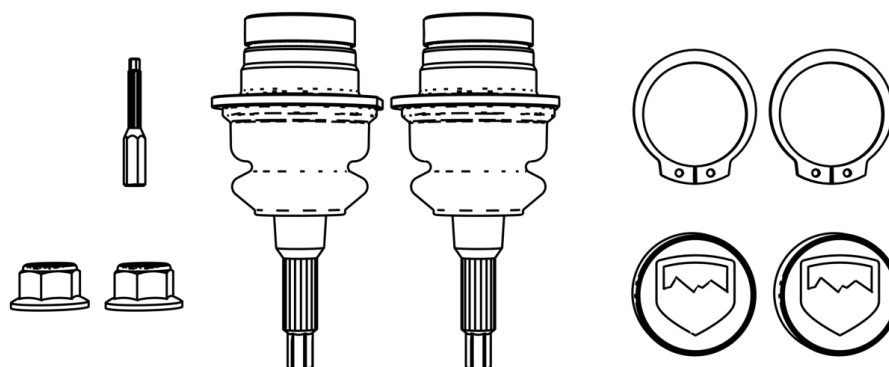




# Ford Bronco HD Ball Joints

www.TERAFLEX.com

# 3453000



## Important Notes:

Prior to beginning this install, read the instructions thoroughly to familiarize yourself with the required steps. Evaluate if you are experienced and capable to personally perform these modifications. A factory service manual should be used in conjunction with these installation instructions.

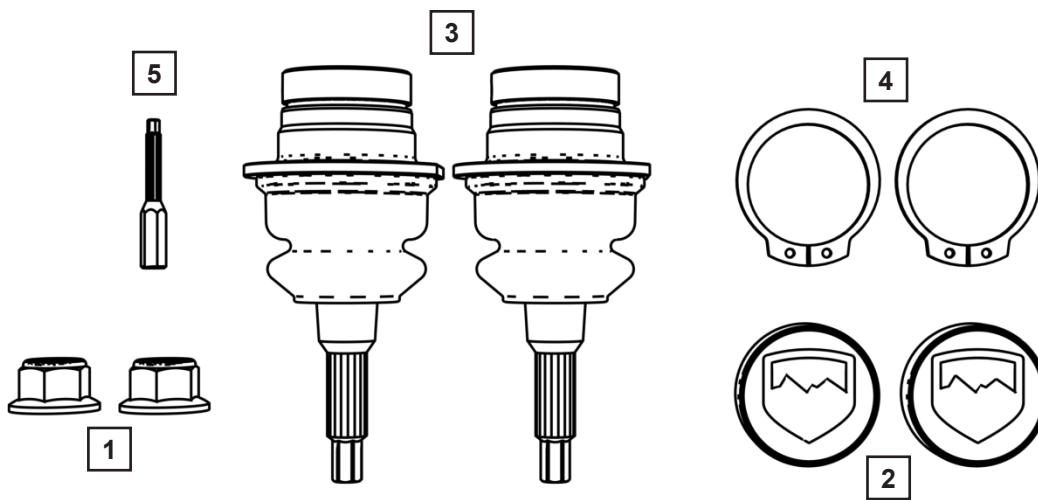
This product will change the highway handling characteristics of your vehicle, exercise caution. After altering the suspension it is always advisable to have an alignment done by a competent 4 wheel drive shop or by an alignment shop that is experienced with lifted 4 wheel drive vehicles.

Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local TeraFlex dealer for assistance.

**When reinstalling OEM hardware, refer to the torque specs given in the Factory Service Manual.**

## Tools Needed:

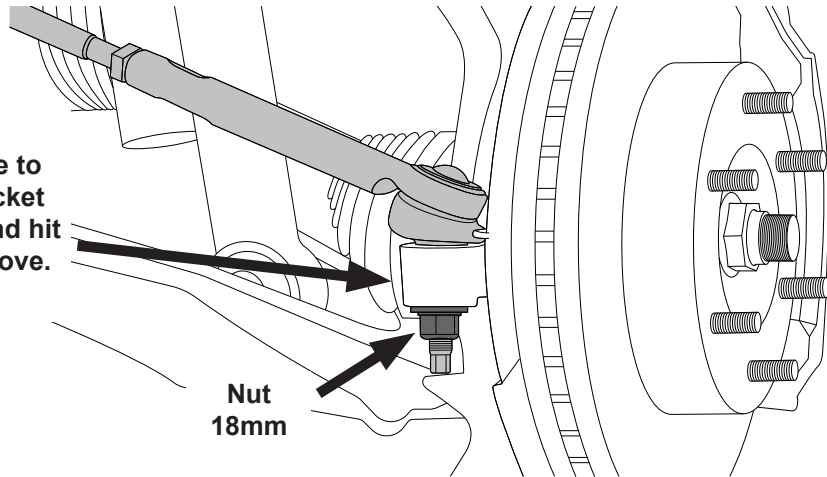
- Ball joint press tool
- Metric sockets and wrenches
- Snap ring pliers



Number	Part #	Name	Qty.
1	23-07-02-006	Hardware (S), Nut, Fuji, Flanged, M12 x 1.75, ZnAl, Silver	2
2	31-02-002-006	Steering (S), Ball Joint, Rubber Cover	2
3	31-02-002-101	Steering (S), Ball Joint, Ford Bronco, Front Upper Ball Joint Assembly	2
4	45-29-001-002	Hardware (S), Retaining Ring, External, 37mm OD	2
5	51-03-002-005	Tool (S), Socket Wrench, 3mm Hex Bit	1

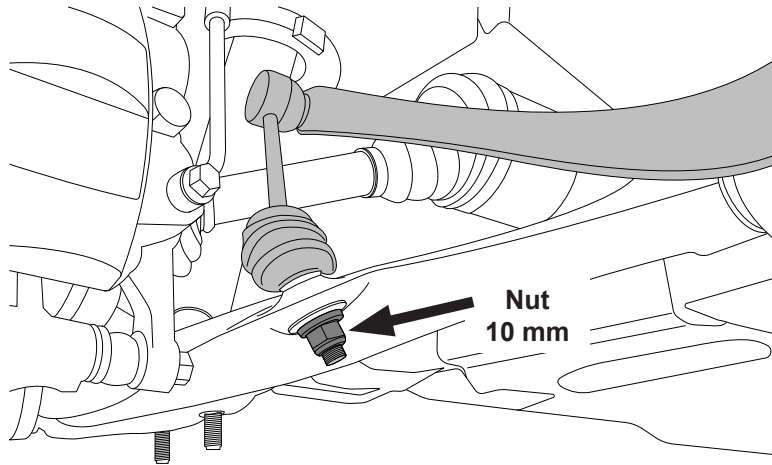
**LIFT AND SUPPORT FRONT OF BRONCO AT THE FRAME  
REMOVE FRONT WHEELS AND DISCONNECT TIE ROD AND HANG OR WIRE UP OUT  
OF THE WAY**

Use air hammer on knuckle to remove tie rod or place socket over partially loosend nut and hit socket with hammer to remove.



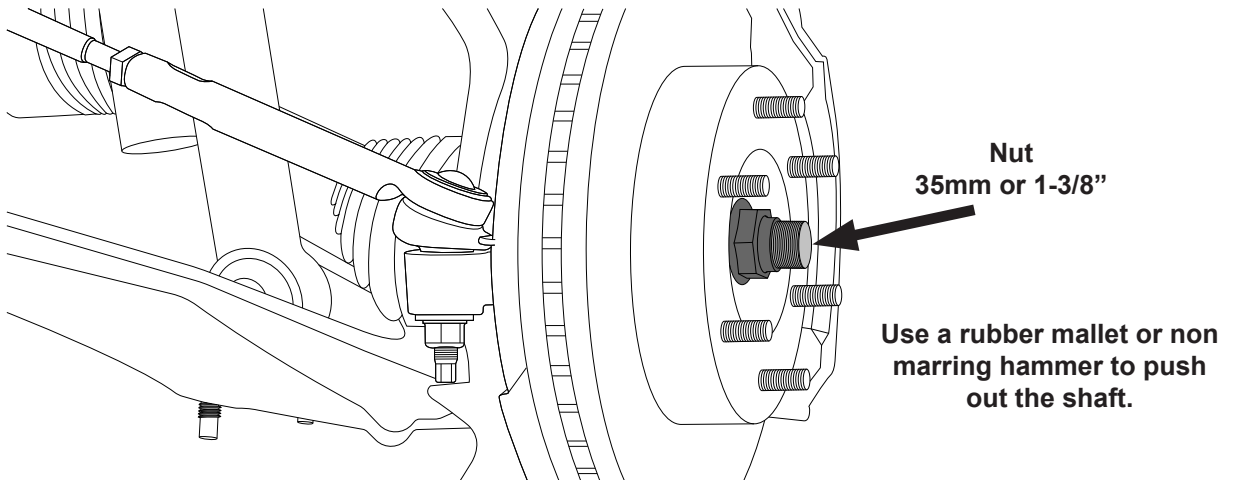
1

**DISCONNECT SWAY BAR LINK**



2

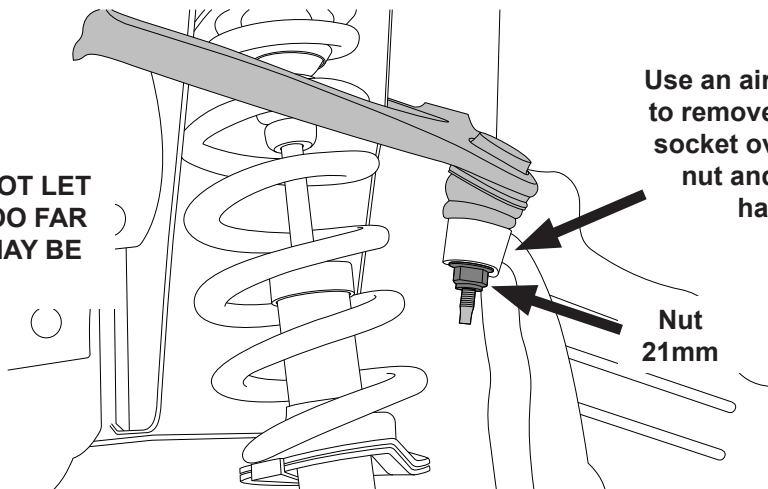
**REMOVE CV AXLE NUT AND PARTIALLY PUSH OUT SHAFT**



3

**DISCONNECT UPPER ARM FROM KNUCKLE AND TIE KNUCKLE OUT OF THE WAY**

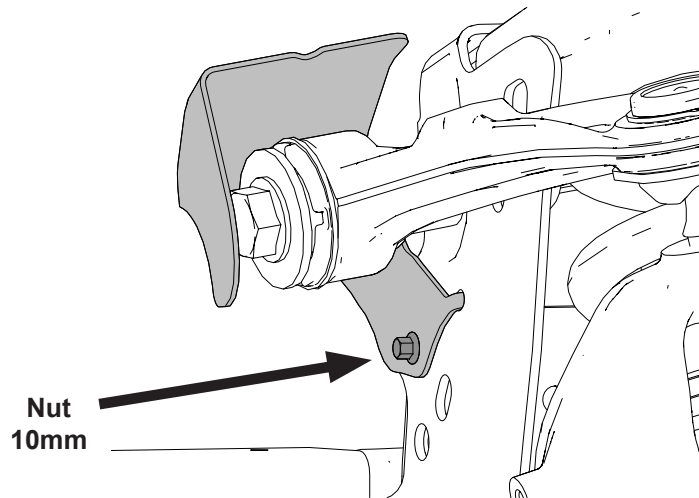
**USE CAUTION TO NOT LET KNUCKLE HANG TOO FAR OR THE CV AXLE MAY BE DAMAGED**



**Use an air hammer on the knuckle to remove the ball joint or place a socket over the partially loosened nut and hit the socket with a hammer to remove.**

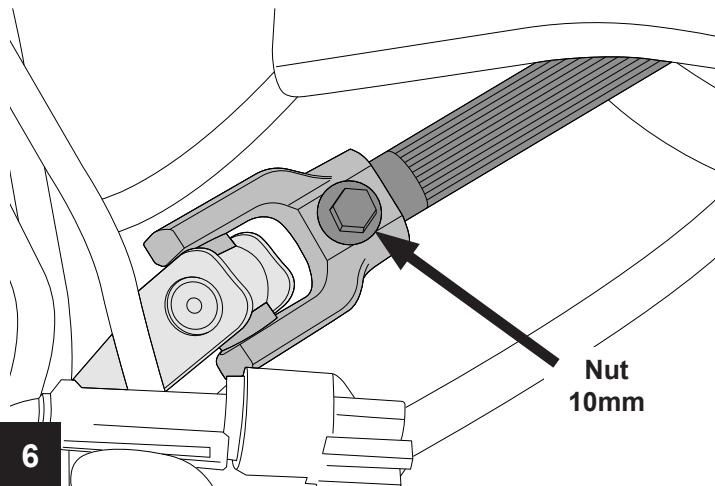
**4**

**ON THE PASSENGER SIDE REMOVE THE UPPER ARM SHIELD**



**5**

**ON THE DRIVER SIDE DISCONNECT THE STEERING LINKAGE**

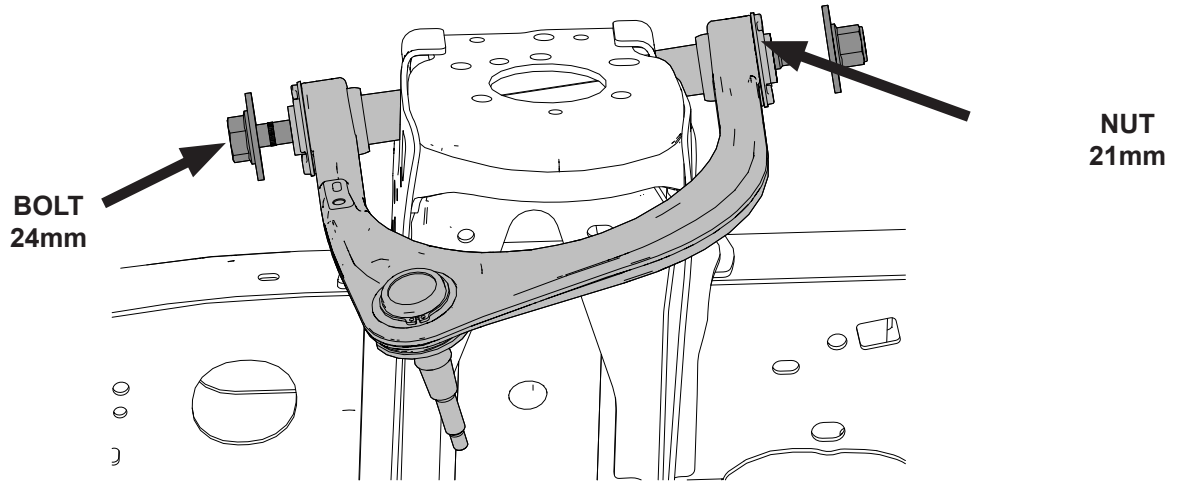


**6**

**The steering linkage will need to be disconnected to remove the driver side upper control arm.**

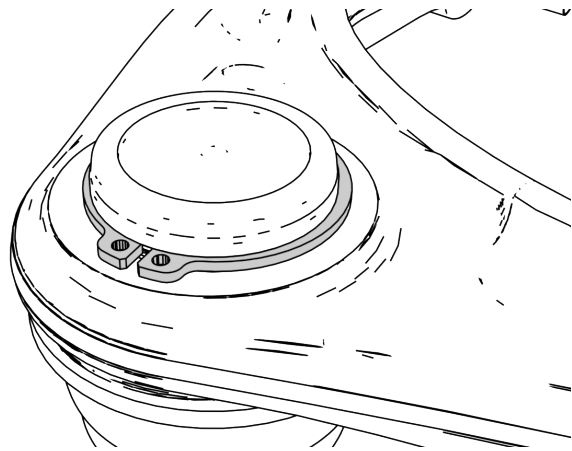
**Before disconnecting steering linkage use a strap to keep steering wheel from rotating or else damage to steering wheel clock spring will result.**

**REMOVE UPPER ARM BOLT AND NUT AND REMOVE UPPER CONTROL ARM**



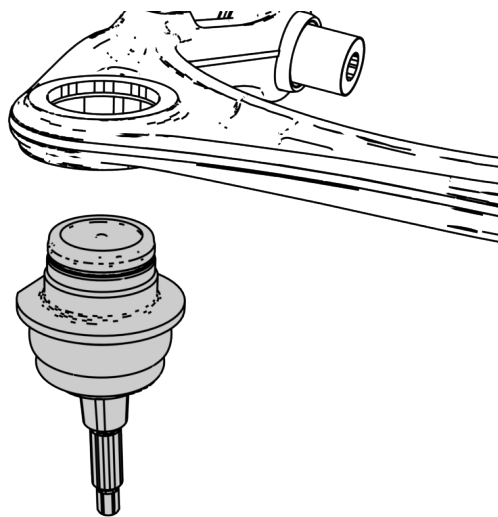
**7**

**REMOVE THE OEM SNAP RING**



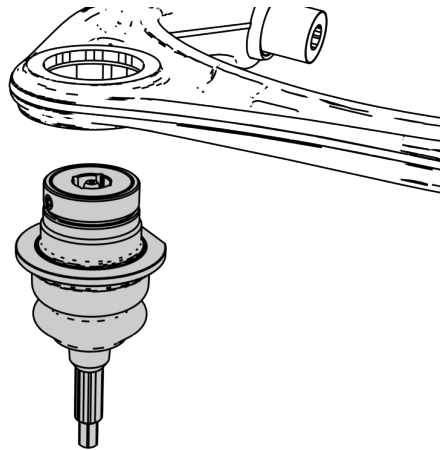
**8**

**REMOVE THE OEM BALL JOINT USING A BALL JOINT PRESS TOOL**



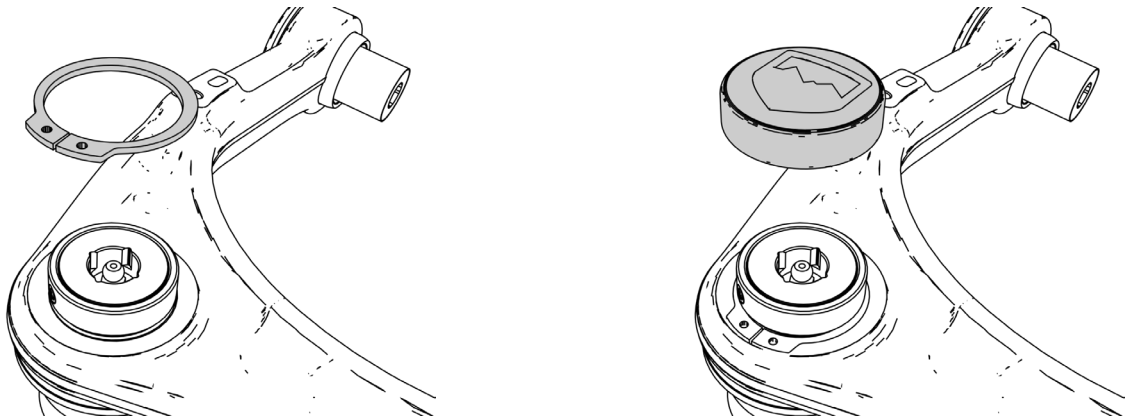
**9**

**INSTALL THE HD BALL JOINT USING A BALL JOINT PRESS TOOL**



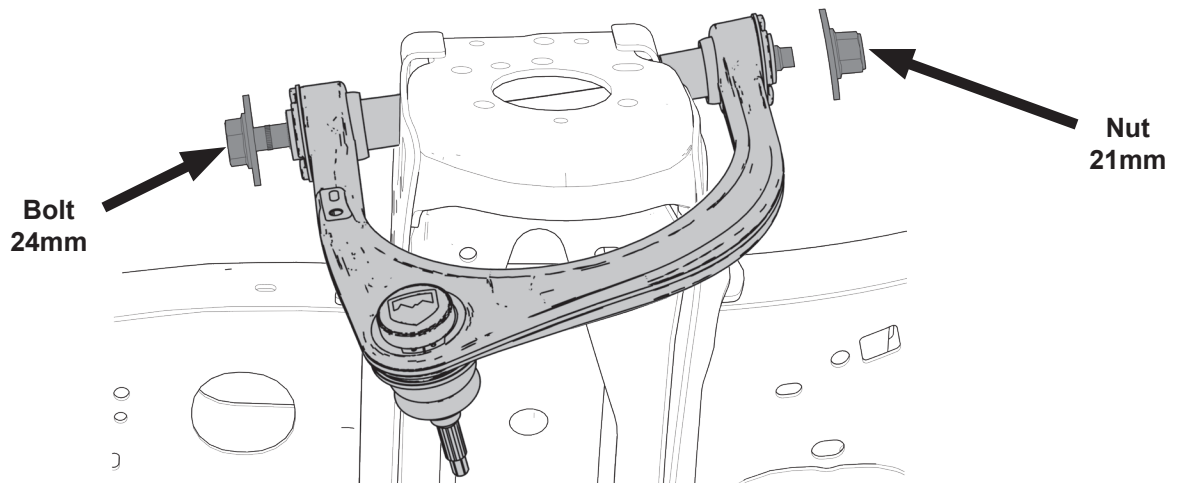
**10**

**INSTALL THE SNAP RING AND RUBBER COVER**



**11**

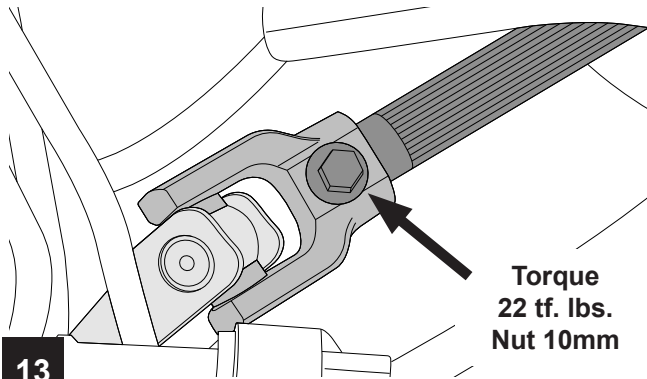
**REINSTALL FRONT UPPER CONTROL ARM**



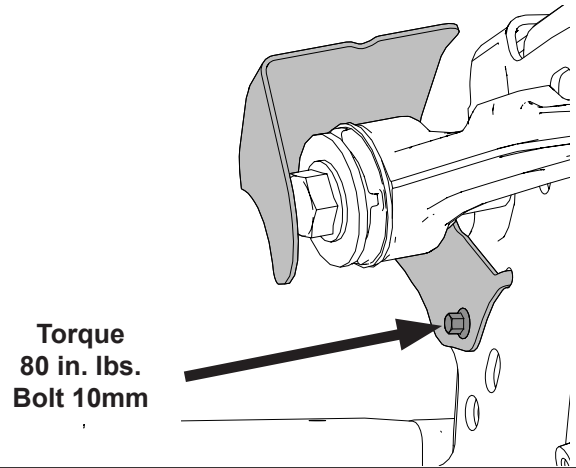
**12**

**Keep the control arm hardware loose until the the vehicle is back on the ground with the suspension under load.**

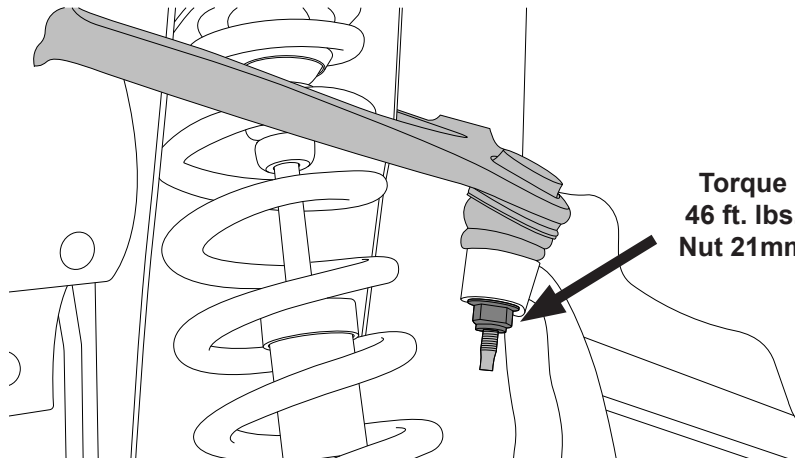
### RECONNECT THE STEERING LINKAGE AND CONTROL ARM SHEILD



Torque  
22 ft. lbs.  
Nut 10mm

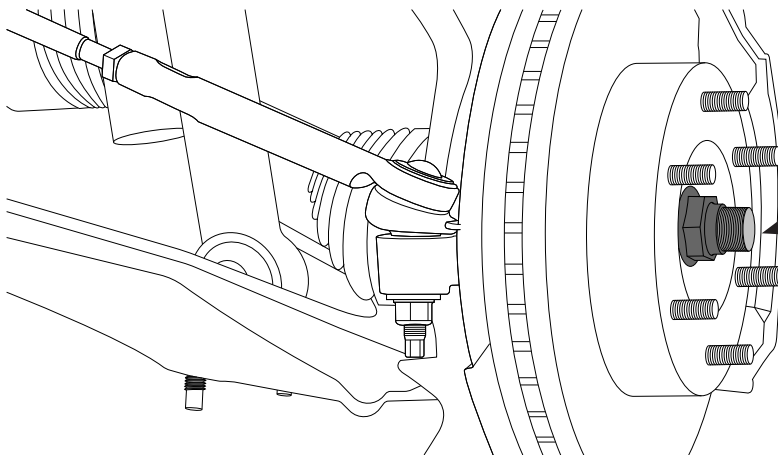


### REINSTALL UPPER ARM TO KNUCKLE



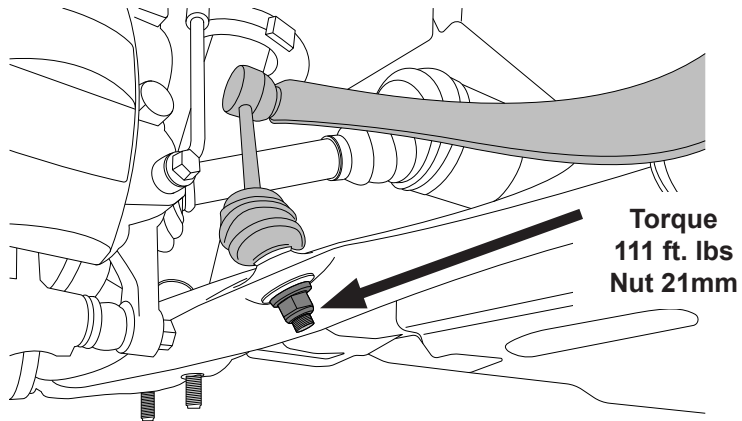
Torque  
46 ft. lbs.  
Nut 21mm

### REINSTALL CV AXLE NUT



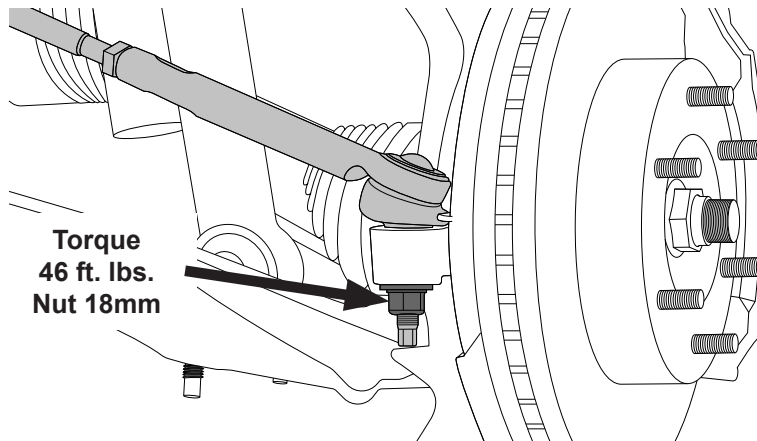
Torque  
221 ft. lbs.  
Nut 35mm or 1-3/8"

### REINSTALL SWAY BAR LINK



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### REINSTALL TIE ROD



17

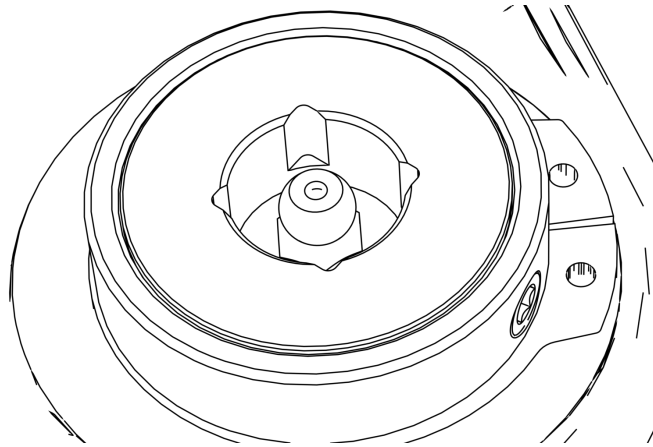
**REINSTALL WHEELS AND LOWER BRONCO TO THE GROUND**

**FULLY TIGHTEN UPPER CONTROL ARM BOLTS ON BOTH SIDES TO 122 FT.-LBS.**

**TO COMPLETE INSTALL A WHEEL ALIGNMENT WILL BE NECESSARY**

18

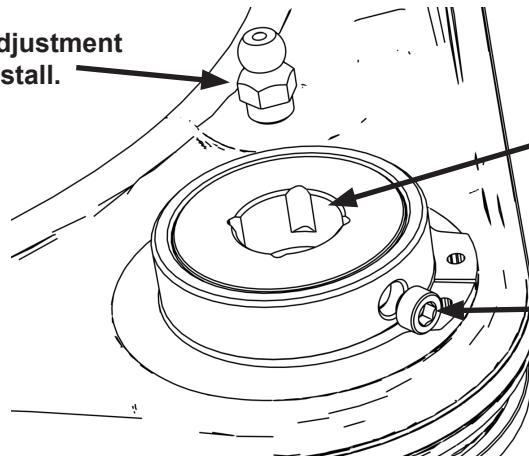
### ADD GREASE TO BALL JOINTS AT EVERY OIL CHANGE



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### HOW TO ADJUST BALL JOINT TENSION

Remove for adjustment  
then reinstall.



Use a 1/2" torque wrench and  
tighten to 30 in. lbs.

Loosen for adjustment  
3 mm hex  
or provided tool

Tighten after adjustment.  
Torque: 55 in. lbs.

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# TERAFLEX

## PRODUCT INFORMATION

### MAINTENANCE INFORMATION:

It is the buyer's responsibility to have all suspension, drivetrain, steering, and other components checked for proper tightness and torque after the first 100 miles and every 3000 miles after that.

### NOTICE TO INSTALLER:

The enclosed "Warning to Driver" sticker must be installed in the vehicle in driver's view. This sticker is to act as a constant safety reminder when operating the vehicle. It is your responsibility as the equipment installer to install the provided sticker and to forward the product instructions to the vehicle's owner for review. If a "Warning to Driver" sticker or product installation guide were not included in the kit, FREE replacement stickers and instructions are available by request. It is the installer's duty to ensure a safe and controllable vehicle after the modifications have been performed.

### WARNING:

Neither the seller nor the manufacturer will be liable for any loss, damage, or injury directly or indirectly arising from the use of or inability to determine the use of these products. Before using, the user shall determine the suitability of the products for its intended use, and the user shall assume all responsibility and risk in connection therewith.

### WARNING TO DRIVER:

This vehicle has been modified to enhance off road performance and has unique handling characteristics. Use in harsh environments can cause extreme stress on the components. Vehicle should be inspected after being off road to make sure that all the components are in working order and safe to travel on the highway. All fasteners should be checked so that they are at the correct torque specifications as the vibration and stresses from off roading may cause critical fasteners to work loose. Extra care should be taken to inspect the critical components, steering, and brake systems. During each oil change components such as arms, tie rod ends, etc should be greased and checked for excessive wear. Any worn components should be replaced. When returning to the pavement always set or restore tire air pressure to the factory recommendation and connect or engage any disabled sway bar mechanisms. Because of the higher center of gravity and larger tires, this vehicle handles and reacts differently than many passenger cars, both on and off road. You must drive it safely! Extreme care should be taken to prevent vehicle rollover or loss of control, which can result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers. Generally, braking performance and capabilities are decreased when significantly larger/heavier tires are used, especially when used in combination with transfer case low-range reduction kits. Take this into consideration while driving. Do not add, alter or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the TeraFlex product purchased. Mixing component brand is not recommended. TeraFlex Inc. will not be responsible for any altered product or any improper installation or use of our products. We will be happy to answer any questions concerning the design, function, and correct use of our products. It is ultimately the buyer's responsibility to have all bolts/nuts checked for tightness after the first 100 miles and then every 3000 miles. Wheel alignment, steering system, suspension and drive line systems must be inspected by a qualified professional mechanic at least every 3000 miles.

### TERAFLEX PRODUCT WARRANTY:

TeraFlex Inc. warrants TeraFlex Suspension products to the original retail purchaser to be free of defects in material and workmanship for as long as the original purchaser owns the vehicle on which products were originally installed.

Failure to complete regular maintenance (grease every 3000 miles) on TeraFlex FlexArms will void this warranty. All other conditions of the standard TeraFlex product warranty apply.

All TeraLow products are covered by the TeraFlex two (2) year warranty to be free of defects in material and workmanship for two years from date purchased.

TeraFlex axles are covered by a 12-month warranty to be free of defects in materials and workmanship.

This warranty does not cover or include product finish, improperly installed or applied products, improperly maintained products, products or components used for racing or competition or damage due to abuse or neglect, products that fail due to the use of larger tire and wheel combinations.

All returns must be accompanied by an original invoice. It is the customer's responsibility to remove the product from the vehicle. Shipping charges are the responsibility of the customer. TeraFlex Inc. will pay the return freight if the product meets the terms of warranty.

This warranty is for the replacement or repair of defective TeraFlex products only and does not include freight charges, labor charges for removal of or installation of TeraFlex or related products or components, costs incurred due to down time of the vehicle, or lost profits due to vehicle down time.

A returned goods authorization number (RGA#) must accompany any returned products. For more information please contact a TeraFlex customer service representative.

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