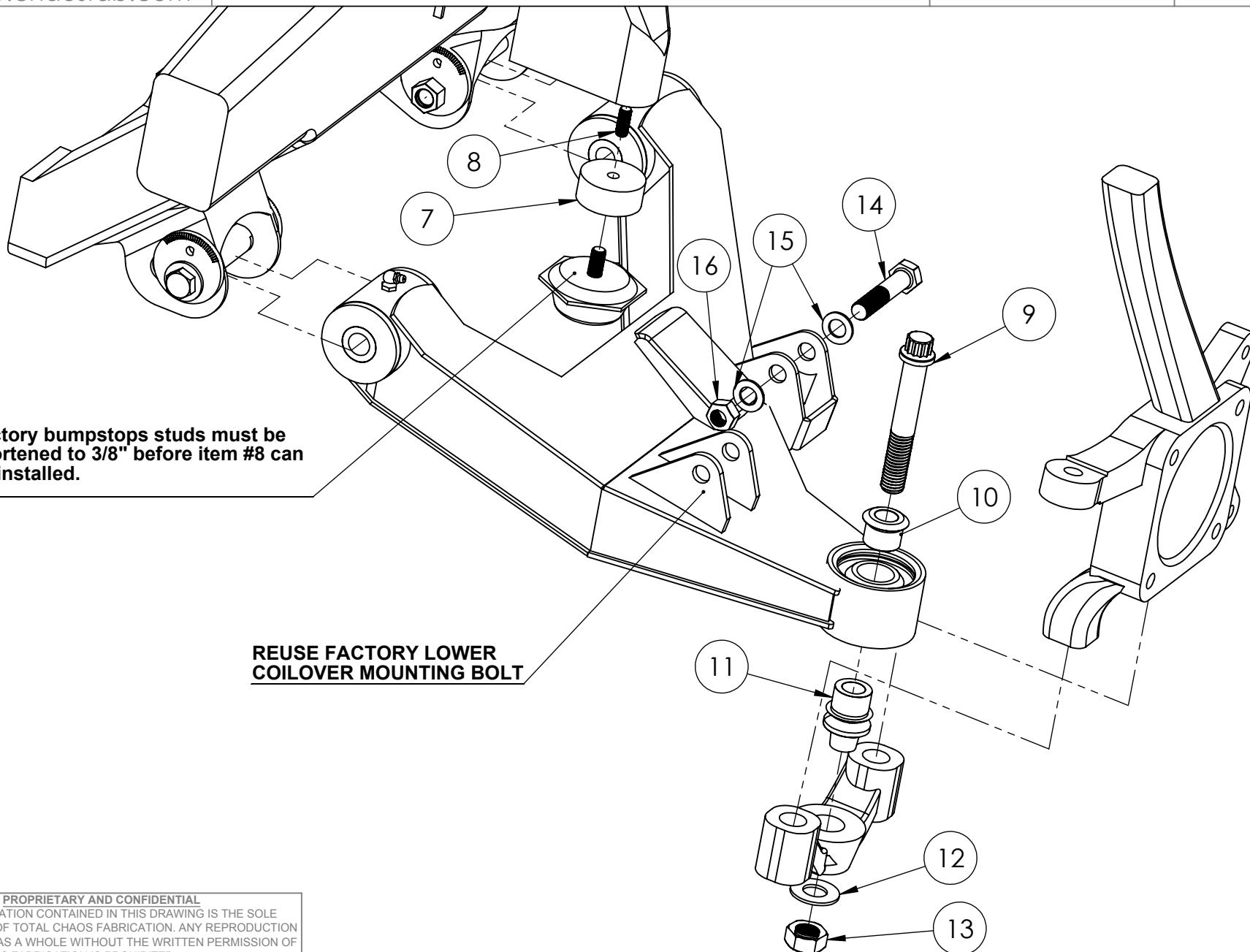
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Factory bumpstops studs must be shortened to 3/8" before item #8 can be installed.

**REUSE FACTORY LOWER  
COILOVER MOUNTING BOLT**

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## INSTALLATION NOTES

The factory manual is required for torque specifications on all hardware. This procedure will involve the removal and re-installation of many parts. Always use factory replacements for worn or damaged parts. Always use new cotter keys during re-installation.

Some items are not shown for clarity.

### Page 2

Apply generous amounts of synthetic grease to outside of sleeves and I.D. of urethane bushings.

### Page 3

Torque item #9 to 100ft lbs.

Factory bumpstops studs must be shortened to 3/8" before item #8 can be installed.

## PARTS LIST: 2005+ TACOMA LOWER CONTROL ARMS

ITEM #	PART #	QTY.	ITEM DESCRIPTION
1	86506L	1	CONTROL ARM, LANDCRUISER LOWER LEFT
	86506R	1	CONTROL ARM, LANDCRUISER LOWER RIGHT
2	60293	6	BUSHING, URETHANE SHORT HALF
3	60685	2	BUSHING, URETHANE LONG HALF
4	68608	2	SLEEVE, SHORT LOWER ARM INNER
5	68609	2	SLEEVE, LONG LOWER ARM INNER
6	10005	4	FITTING, GREASE (ZERK)
7	68610	2	SPACER, BUMP STOP
8	10611	2	STUD, 10mm x 1.00"
9	10141	2	BOLT, 5/8" x 4.00L 12-POINT
10	10058C	2	SPACER, TOP LOWER ARM MISALIGNMENT
11	10058TAC	2	SPACER, BOTTOM LOWER ARM MISALIGNMENT
12	12103	2	WASHER, 5/8" AN
13	11102	2	NUT, 5/8" GRADE C LOCK
14	10022	2	BOLT, 1/2" x 2.25" GRADE 8 SHOCK
15	12003	4	WASHER, 1/2" AN
16	11002	2	NUT, 1/2" GRADE C LOCK

**TOTAL CHAOS Fabrication Inc.**  
**159 North Maple St. Unit J**  
**Corona, CA 92880**  
**951.737.9682**

**WWW.CHAOSFAB.COM**

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**1.25" WHEEL SPACERS ARE REQUIRED. Inspect equipment for proper clearance after installation.**



**Steering stop must be trimmed off of the lower ball joint cradle or severe damage to the new lower control arm will result. Some contact may remain at full lock steering.**

**Included bump stop spacer can be welded to the frame or installed using the supplied 10mm stud. If supplied 10mm stud is used, the factory bump stop's mounting stud will need to be trimmed.**



## LOWER CONTROL ARM INSTALL TIPS

The following tips are intended to make installation of your TOTAL CHAOS Fabrication lower control arms smoother. We try to answer some of the frequently asked questions that we get during an LCA installation.

### **PIVOT POCKET ADJUSTMENT**

If the LCA pivots are not aligning you may need to use a large crescent wrench or rubber mallet to open up the frame pockets where the lower control arm will mount.

CAUTION: Only a small adjustment may be necessary. You will not need to bend it very much.



### **GREASE THE PIVOT POCKETS**

Greasing the control arm pockets where the bushings pivot on the frame will help when installing the LCA. This will also provide a layer of grease on the flat shoulder side of the bushing.



## **GREASE THE PIVOT POCKETS CONTINUED**



## **BUSHING PREP AND INSTALLATION**

Apply generous amounts of grease to the inside of the lower control arm pivots. Then install the bushings using a dead blow hammer.

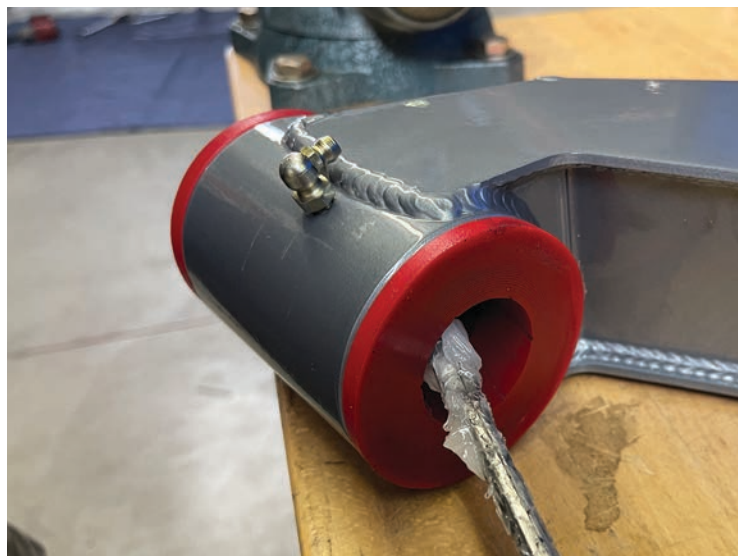
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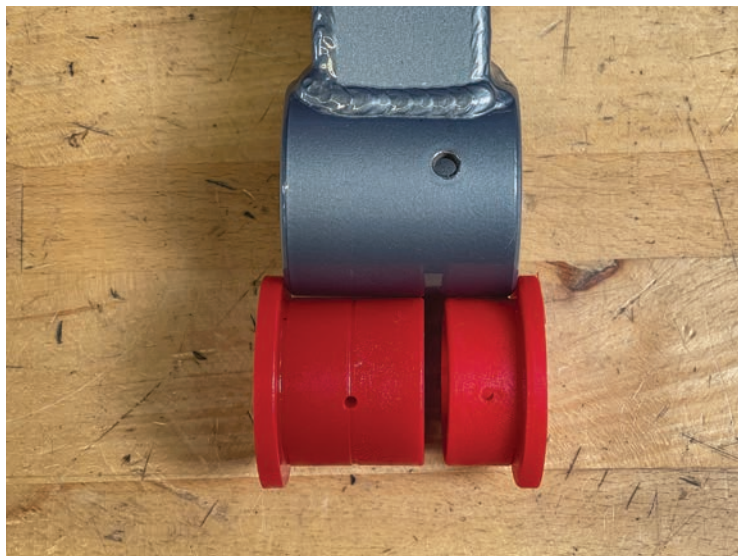
### **BUSHING PREP AND INSTALLATION**

Apply grease to the inner bushing and insert the inner sleeve. It will be a tight fit so a deadblow hammer will be necessary.



### **BUSHING ALIGNMENT**

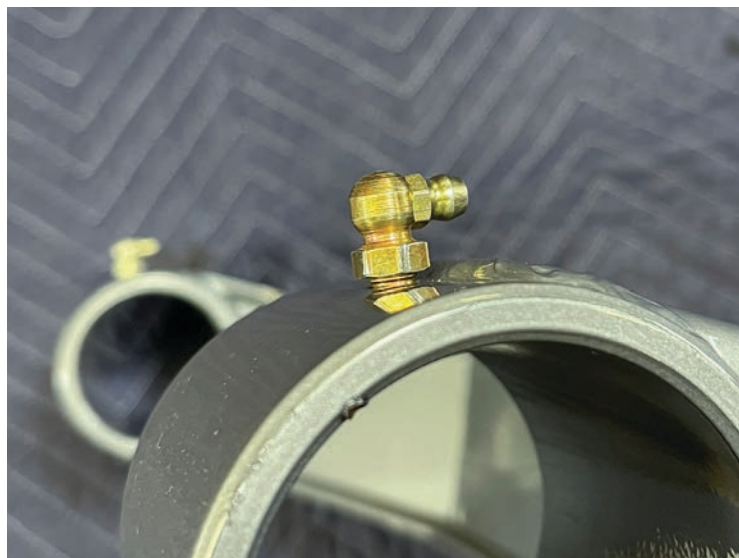
Some lower control arm pivots have an offset zerk fitting hole. Be sure to install the bushings in the correct orientation where the gap lines up with the zerk hole.





### **ZERK FITTINGS**

Powder coat can build up in the threaded holes – run a ¼”-28 tap through it to chase it when needed. When tightening the zerk, DO NOT tighten the zerk to the bottom of the thread. Stop when it gets snug. Then rotate as needed to make the fitting accessible for a grease gun.



### **UNIBALLS**

Brand new uniballs are designed to be much tighter to rotate than a ball joint. Rotating the uniball will not be as easy as the ball joint you just removed. You may also notice this when driving the vehicle, especially at low speeds – a heavier steering wheel feel and it may not return to center as fast. If you are replacing a set of worn out ball joints, a new uniball might feel tighter than you were anticipating. There is a break in period associated with these new parts. They will begin to loosen up as break in occurs. Mileage of break in can vary.



**FOR INSTALL QUESTIONS OR CUSTOMER SERVICE INQUIRIES:**

Call 951.737.9682 or email [info@chaosfab.com](mailto:info@chaosfab.com)