



159 N. MAPLE ST. UNIT J CORONA, CA 92880
P. 951.737.9682 F. 951.737.9006
WWW.CHAOSFAB.COM

Uniball Upper Control Arms

Part #: 77500 2007-2018 Chevy 1500 with Cast Steel Upper Control Arms

Part #: 77514 - 2014-2018 Chevy 1500 with Aluminum or Stamped Steel Upper Control Arms

Tools List:

- 10mm wrench or socket
- 18mm wrench or socket
- 21mm wrench or socket
- Ratchet
- Hammer
- 13/16" wrench or socket
- 7/8" wrench or socket

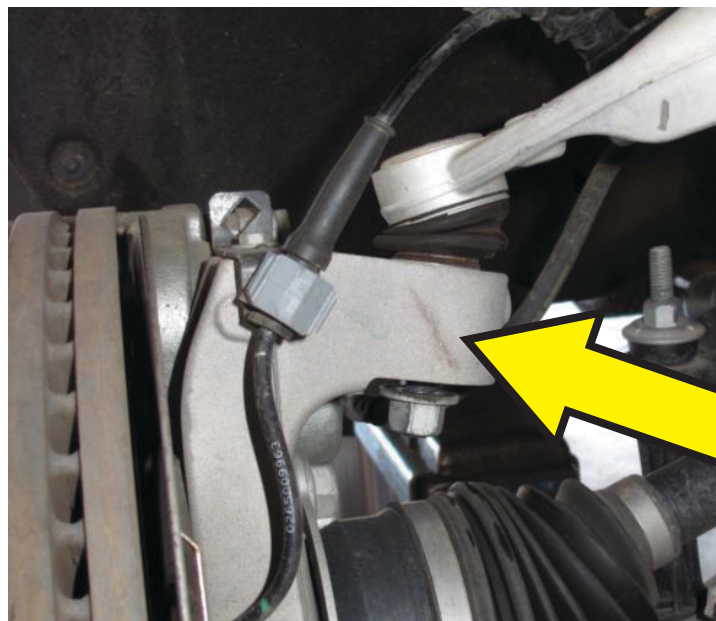


Step 1:

Start by removing the ABS bolt and bracket from the stock upper control arm using a 10mm wrench or socket.

**Step 2:**

Using an 18mm wrench or socket, loosen the upper ball joint bolt, and strike the top part of the spindle (where arrow is pointing) with a hammer until the joint separates from the spindle.



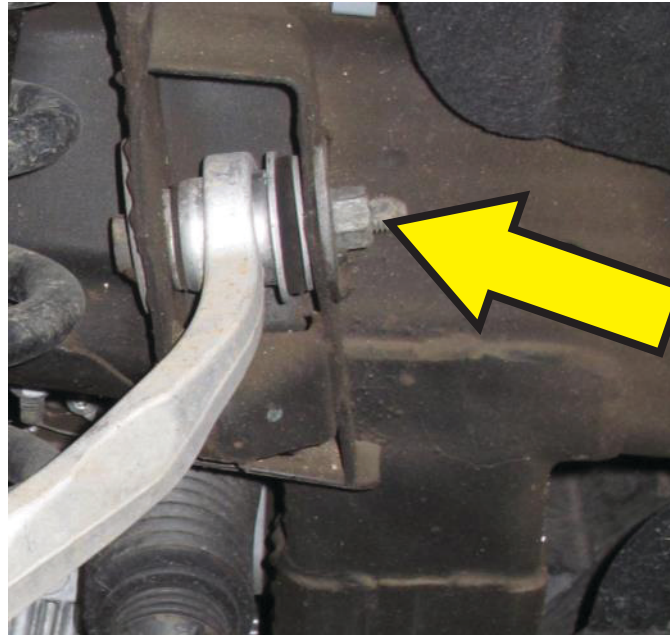
STRIKE HERE

Step 3:

Separate the spindle from the ball joint, then using a 14mm wrench or socket remove the three upper shock bolts and the lower shock bolt. Now remove the shock.

Step 4:

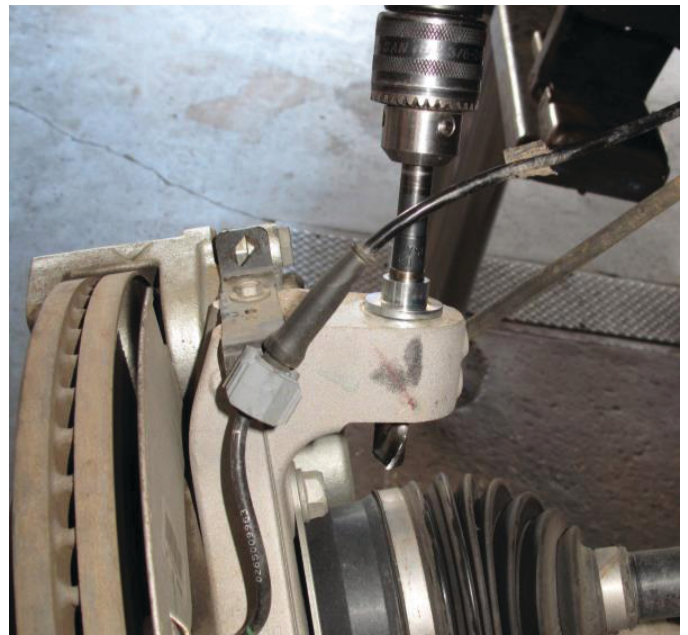
Loosen and remove the two upper control arm bolts that mount the upper control arm to the frame using a 21mm wrench or socket then remove the upper control arm.



21mm

Step 5:

Using the supplied tapered adapter as a guide, drill out the spindle taper using a 9/16" drill bit.



Step 6:

Install the TOTAL CHAOS upper control arm into the frame pockets with the bolts going from the inside out.



Step 7:

Install the shock, and tighten the upper and lower bolts.

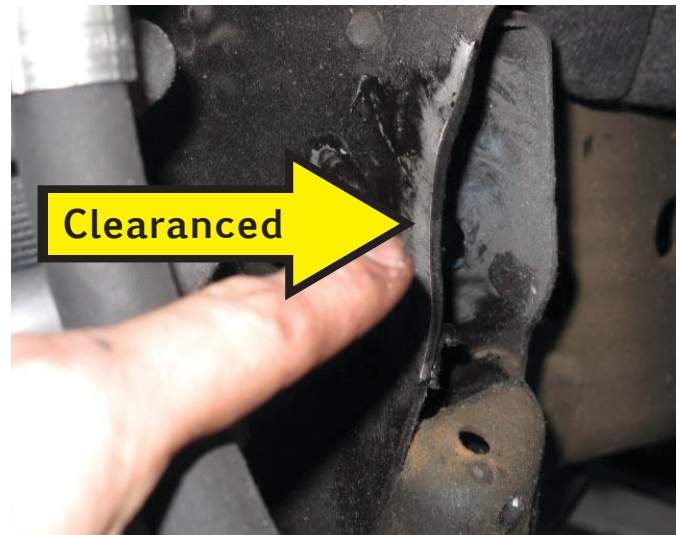
Step 8:

Adjust the alignment of the upper control arm to the inward position and look for contact with the frame pocket.



Step 9:

If the control arm contacts the frame, it will be necessary to use a sander to clearance the frame so that the control arm can pivot freely.

**Step 10:**

Once the control arm has clearance, center the alignment cams and tighten the upper control arm bolts.

Step 11:

Using the supplied tapered adapter and 9/16" bolt, connect the upper control arm to the spindle and torque to 95 foot pounds.



Step 12:

Re-install wheels/tires and properly torque the lug nuts. Have a professional alignment performed and re-torque all hardware after 500 miles.





PARTS LIST:		
PART #	QTY	ITEM DESCRIPTION
77501L	1	LEFT UPPER CONTROL ARM
77501R	1	RIGHT UPPER CONTROL ARM
*FK-WSSX16T-1	2	1" UNIBALL (STAINLESS) W/ PTFE LINER
*30604	2	SNAP RING / 1" UNIBALL
*100916	4	FITTING - GREASE (ZERK)
*10034-TCF	2	SPACER - 3/4" MISALIGNMENT
10255	2	BOLT - 9/16" x 18x5.5 GRADE 8
12203	2	WASHER - 9/16" AN
30010	2	ADAPTER - 9/16" ID TAPERED SPINDLE ADAPTER (FOR 77500)
30008	2	ADAPTER - 9/16" ID TAPERED SPINDLE ADAPTER (FOR 77514)
12204	2	WASHER - 9/16" SAE
11202	2	NUT - 9/16" C-LOCK
11061	2	NUT - 6MM x 1.0 HEX HEAD FLANGE
10005	4	ZERK FITTING - 1/4"-28 90 DEGREE
60684	8	BUSHING - UNIVERSAL HALF-URETHANE, RED
69120	4	INNER SLEEVE - UPPER A-ARM
* THESE PARTS ARE PRE-INSTALLED IN THE UCA		



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Frequently Asked Questions & Important Things To Read About TC Equipment and Parts

1. Uniballs:

TC uses a 100% stainless steel uniball and race for maximum corrosion resistance in all our equipment. The uniballs feature a military grade PTFE Liner that makes much less noise than the standard lined uniballs used in competing brands. This military grade PTFE Liner is self-lubricating and does not require any additional lubrication or grease. If you have a ball that is making some noise apply either a layer of Tri-Flow Superior Dry Lubricant (No. TF21013) or CRC Dry PTFE Lube (No. 03044).

Uniballs are a consumable item and will need to be replaced when the military grade PTFE Liner wears away. Grabbing your wheel and applying force to see if the ball is moving in the race will determine their maintenance schedule. Each uniball is retained in the uniball cup at the end of the arm with a large snap ring. . Wiping the uniballs down with a damp cloth to remove any built up dirt and debris will help extend the life of these parts Replacement parts are available directly from TOTAL CHAOS Fabrication Inc.

2. Polyurethane Bushings:

Poly bushings can and will make some noise. They offer many benefits vs. a factory style rubber bushing. To reduce as much noise as possible, TC uses a synthetic grease that contains PTFE called Superlube (No. 41150). If Superlube is not readily available use a good synthetic grease (Mobil 1, Valvoline, etc.).

When greasing your pivot bushings on the vehicle it is very important not to force too much grease into the zerk fittings. This will cause excess pressure to become trapped in the pivot and will result in mushrooming the bushing shoulders out of the pivots. To prevent this, first loosen the factory bolt that holds the arms to the frame and separate the washers from the face of the bushings when applicable. This will allow any excess pressure and grease to escape. Don't forget to re-torque the factory bolt when you are finished to a factory torque specification!

3. Zerk Fittings:

The grease nipples or zerk fittings that are supplied with our arms are 1/4"-28 in size. Should you have a tapped hole that has an excess amount of powder coat in it, use a 1/4"-28 tap to clean it up. When installing the zerk fittings take care not to over tighten them as they are hollow and can snap off. When fully installed they will not sit all of the way flush with the pivot, just insert them two or three rotations until they are snug. Don't forget to have them pointing in the right direction so you can get a grease gun onto them once the arms are installed onto the vehicle.

4. Anti-seize:

To aid in future disassembly of components, we recommend that you liberally apply an anti-seize to all metal on metal contact surfaces such as the ID of the uniball, hi-mis spacers, and inner sleeves. Also, apply it to the threads on any C-lock or Stover nut. This will prevent the C-lock portion of the nut from galling onto the bolt.

5. Black Oxide Coated Parts:

Some components (such as 4340 axle shafts and lower uniball conversion cups) are coated with Black Oxide. While this will help to prevent rust, depending on your climate you may want to further coat these parts. For axle shafts we wrap a layer of electrical tape the length of the shaft (excluding the splines). For lower uniball conversion cups you can use black spray paint, just be sure to mask of the uniball before painting.

6. Hardware Torque:

All hardware should be re-torqued after an initial break in period of 50 miles and again at 500 miles. Periodically after that you should inspect your suspension to ensure that nothing is loose, worn, or damaged.

7. Uniball Caps:

We do not use any sort of cap or cover over our uniballs as these actually lead to premature wear and corrosion. With a cap installed moisture and containments work their way up through the underside of the uniball and then become trapped. With no cover this moisture can evaporate and you have easy access to wipe down the uniball periodically.



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WARNING

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TOTAL CHAOS FABRICATION long travel suspension systems were designed for off-road use only. This suspension system is not to be modified from its original design in any way. TOTAL CHAOS is not liable nor held responsible for any injury's or death that can occur from off-road use or as the result of product failure. Customer/driver assumes all liability in assuring that the suspension system is properly installed, maintained, and operating in safe conditions. The following are guidelines for maintaining a safe operating vehicle. Safety and reliability are our number one concern.

Visually inspect all equipment for clearance and unusual wear.

Regularly clean and inspect equipment such as suspension components, heim joints, polyurethane bushings and all hardware. Replace items as necessary. All suspension components are available for individual replacement direct from TOTAL CHAOS. We strongly recommend the suspension system be installed by an authorized installation center. TOTAL CHAOS FABRICATION reserves the right to warranty any components that we have determined to be product or material defective. Off-road abuse can damage suspension components.

BREAK IN PERIOD. After every installation we recommend checking the torque of all nuts and bolts to assure that the torque has taken after driving 500 miles. Some minor adjustments may need to be made.

The customer assumes all responsibility for the use of all equipment and the proper maintenance of said equipment. This equipment will alter the center of gravity of your vehicle and also the handling characteristics that you may be accustomed to. Even though your vehicle may have a wider track width it is capable of rolling over. Please wear your seat belt and demand that all passengers do so as well.

Please remember that no matter how well your vehicle is built it is only as safe as you drive it. This equipment is designed to improve the performance of your vehicle. **INCREASING PERFORMANCE ALSO INCREASES YOUR RISK WHILE OPERATING THIS VEHICLE.** The operator must know and understand the vehicles handling characteristics. None of this equipment is guaranteed to be free of defect or to protect the driver or occupants from death or injury in the event of a collision. Please drive in a safe and sane manner.



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Core Charges

All cores must be received within 45 days of purchase date for a full core credit. Cores cannot be damaged or modified in any way.

Replacement Parts

TOTAL CHAOS attempts to stock all items associated with a suspension system for individual replacement. Off Road use can damage individual parts and associated components. Demand peaks can occur which can delay delivery and availability. You will be kept informed on the status of your delivery in the event that your items ordered are not in stock. You will be notified when items become available before shipment.

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Finishes

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Limited Warranty

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Uniball's, Heims, Bushings, Hardware

Items such as uniballs, heim joints and bushings require maintenance. Inspect these items periodically for unusual wear and to ensure they are performing properly, replace as necessary. Replacement is required when you notice that the ball has slop while seated in the race. Longevity of these components varies on each vehicles application. These items vary in tolerances by the manufacturer. Some production runs will produce parts that have tighter tolerances. It is recommended that 100-110ft lbs. of torque be placed on uniballs and heims when assembling. There can be a break in period for uniballs and heims associated with some production runs for the ball to wear into the Teflon liner. Clunking or creaking can be associated with these components after installation. This does not warrant component replacement. Contact TOTAL CHAOS if you are concerned of noise. It is at the discretion of the manufacture or supplier to determine if the item should be replaced. This does not include reimbursement for shipping of the product to or from TOTAL CHAOS and DOES NOT include any costs incurred during down time of the vehicle or any other consequential losses. All parts that come pre-assembled, such as steering, must have the hardware torqued after installation. All components should be checked periodically after the installation and re-tightened as necessary.

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