

400 W. Artesia Blvd.
Compton, CA 90220
Fax: (310) 747-3912
Ph: 1-800-776-0767
E-Mail: info@procompusa.com
Website: www.procompusa.com

Latest Revision:
2.21.2022



PRO COMP SUSPENSION

IMPORTANT!: If not using a Pro Comp suspension system with these control arms, it is on the installer to check clearances on the upper arm for binding at both full shock extension and full shock compression and lock to lock steering in both compression and extension to make sure the arm does not bind in any manner. Installing with such combination that does not allow full cycling of the ball joint without binding is unsafe and should not be done. Failure to follow these directions will void any implied warranty.

57023B

2022-Up Toyota Tundra Ball Joint Upper Control Arm Kit

This document contains very important information that includes warranty information and instructions for resolving problems you may encounter. Please keep it in the vehicle as a permanent record.

PART #	DESCRIPTION	QTY
89-20318	TUBULAR UPPER CONTROL ARM: DVR	1
35-12451	WSHR 1.50 X .504 X .125HT	1
89-20322	TUBULAR UPPER CONTROL ARM: PAS	1
35-12451	WSHR 1.50 X .504 X .125HT	1
90-9607	WASHER 2.25 X .635 X .125	8
90-60771	HARDWARE PACK: .75" BUSHING HARDWARE	1
15-11071	BUSHING	8
15-11072	SUPPORT RING	4
90-60796	HARDWARE PACK: SLEEVE 1.00 X 16MM X 2.3	1
35-20274	SLEEVE: 1.00 X 16MM X 2.3	4
90-4433	GREASE PACK	8
90-4414	FIR TREE ZIP TIE, 8.6 LONG	4
HERNON427	RED HIGH STRENGTH SEAL 427	1

TECH NOTES

- INSTALLED HARDENED WASHER (35-12451) ON BALL JOINT STUD AND RED THREAD LOCKER MUST BE USED. THREADS WILL NOT PROTRUDE FROM NUT. SEE PAGE 8.
- UPPER CONTROL ARMS ARE DESIGNED FOR 2.25"-3.5" OF LIFT OVER STOCK.
- RE-TORQUE BOLTS AFTER 500 MILES OF USE.
- GREASE ALL ZERK FITTINGS EVERY OIL CHANGE OR DIRT USE.
- DO NOT EXCEED AN ASSEMBLED COILOVER LENGTH OF 21 3/4" OR BINDING WILL OCCUR.
- IF USING 57023B WITH A NON APPROVED KIT, YOU MUST CYCLE TO VERIFY NOTHING WILL BIND. PRO COMP DOES NOT WARRANTY ANY NON APPROVED KIT COMBINATION.

Optional Equipment Available from your Pro Comp Distributor!

2.5 VST PRO SERIES FRONT COILOVERS: 57050BX-1

2.5 VST PRO SERIES REAR SHOCKS: 57050BX-2

22 TUNDRA COILSPRING AND AIR RIDE REAR 1.0" LIFT KIT: 65211

22 TUNDRA NITRO KIT: 65211K

Optional Upper Control Arm Rebuild Equipment Available from your Pro Comp Distributor!

Ball Joint: 90-60783 (1 Ball Joint Kit)
Boot Kit: 90-60786 (2 Boots)
Bushings: 90-60771 (Complete Bushing Set)
Dust Cap: 90-60785 (1 Cap Kit)
Flush Grease Tip Tool: QCC-NNS from SAEproducts.com

Also, Check out our outstanding selection of **Pro Comp** tires to compliment your new installation!

Introduction:

- ◆ This installation requires a professional mechanic!
- ◆ We recommend that you have access to a factory service manual for your vehicle to assist in the disassembly and reassembly of your vehicle. It contains a wealth of detailed information.
- ◆ Prior to installation, carefully inspect the vehicle's steering and driveline systems paying close attention to the tie rod ends, ball joints, wheel bearing preload, pitman and idler arm. Additionally, check steering-to-frame and suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition. Repair or replace all worn or damaged parts!
- ◆ Read the instructions carefully and study the illustrations before attempting installation! You may save yourself a lot of extra work.
- ◆ Check the parts and hardware against the parts list to assure that your kit is complete. Separating parts according to the areas where they will be used and placing the hardware with the brackets before you begin will save installation time.
- ◆ Check the special equipment list and ensure the availability of these tools.
- ◆ Secure and properly block vehicle prior to beginning installation.
- ◆ **ALWAYS** wear safety glasses when using power tools or working under the vehicle!
- ◆ Use caution when cutting is required under the vehicle. The factory undercoating is flammable. Take appropriate precautions. Have a fire extinguisher close at hand.
- ◆ Foot pound torque readings are listed on the Torque Specifications chart at the end of the instructions. These are to be used unless specifically directed otherwise. Apply thread lock retaining compound where specified.
- ◆ **Please note that while every effort is made to ensure that the installation of your Pro Comp lift kit is a positive experience, variations in construction and assembly in the vehicle manufacturing process will virtually ensure that some parts may seem difficult to install. Additionally, the current trend in manufacturing of vehicles results in a frame that is highly flexible and may shift slightly on disassembly prior to installation. The use of pry bars and tapered punches for alignment is considered normal and usually does not indicate a faulty product. However, if you are uncertain about some aspect of the installation process, please feel free to call our tech support department at the number listed on the cover page. We do not recommend that you modify the Pro Comp parts in any way as this will void any warranty expressed or implied by the Pro Comp Suspension company.**

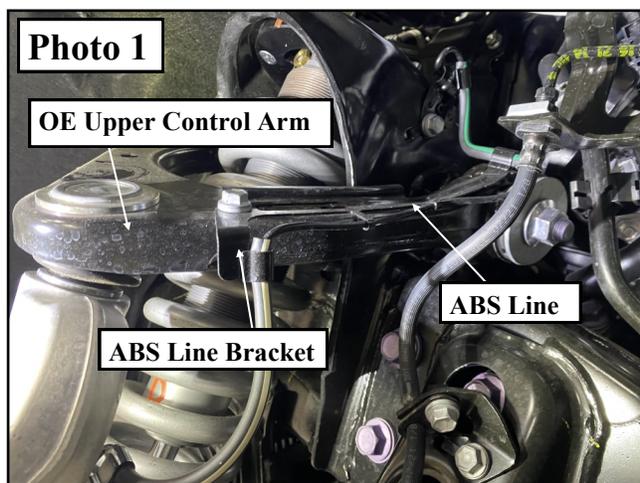
FRONT INSTALLATION:

1. Measure the vehicle from the center of the hub to the fender lip and record this measurement below.

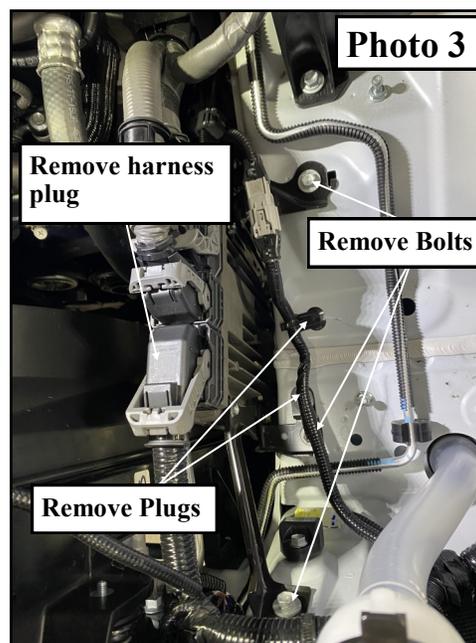
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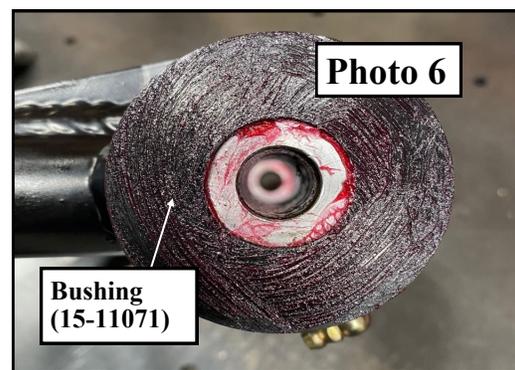
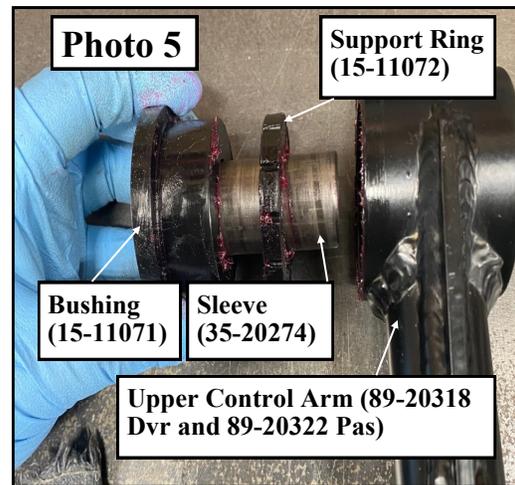
2. Be sure you are working on a level surface. Block the rear tires and raise the front of the vehicle. Support the frame with jack stands.
3. Remove the front wheels.
4. Remove ABS line bracket from control arm. Unhook ABS line from bracket and move out of the way. See Photo 1.



5. On the driver side, in order to access and remove the OE upper control arm pivot bolt, first remove the air filter housing. See Photo 2.
6. Remove bolts and pins and unplug harness plug shown in Photo 3.
7. Move harness plug out of the way to have access to the head of the OE upper control arm pivot bolt. See Photo 4.



8. Remove the cotter pin and loosen, but do not remove the upper ball joint nut. Separate the knuckle from the ball joint taper using the appropriate tool.
9. Remove the nut on the OE upper control arm pivot bolt. Save OE hardware for reinstallation.



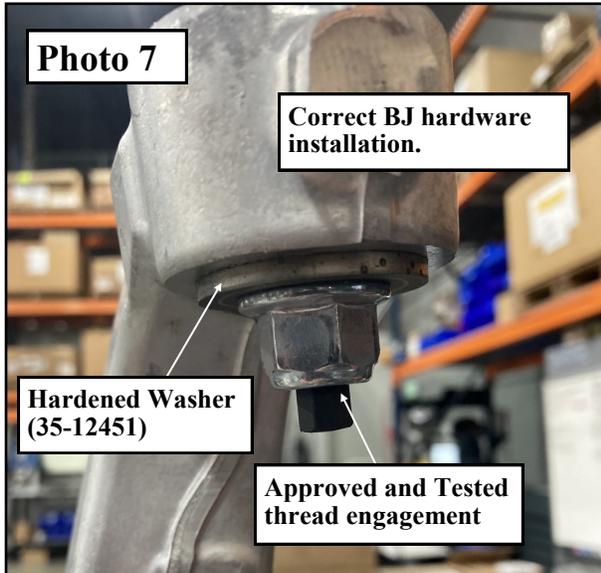
10. Before removing the ball joint nut, secure the knuckle to prevent it from tilting away from the center of the vehicle. Remove the ball joint nut and lift the control arm out of the way. Support the knuckle if it has not already been done.
11. Remove the upper control arm pivot bolt from the OE upper control arm. Remove the OE upper control arm.
12. Replace the OE washer with (90-9607) next to the head of the bolt.
13. Apply grease to the inner and outer diameter of the (8) bushings (15-11071) and install the bushings onto the sleeve assemblies. The support ring sits in the middle of each arm pivot. See Photo 5.
14. Apply grease to the mounting faces of the bushings (15-11071). See Photo 6.
15. Install bushings and sleeves in control arm pivots.

16. Install the Pro Comp Upper Control Arm (89-20318 Dvr and 89-20322 Pas) into the original mounting location using the washers (90-9607), OE pivot bolt, and nut. Tighten hardware but do not torque.

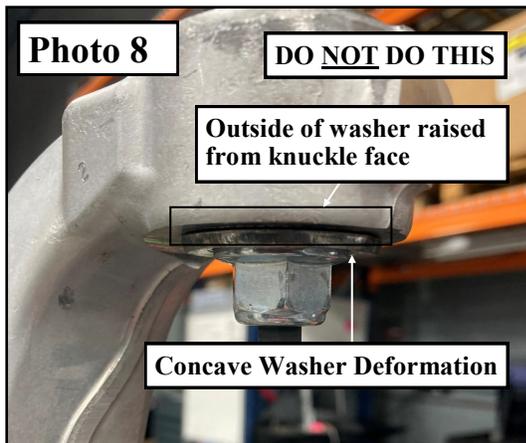
NOTE: Washers are installed on all four of the bushing faces.

17. Secure the Upper Control Arm to the knuckle using the supplied hardened washer and 12mm X 1.75 lock nut and supplied red thread locker. Torque the 12mm nut to 75 ft-lbs.

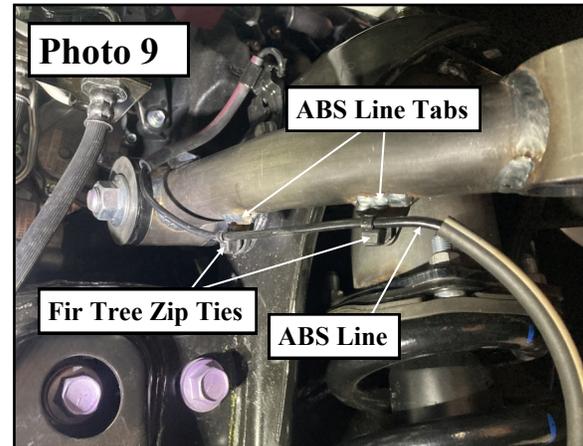
NOTE: Installed Hardened Washer (35-12451) on ball joint stud and red thread locker MUST be used. Threads will not protrude from nut. See Photo 7.



NOTE: Contact dealer if washer is deformed when hardware is torqued to 75 ft-lbs like in Photo 8.



14. Grease Zerk fittings at pivots prior to torquing the OE upper control arm pivot bolt.
15. Torque the OE upper control arm pivot bolt to OE specifications.
16. Attach ABS line to the under side of the rear tube of the upper control arm using the supplied Fir Tree Zipties (90-44114). See Photo 9.



17. Repeat steps 4-16 on the remaining side of the vehicle.
18. Grease flush ball joint Zerks with a nipple adapter tool.
19. Install the front tires/wheels and lower the vehicle onto the ground. Torque lug nuts to wheel manufacturer's specifications.
20. Recheck for proper installation and torque on all newly installed hardware. Re-torque all bolts after 500 miles.
21. Grease the Zerk fittings every 5000 miles or after any off-road use.

IMPORTANT! BE SURE TO BRING THE VEHICLE IMMEDIATELY TO A REPUTABLE ALIGNMENT SHOP TO BE ALIGNED!

Use this only as a guide for hardware without a called out torque specification in the instruction manual.

Bolt Torque and ID						
Decimal System			Metric System			
All Torques in Ft. Lbs. Maximums						
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 9.8	Class 10.9	Class 12.9
5/16	15	20	M6	5	9	12
3/8	30	45	M8	18	23	27
7/16	45	60	M10	32	45	50
1/2	65	90	M12	55	75	90
9/16	95	130	M14	85	120	145
5/8	135	175	M16	130	165	210
3/4	185	280	M18	170	240	290

1/2-13x1.75 HHCS
 D T L X

Grade 5 Grade 8
 (No. of Marks + 2)

M12-1.25x50 HHCS
 D T L X

P = Property Class (Bolt Strength)

G = Grade (Bolt Strength)
 D = Nominal Diameter (Inches)
 T = Thread Count (Threads per Inch)
 L = Length (Inches)
 X = Description (Hex Head Cap Screw)

P = Property Class (Bolt Strength)
 D = Nominal Diameter (Millimeters)
 T = Thread Pitch (Thread Width, mm)
 L = Length (Millimeters)
 X = Description (Hex Head Cap Screw)

Revisions:

CREATED 2.10.2022



The PRO COMP PROMISE WARRANTY

At Pro Comp, we know you have many choices when selecting products to personalize your vehicle. You should demand nothing but the highest quality available and have total confidence that the products you selected are the best in the industry. It is for these reasons that Pro Comp Suspension products are backed by the best warranty in the industry...the Pro Comp Promise!

Pro Comp promises that its products will last a lifetime or we will replace it free of charge. It's that simple! Because of our commitment to quality and manufacturing excellence, we are able to stand behind our products. FOREVER.

It is Pro Comp's Promise that if one of our suspension products breaks not due to misuse, neglect or vandalism, we will replace it. Whether you are the original purchaser or not, you can be assured that we will make it right. The Pro Comp Promise covers all suspension products including shocks and steering stabilizers. Buy Pro Comp Suspension today and enjoy it for the rest of your life!

That's our Pro Comp Promise!

Notice to Owner, Operator, Dealer and Installer:

Vehicles that have been enhanced for off-road performance often have unique handling characteristics due to the higher center of gravity and larger tires. This vehicle may handle, react and stop differently than many passenger cars or unmodified vehicles, both on and off-road. You must drive your vehicle safely! Extreme care should always be taken to prevent vehicle rollover or loss of control, which can result in serious injury or even death. Always avoid sudden sharp turns or abrupt maneuvers and allow more time and distance for braking! Pro Comp reminds you to fasten your seat belts at all times and reduce speed! We will gladly answer any questions concerning the design, function, maintenance and correct use of our products.

Please make sure that the Dealer / Installer explains and delivers all warning notices, warranty forms and instruction sheets included with Pro Comp product.

Warranty and Return Policy:

Pro Comp warrants its full line of products to be free from defects in workmanship and materials for the life of the product. Pro Comp's obligation under this warranty is limited to repair or replacement, at Pro Comp's option, of the defective product. Any and all costs of removal, installation, freight or incidental or consequential damages are expressly excluded from this warranty. Pro Comp is not responsible for damages and / or warranty of other vehicle parts related or non-related to the installation of Pro Comp product. A consumer who makes the decision to modify his vehicle with aftermarket components of any kind will assume all risk and responsibility for potential damages incurred as a result of their chosen modifications. Warranty coverage does not include consumer opinions regarding ride comfort, fitment and design. Warranty claims can be made directly with Pro Comp or at any factory authorized Pro Comp dealer.

IMPORTANT! To validate the warranty on this purchase please be sure to mail in the warranty card.

Claims not covered under warranty

* Parts subject to normal wear; this includes bushings, bump stops, ball joints, tie rod ends and heim joints.

* Finish after 90 days.

* Damage caused as a result of not following recommendations or requirements called out in the installation manuals.

Pro Comp MX Series coil-over shocks are considered a serviceable shock with a one-year warranty against leakage only. Rebuild service and replacement parts will be available and sold separately by Pro Comp. Contact Pro Comp for specific service charges. Pro Comp accepts no responsibility for any altered product, improper installation, lack of or improper maintenance or improper use of our products.

E-Mail: info@procompusa.com
Website: www.procompusa.com
Fax: (310) 747-3912
Ph: 1-800-776-0767

<u>PLACE</u> <u>WARRANTY REGISTRATION</u> <u>NUMBER</u> <u>HERE:</u> _____
