



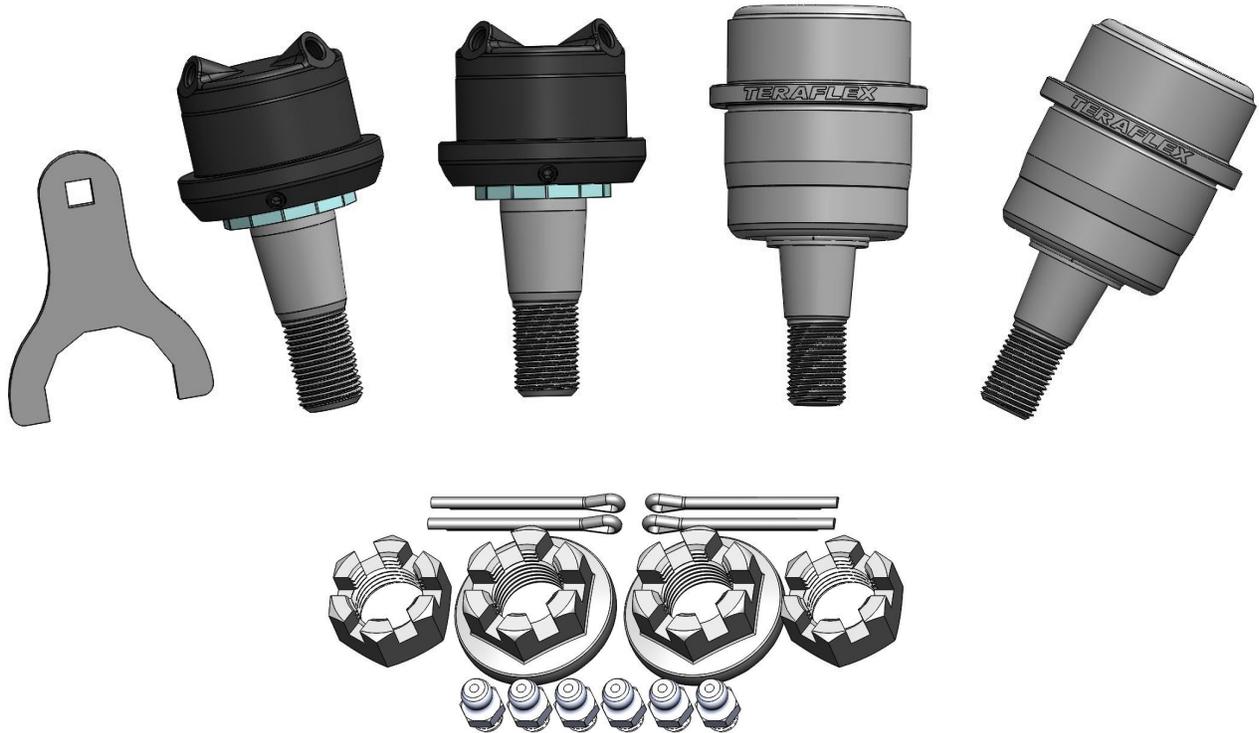
TeraFlex Premium JK Dana 30/44

Ball Joints Install Instructions

www.teraflex.com

#3442002

#3442022 (Knurled)



Important Notes:

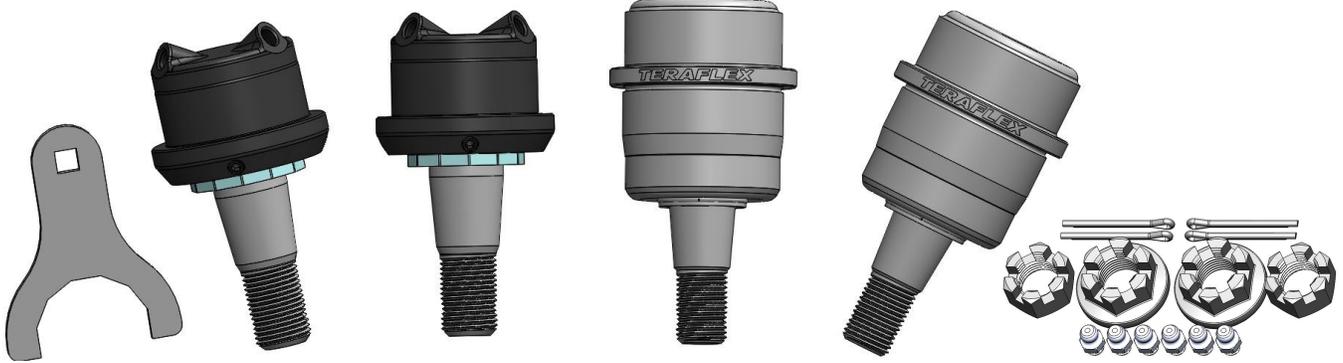
Prior to beginning this or any installation read these instructions to familiarize yourself with the required steps and evaluate if you are experienced and capable to personally perform these modifications. A factory service manual should be used in conjunction with these installation instructions.

For maximum happiness and the least amount of heartache and frustration, follow these instructions exactly. The orientation of the TeraFlex Lower Ball Joints is critical for proper function. If your axle is equipped with RCV[®] axle shafts make sure to follow the special notes in steps 8 & 9, as per lower ball joint orientation.

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.

Tools needed:

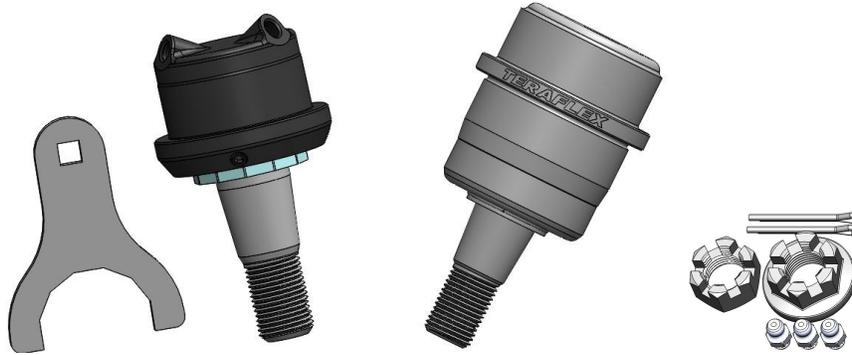
- This installation guide
- Basic mechanics tool set
- Ball Joint Press
- Grease Gun/High Quality Grease
- Blue thread locking compound
- Large Hammer



ITEM NO.	PART #	3442002 Non-Knurled Set DESCRIPTION	QTY.
1	344001	JK Dana 30/44 Premium Series Upper Ball Joint	2
2	345007	JK Dana 30/44 Premium Series Lower Ball Joint Adjusting Tool	1
3	345110	JK Dana 30/44 Premium Series Lower Ball Joint	2
4	279	Nut 9/16"-18 UNF Black Castle Nut	2
5	301	Cotter Pin 3/32" Diameter x 1.25" Long	4
6	308	Grease Zerk 1/4"-28 UNF Straight	6
7	344206	Nut 5/8"-18 UNF Flanged Serrated Castle Nut	2



ITEM NO.	PART #	3442022 Knurled Set DESCRIPTION	QTY.
1	344021	JK Dana 30/44 Knurled Premium Series Upper Ball Joint	2
2	345007	JK Dana 30/44 Premium Series Lower Ball Joint Adjusting Tool	1
3	345210	JK Dana 30/44 Knurled Premium Series Lower Ball Joint	2
4	279	Nut 9/16"-18 UNF Black Castle Nut	2
5	301	Cotter Pin 3/32" Diameter x 1.25" Long	4
6	308	Grease Zerk 1/4"-28 UNF Straight	6
7	344206	Nut 5/8"-18 UNF Flanged Serrated Castle Nut	2

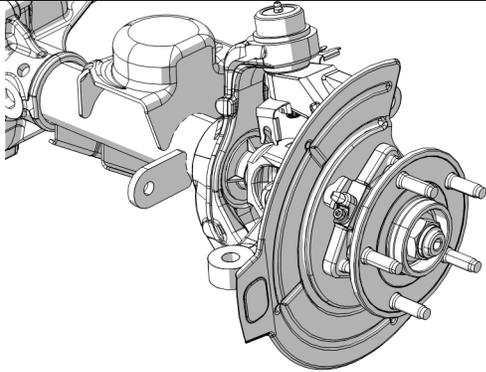


ITEM NO.	PART #	344000 Non-Knurled Half Set DESCRIPTION	QTY.
1	344001	JK Dana 30/44 Premium Series Upper Ball Joint	1
2	345007	JK Dana 30/44 Premium Series Lower Ball Joint Adjusting Tool	1
3	345110	JK Dana 30/44 Premium Series Lower Ball Joint	1
4	279	Nut 9/16"-18 UNF Black Castle Nut	1
5	301	Cotter Pin 3/32" Diameter x 1.25" Long	2
6	308	Grease Zerk 1/4"-28 UNF Straight	3
7	344206	Nut 5/8"-18 UNF Flanged Serrated Castle Nut	1



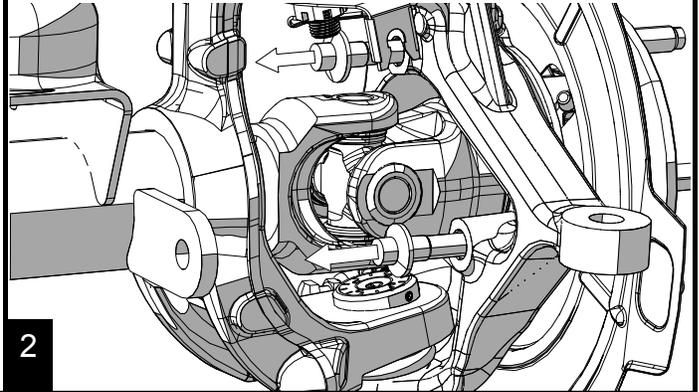
ITEM NO.	PART #	344020 Knurled Half Set DESCRIPTION	QTY.
1	344021	JK Dana 30/44 Knurled Premium Series Upper Ball Joint	1
2	345007	JK Dana 30/44 Premium Series Lower Ball Joint Adjusting Tool	1
3	345210	JK Dana 30/44 Knurled Premium Series Lower Ball Joint	1
4	279	Nut 9/16"-18 UNF Black Castle Nut	1
5	301	Cotter Pin 3/32" Diameter x 1.25" Long	2
6	308	Grease Zerk 1/4"-28 UNF Straight	3
7	344206	Nut 5/8"-18 UNF Flanged Serrated Castle Nut	1

Lift the front of the vehicle and support. Remove the front tires, then the brake caliper and anchor bracket assemblies. Support the caliper assemblies to ensure the brake lines or ABS wiring are not supporting the weight of the caliper. Remove the brake rotors.



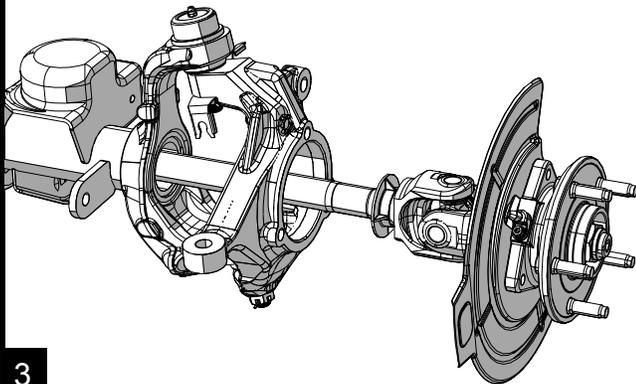
1

Remove the three 12 point 13mm bolts that secure the unit bearing to the outer knuckle. Repeat on opposite side. Be sure to unbolt and remove the ABS sensors from the outer knuckles before moving onto step 3.



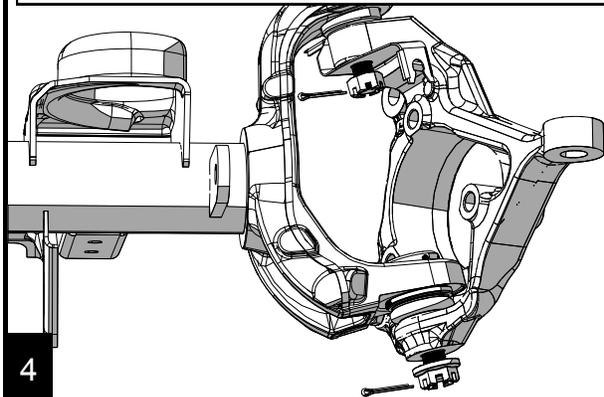
2

Remove the unit bearing and axle assembly. Support the inner axle shaft so that the inner axle seal is not damaged during removal. Remove dust shields.



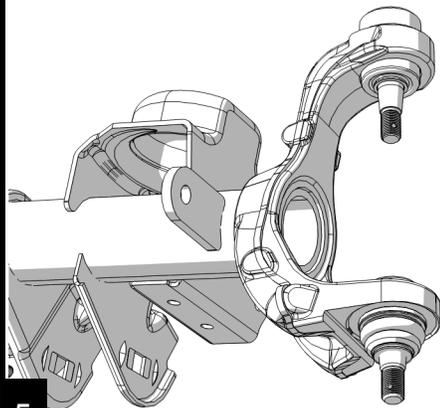
3

Remove the cotter pins and loosen the upper and lower ball joint nuts but **do not completely remove**. This will prevent the knuckle from falling off when it breaks loose from the ball joints.



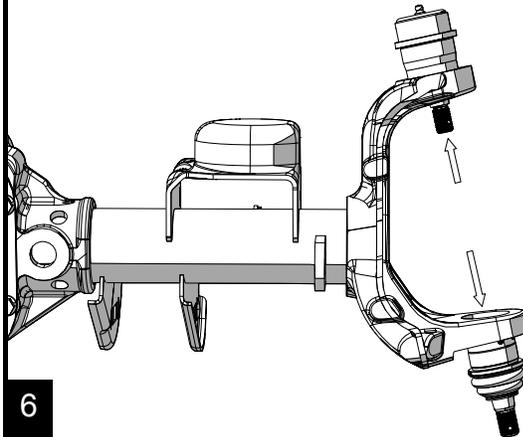
4

Use preferred method to remove the outer knuckle. (Large hammer, pickle fork, etc.)



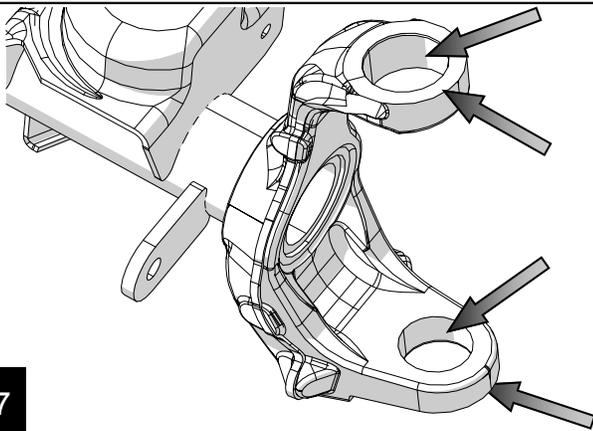
5

Remove the upper, then the lower ball joints, using a ball joint press.



6

Clean the ball joint bores as well as the surfaces the ball joints seat against. Apply a small amount of grease or anti-seize to the bores to aid in installation.

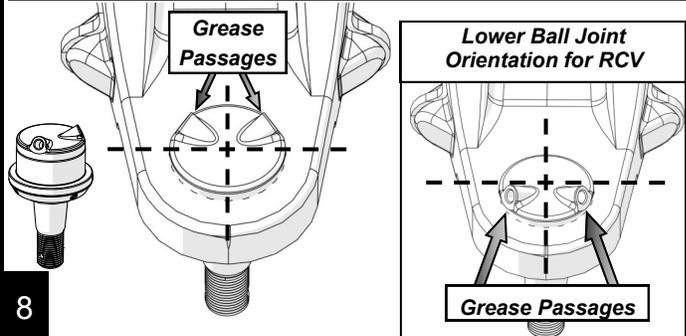


7

Lower ball joint orientation is critical!

The two raised **grease passages** of the lower ball joint housing must be **facing the axle** (Picture 1).

NOTE: If your axle is equipped with **RCV® axle shafts** then the raised grease passages will need to be **facing away from the axle** (Picture 2).



8

The orientation of the lower ball joint on the passenger side is to be installed the same as the driver side (**raised grease passages are to face the axle tube and for RCV® equipped axles, facing away**).

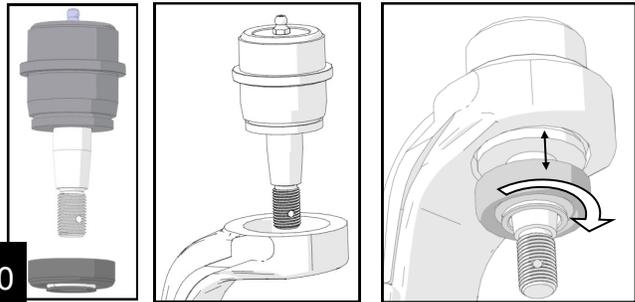
Press the lower ball joint into the inner C.

Ensure the orientation described in steps 8 is maintained for each respective side!

9

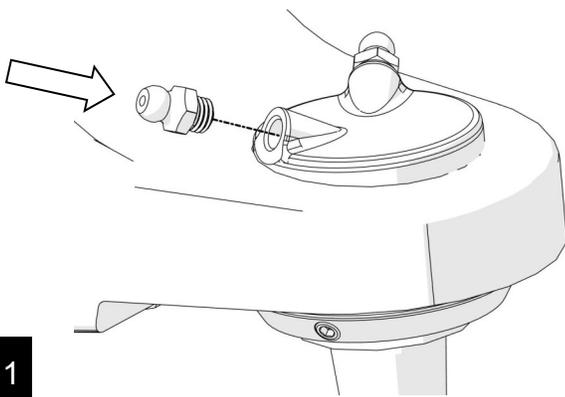
Remove dust boot from the new TeraFlex upper ball joints. Install ball joint from the top down. Take care that the bottom cup of the ball joint press tool is centered under the ball joint.

Reinstall the dust boot by first pressing it on the outer most side, then rotate the boot around the ball joint, pushing the boot on as it comes around.



10

Install grease zerks into new lower TeraFlex ball joints.

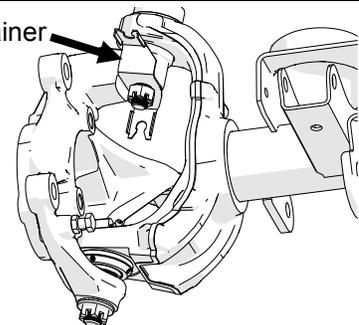


11

Reinstall the outer knuckle to the ball joint studs. Don't forget the ABS wiring retainer. Torque the upper and lower ball joint nuts to 70 ft-lbs (95 N-m).

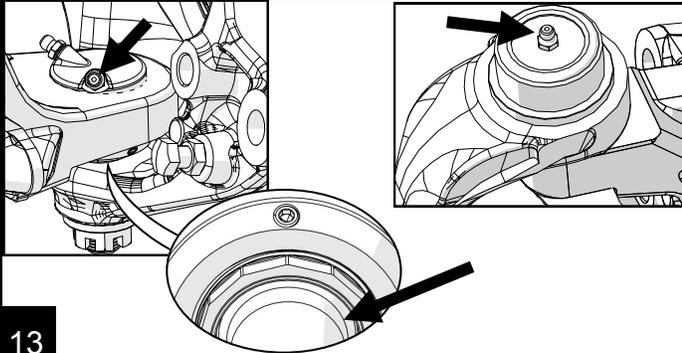
If the cotter pin holes don't line up with a slot in the castle nut, tighten the nut further until the cotter pin can be installed.

ABS wiring retainer

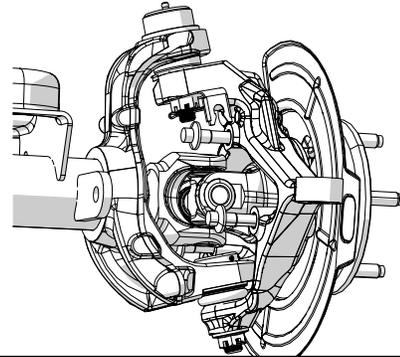


12

Now is a great time to grease the upper and lower ball joints with a premium grease before reinstalling the remaining components. For the lower ball joints, grease until a small amount starts to come out of the bottom lip seal. Grease the upper ball joints until you can feel the boot begin to swell slightly. **Do Not Overfill.**



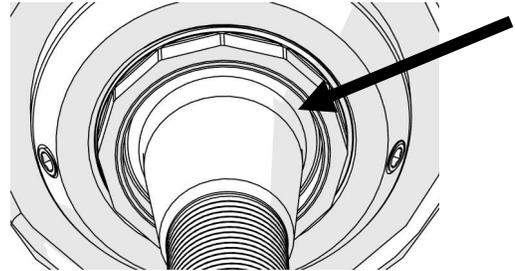
Repeat installation steps for the other side. Reinstall the axle shafts, unit bearings and brakes in reverse order of disassembly. Torque unit bearing bolts to 75 ft-lbs (102 N-m). Installation is complete. Enjoy your Premium TeraFlex Ball Joints!



The following are steps for servicing your new Premium Ball Joints.

Grease both upper and lower ball joints at every oil change interval.

For the lower ball joints, grease until a small amount starts to come out of the bottom lip seal. For the upper ball joints, grease until you can feel the boot begin to slightly swell.

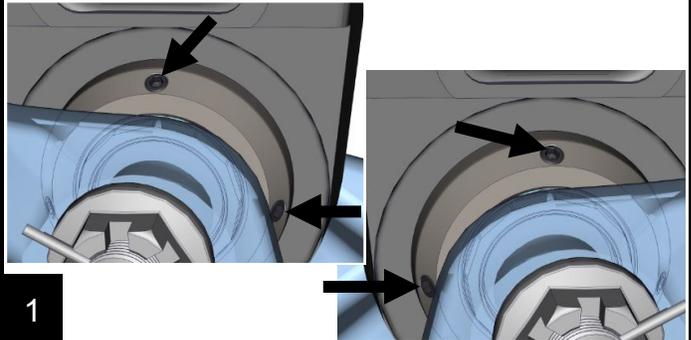


1

The new Premium Lower Ball Joints are designed with an adjustable preload ring. If excessive wear becomes apparent and falls out of factory specs (refer to your factory service manual), use the following instructions to tighten the preload.

This process should be done with the ball joints under load, with the wheels on the ground. Removal of wheels and other components are not necessary for this process.

Loosen the three set screws at the base of the lower ball joint (**DO NOT REMOVE**). To gain access to the side set screws turn the tires to the left. Loosen the accessible set screws (front drivers side, rear passenger side) 1 to 2 turns. Then turn the tires to the right for access to the remaining set screws (rear drivers side, front passenger side).

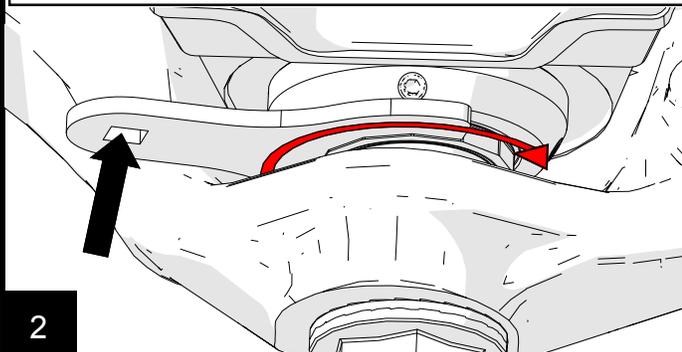


1

Use the supplied specialty wrench and an inch pounds torque wrench to tighten the lower ball joint's preload adjustment nut. **Torque to 70 in-lbs (8 N-m).**

Tighten the three set screws.

Torque to 30 in-lbs (4 N-m).



2

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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