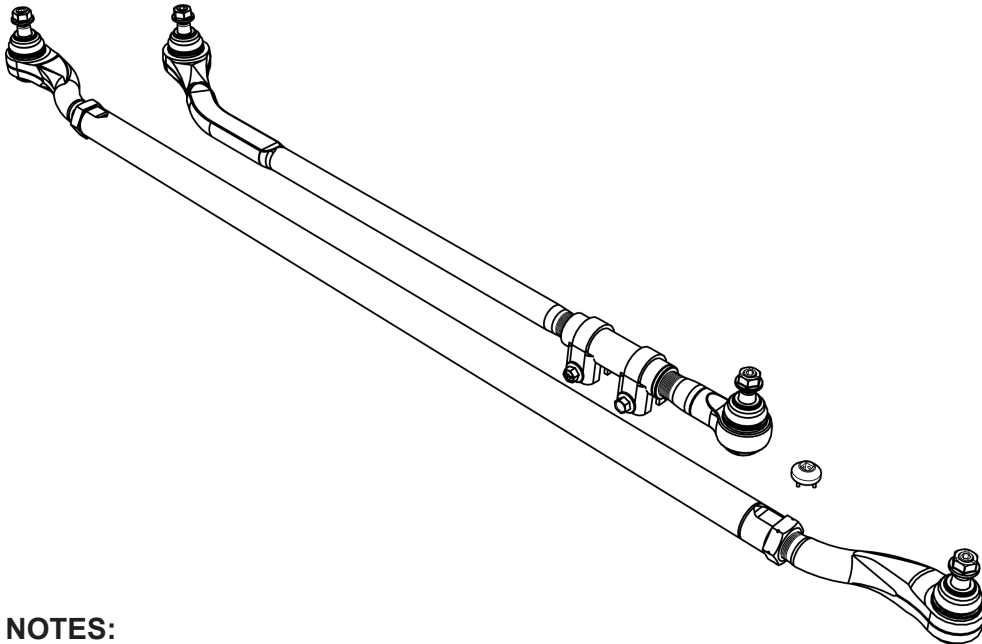




# TeraFlex JK Complete HD Steering Instructions

**KIT:** #1853900 JK Premium HD Complete Steering Kit  
#1853905 JK Premium HD Complete Steering with Flipped Drag Link Kit



## IMPORTANT NOTES:

Prior to beginning this, or any installation, read the instructions to familiarize yourself with the required steps and evaluate if you are experienced and capable to personally perform these modifications. A factory service manual is recommended to be used in conjunction with these installation instructions.

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.

It is 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.

*The factory steering stabilizer clamp will not fit on your new HD tie rod. Any aftermarket 1-5/8" steering stabilizer clamp will fit.*

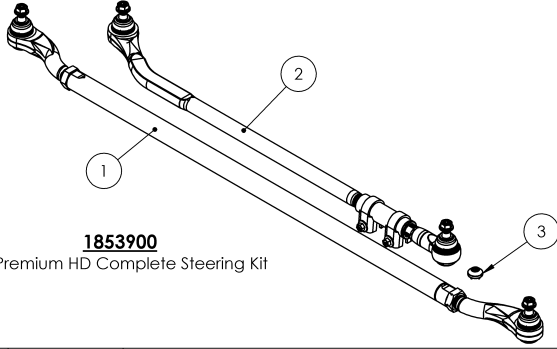
## TOOLS NEEDED:

- |                                                                                                                                                                 |                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Jack</li> <li>• Jack Stands</li> <li>• Basic Mechanics Tool Set</li> <li>• 2.5mm Hex Drive Wrench or Socket</li> </ul> | <ul style="list-style-type: none"> <li>• 1-1/2" Open End Wrench</li> <li>• 1-11/16" Open End Wrench</li> <li>• Large Hammer</li> <li>• Blue Thread-locker Fluid</li> <li>• Tape Measure</li> </ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

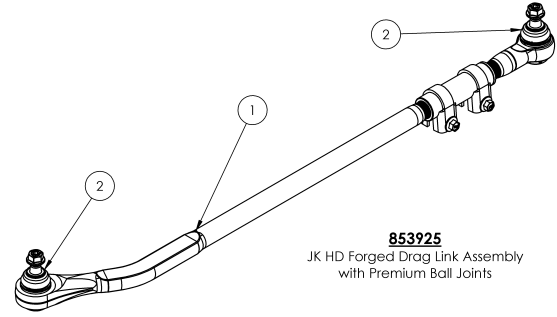
## Maintenance Note:

After the first 300 miles and every 3,000 miles after that, re-torque all the suspension components and bolts.

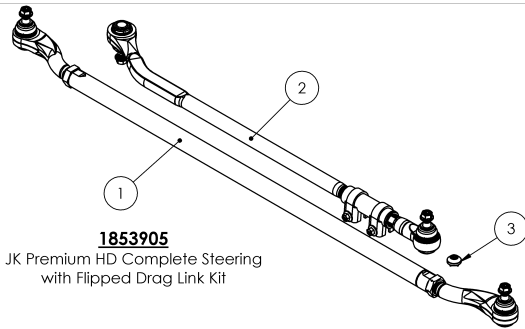
For instructions on adjusting the Teraflex HD Steering Ball Joints see page 7.



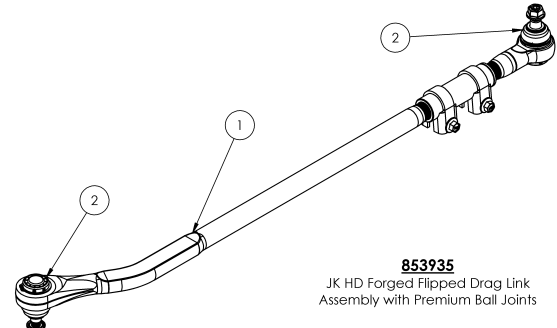
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	853915	JK HD Chromoly Tie Rod Assembly with Premium Ball Joints	1
2	853925	JK HD Forged Drag Link Assembly with Premium Ball Joints	1
3	344000	HD Ball Joint Adjusting Tool	1
4	700136	JK Forged Drag Link Box	1
5	700137	JK Forged Tie Rod Box	1
6	700139	JK Complete Forged Steering Box	1
7	999182	Instructions for JK Complete HD Steering Kit	1



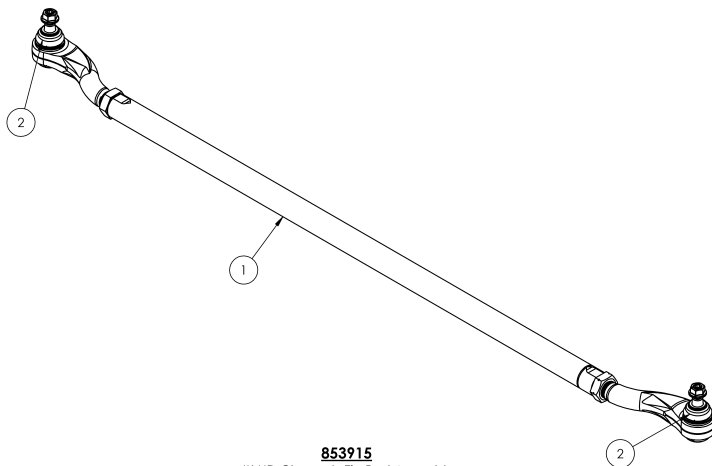
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	853920	JK HD Forged Drag Link Assembly	1
2	344410	Premium JK Steering Ball Joint	2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	853915	JK HD Chromoly Tie Rod Assembly with Premium Ball Joints	1
2	853935	JK HD Forged Flipped Drag Link Assembly with Premium Ball Joints	1
3	344000	HD Ball Joint Adjusting Tool	1
4	700136	JK Forged Drag Link Box	1
5	700137	JK Forged Tie Rod Box	1
6	700139	JK Complete Forged Steering Box	1
7	999182	Instructions for JK Complete HD Steering Kit	1



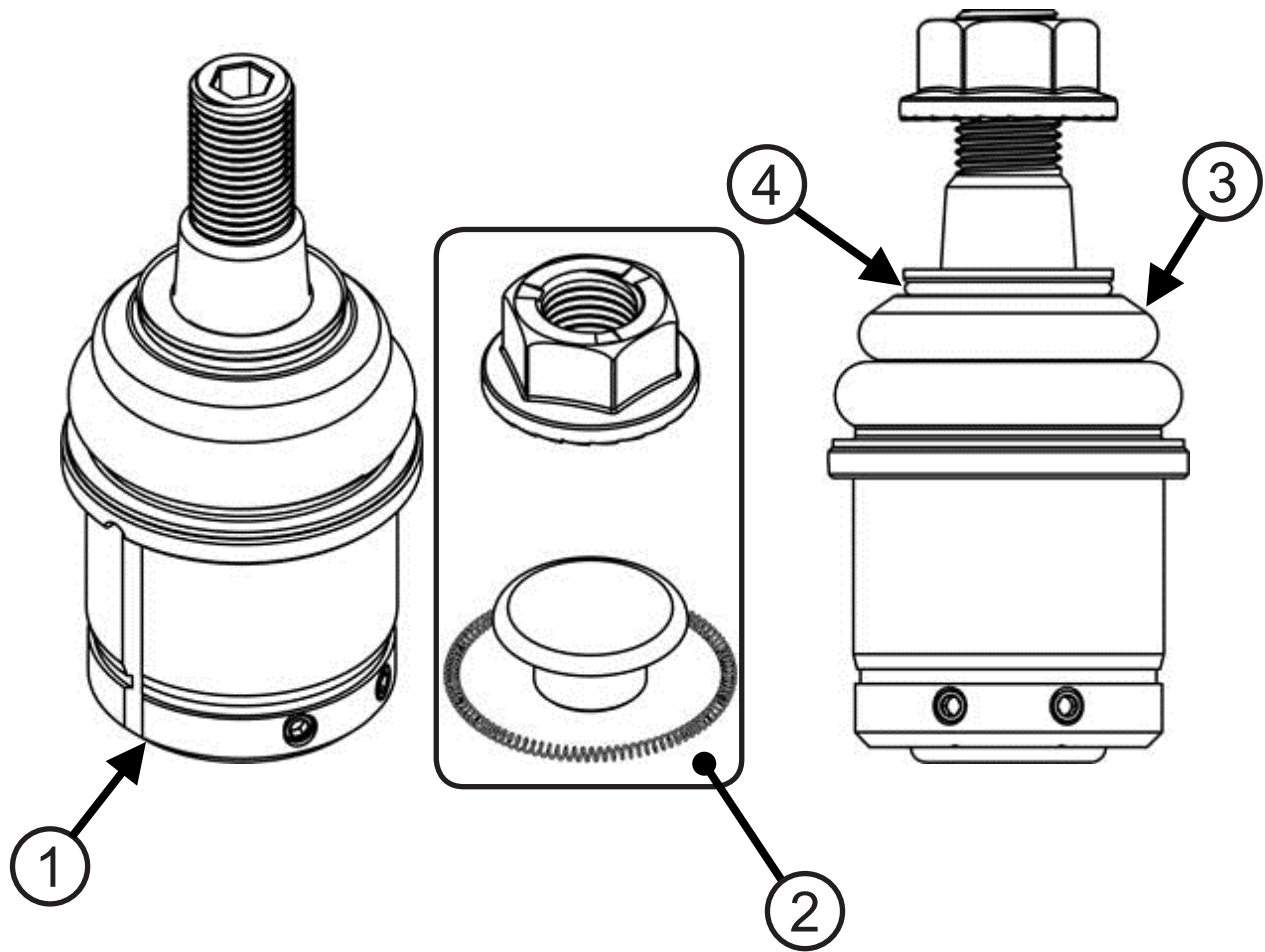
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	853920	JK HD Forged Drag Link Assembly	1
2	344410	Premium JK Steering Ball Joint	2



ITEM NO.	PART NUMBER	DESCRIPTION	853915/QTY.
1	853910	JK HD Chromoly Tie Rod with Forged Ends	1
2	344410	Premium JK Steering Ball Joint	2

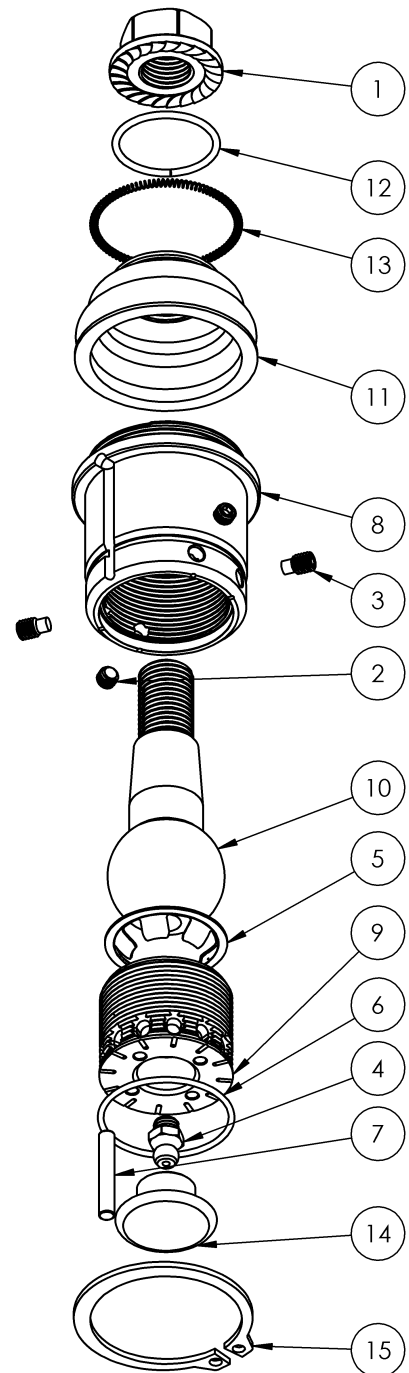
## 344410

### Premium JK Steering Ball Joint



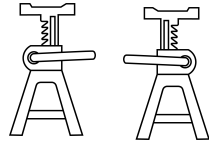
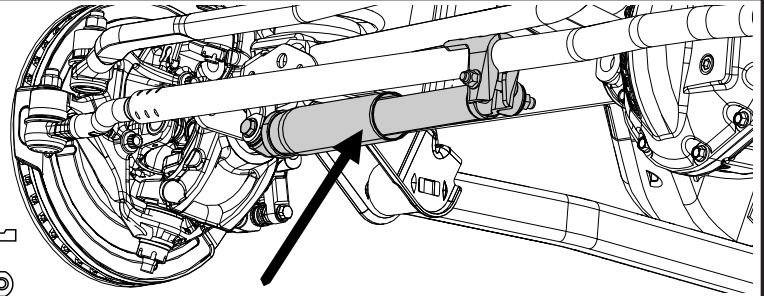
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	344400	Premium JK Steering Ball Joint Stud and Housing Assembly	1
2	344415	Premium JK Steering Ball Joint Hardware Pack	1
3	344405	Premium JK Steering Ball Joint Bi-Fold Dust Boot	1
4	344406	Premium JK Steering Ball Joint Dust Boot Retaining Ring	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	212	M14X1.5 Flanged Serrated Distorted Thread Locknut for HD Steering Ball Joints	1
2	304	Set Screw M5 x 0.8 Pitch x 4mm Flat Point for HD Adjustable Ball Joints	2
3	306	Set Screw M5 x 0.8 Pitch Extended Point for HD Adjustable Ball Joints	2
4	308	Grease Zerk 1/4"-28 UNF Straight	1
5	344207	Tool Steel Washer for HD Series Ball Joints	1
6	344208	O-Ring 32mm I.D. 1.5mm Thick for HD Series Ball Joints	1
7	344401	JK HD Steering Ball Joint Rolled Pin Alignment Key	1
8	344402	JK HD Steering Ball Joint Housing	1
9	344403	JK HD Steering Ball Joint End Plate	1
10	344404	JK HD Steering Ball Joint Stud	1
11	344405	Premium JK Steering Ball Joint Bi-Fold Dust Boot	1
12	344406	Premium JK Steering Ball Joint Dust Boot Retaining Ring	1
13	344407	Premium Series Steering and Lower Ball Joint Dust Boot Retaining Spring	1
14	344408	JK HD Steering Ball Joint Grease Zerk Rubber Plug	1
15	845	Snap Ring 1.625" External for HD Series Steering and Axle Ball Joints	1



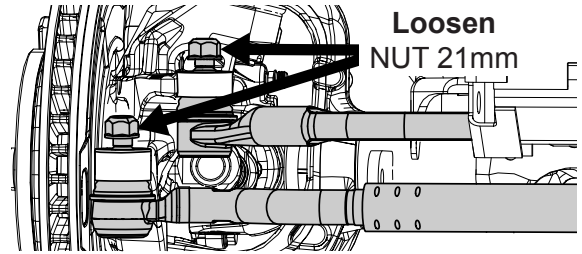
**344410**  
Premium JK Steering Ball Joint

Chock the rear wheels.  
 Raise and support the front of the Jeep  
 at the axle.  
 Remove the front tires and wheels.  
 Remove steering stabilizer. [18mm]



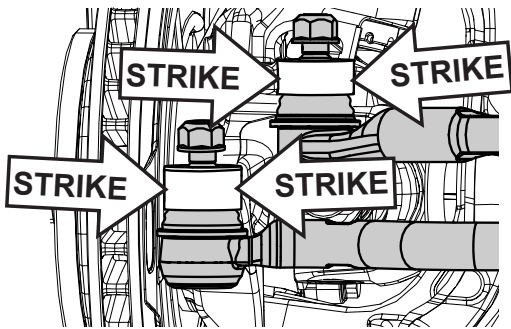
1

Loosen the drag link and tie rod nuts x 4.  
**NOTE:** To prevent link and tie rod from falling do  
 not completely remove nuts.



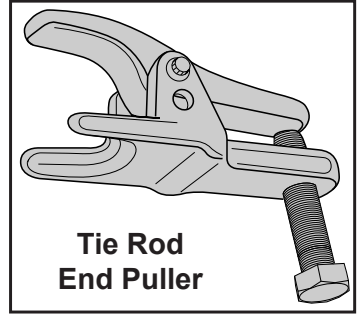
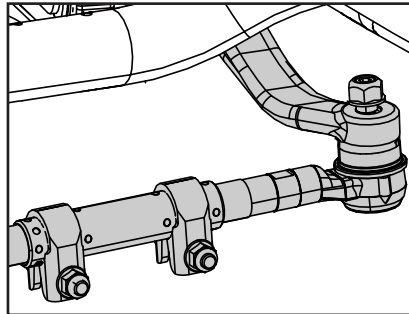
Loosen  
NUT 21mm

2



Use a large hammer to strike around  
 the knuckle castings, perpendicular  
 to the tie rod end and drag link studs,  
 until the drag link and tie rod are free  
 from the knuckles.

3



Tie Rod  
End Puller

**NOTE:** A "Tie Rod End Puller" is suggested to remove  
 the pitman arm side drag link end.  
*Using a hammer can cause damage to your steering  
 box if not done carefully and correctly.*

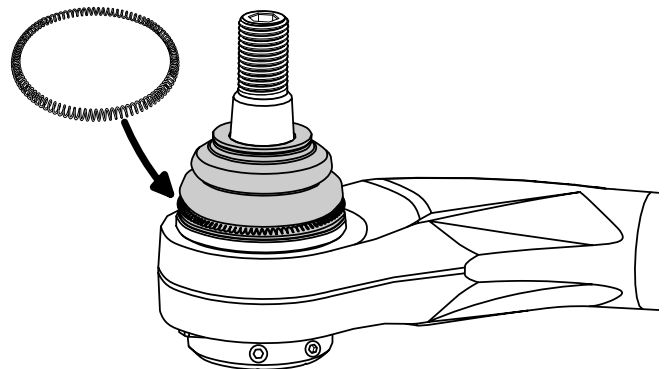
Finish unthreading the nuts and remove the factory  
 drag link and tie rod.

Prep your new TeraFlex Premium HD Forged  
 Drag Link and Tie Rod for installation by installing  
 the #344407 Dust Boot Retaining Spring onto  
 each of the dust boots.

Refer to the parts list on page 3 and 4 for part  
 identification and location.

**NOTE:** Extra O-Rings are included for future  
 maintenance and do not need to be installed in  
 initial setup.

4



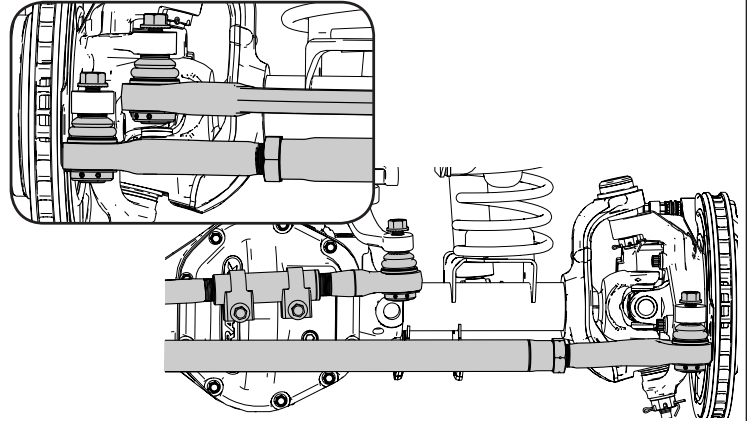
Measure your factory drag link and tie rod from the center of ball joint to the center of the ball joint on the other side. Adjust your new drag link and tie rod assemblies to match the factory assemblies as close as possible.

Install your new drag link and tie rod.

**Torque the nuts to 63 ft. lbs.**

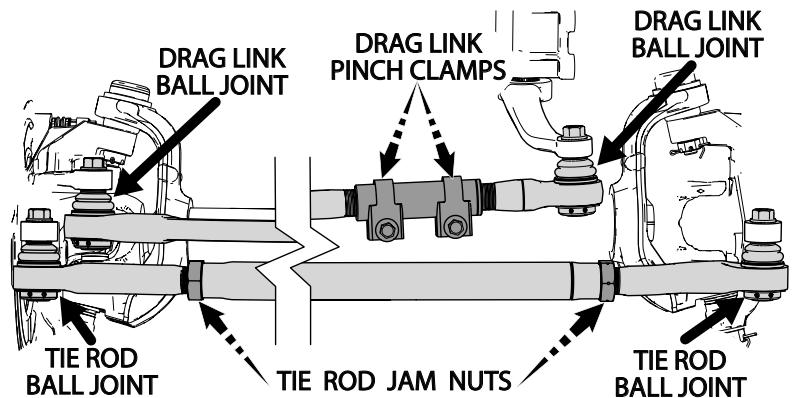
Reinstall your tires and wheels.

**5**

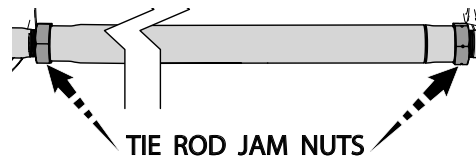


**NOTE:** When tightening the pinch clamps and jam nuts make sure that the ball joints are in a neutral position to the other (not be bound up by being rotated in opposite directions of each other).

Once the pinch bolts and jam nuts are tightened the drag link and tie rod assembly should be able to rotate a few degrees. This allows for a degree of change in the ball joints, while turning, without binding the tie rod and drag link assemblies.

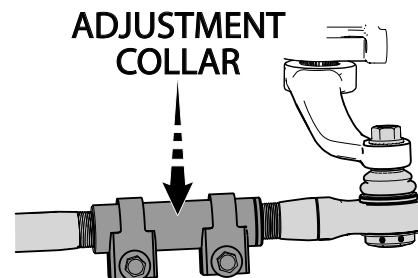


Tighten the tie rod jam nuts.



With your tires pointed straight, adjust your steering wheel by rotating the adjusting collar on your new drag link until the steering wheel is centered, then tighten the pinch clamps.

**Torque pinch clamp bolts to 45 ft. lbs.**



Finish your installation by greasing the ball joints of your new TeraFlex Drag Link with a quality grease and install #344408 Grease Zerk Dust Covers.

For instructions on adjusting the Teraflex HD Steering Ball Joints see page 7.

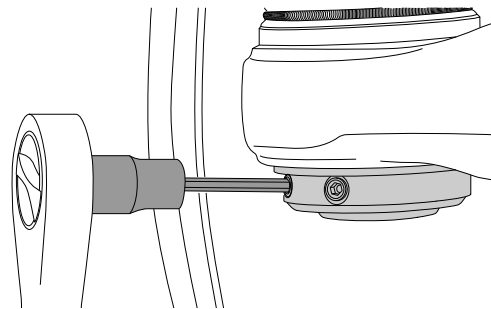
**A professional alignment is highly recommended and suggested to completely finish off this installation.**

**6**

### ADJUSTING THE TERAFLEX HD STEERING BALL JOINTS

Remove the 4 set screws on the back side of the ball joint.

1

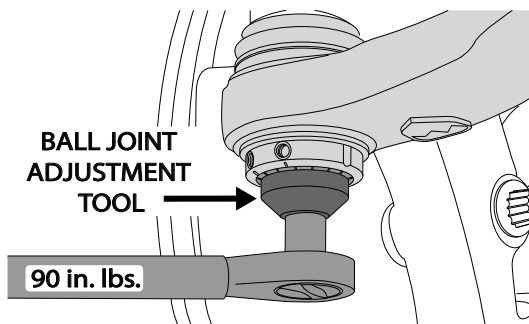


Using the provided Ball Joint Adjustment Tool (1344000) and an inch pound torque wrench **tighten preload to 90 in. lbs.**

2

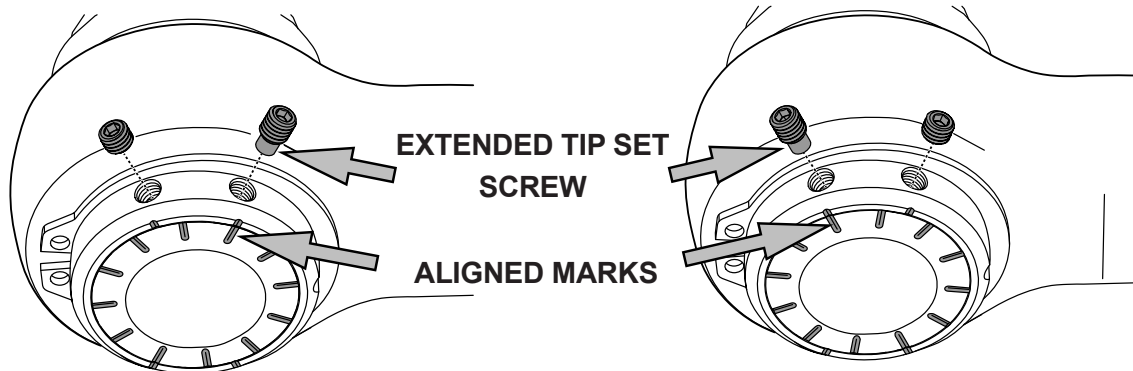
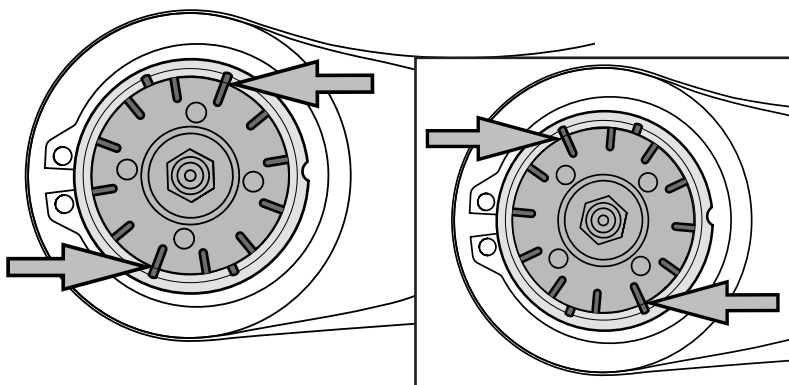
BALL JOINT ADJUSTMENT TOOL

90 in. lbs.



Tighten or loosen the preload cap to match up the alignment marks that are closest to each other.

3



Reinstall the 4 set screws.  
Install extended tip set screws in the position where the marks are aligned.

4

# 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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