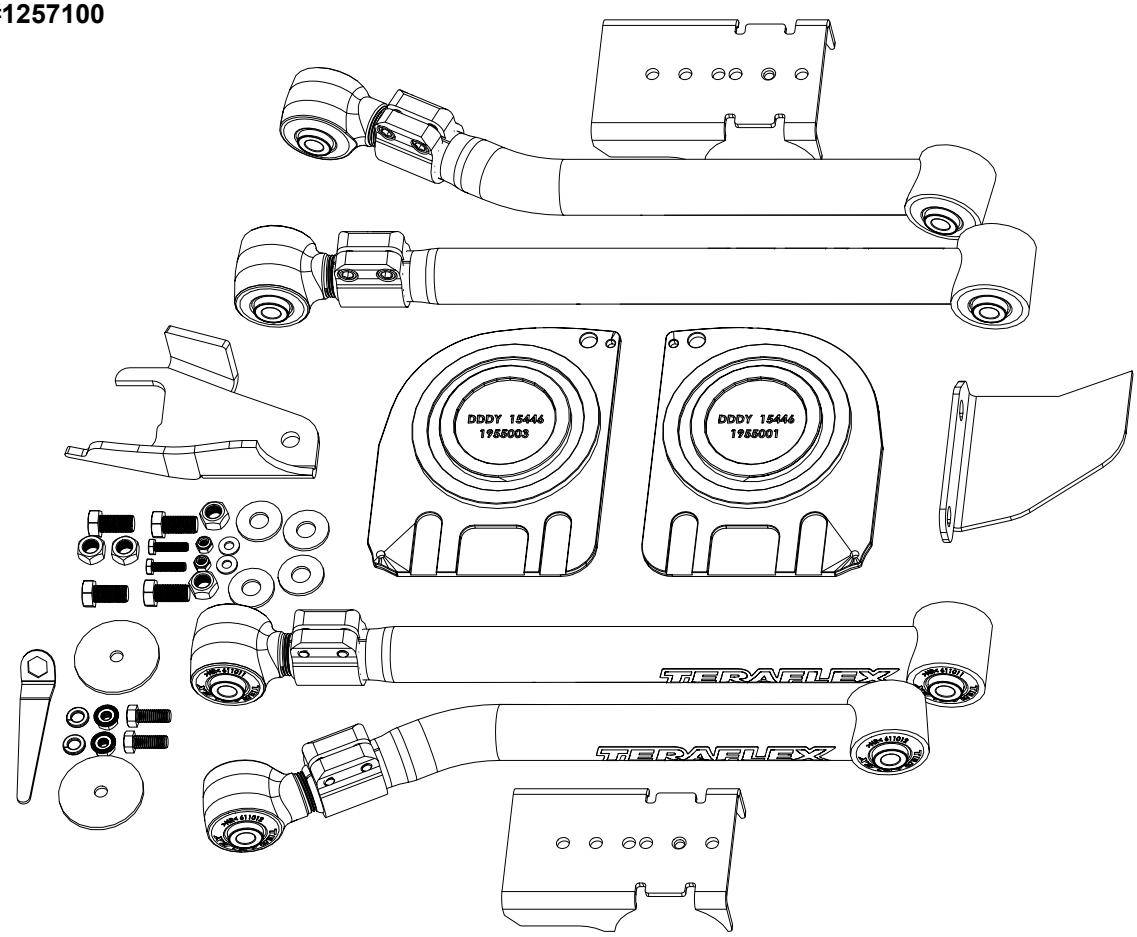
JK 2-Door 2” Stretch Kit Instructions

Kit **#1257100**



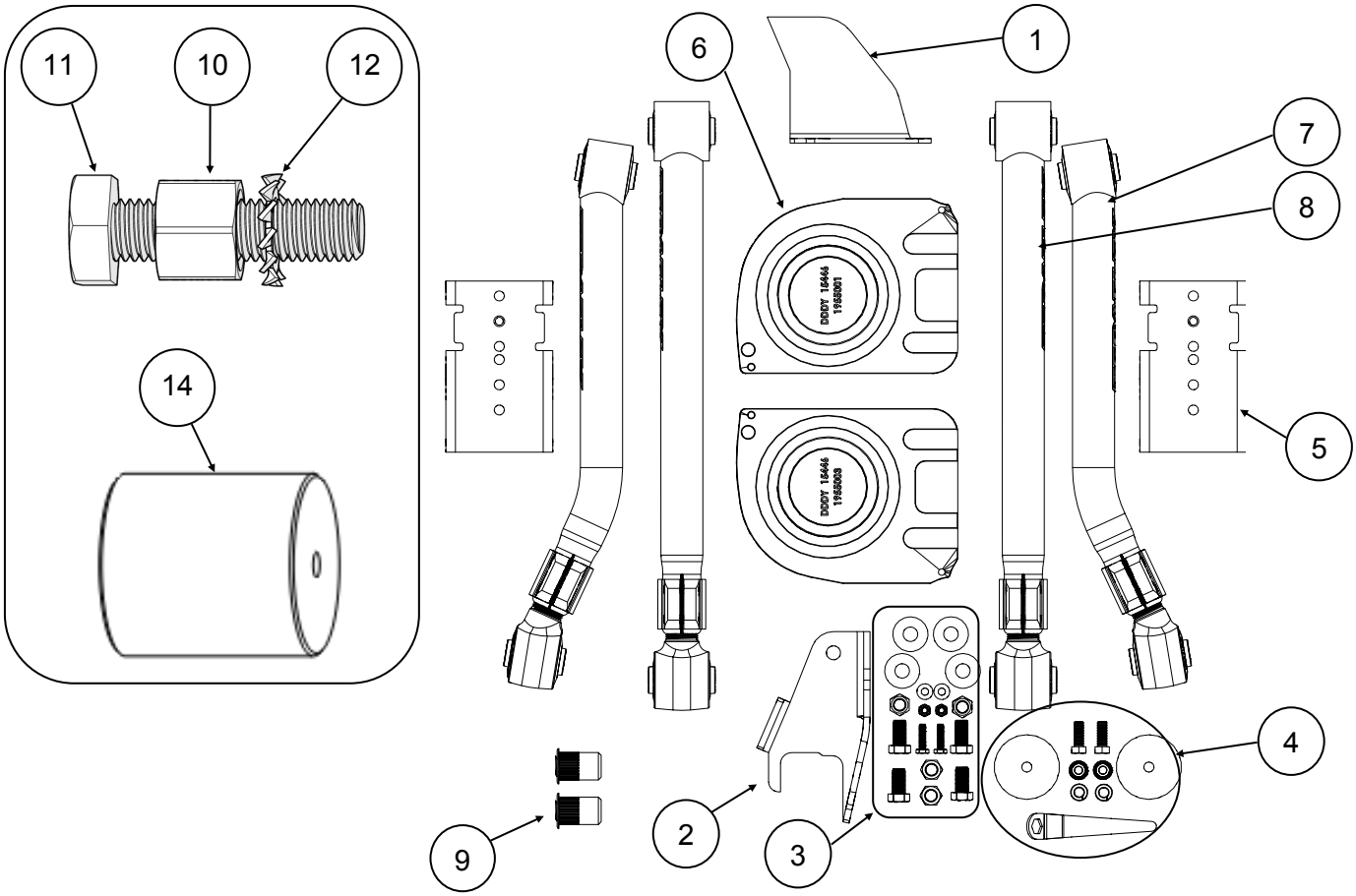
Important Notes:

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.

Refer to the parts list to ensure that all necessary components and hardware have been included. If any parts are missing please contact your local TeraFlex dealer for assistance.
THIS KIT REQUIRES MODIFICATION OF EXHAUST !

Tools needed:

- Jack
- Jack Stands
- Basic mechanics tool set
- Red Thread Locking Compound
- Blue Thread Locking Compound
- 4” Hole Saw
- 17/32” Drill Bit



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	944784	Rear Track Bar Bracket Frame Brace	1
2	944783	Rear Track Bar Relocation Bracket	1
3	5051	Hardware Pack for 2” Stretch Kit	1
4	4954300	JK Rear Lower Spring Retainer Kit	1
5	3990062	JK Rear Bump Stop Striking Pad	2
6	1955001/1955003	Spring Perch Relocation Brackets (LH/RH)	2
7	151540/151530	Alpine Control Arms, Rear Upper (Passenger/Driver)	2
8	151520/151510	Alpine Control Arms, Rear Lower (Passenger/Driver)	2
9	731	Nutsert M10 x 1.5 with 3.8mm-7.9mm Grip	2
10	733	Nutsert tool for M10 nutserts	1
11	737	Bolt M10 x 1.5 P x 40mm Long Hex Head Grade 10.9 for Nutsert Tool	1
12	739	Washer M10, External-Tooth Lock Zinc Plated for Nutsert Tool	1
13	94-12-99-024	07-17 Jeep JK Rear Lower Stud Mount Kit	1
14	56-18-20-025-2-1	Spacer, 1.82" OD, 2.00" Length, 0.250" ID, Centering Tool	1

Raise and support the rear of the vehicle. See factory service manual for safe support locations.

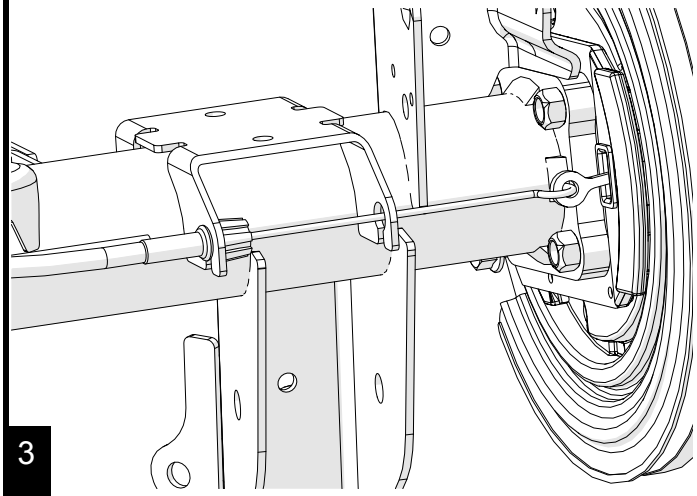
Remove rear wheels and tires.

1

Using a 10mm, unbolt the brake line bracket from the frame.

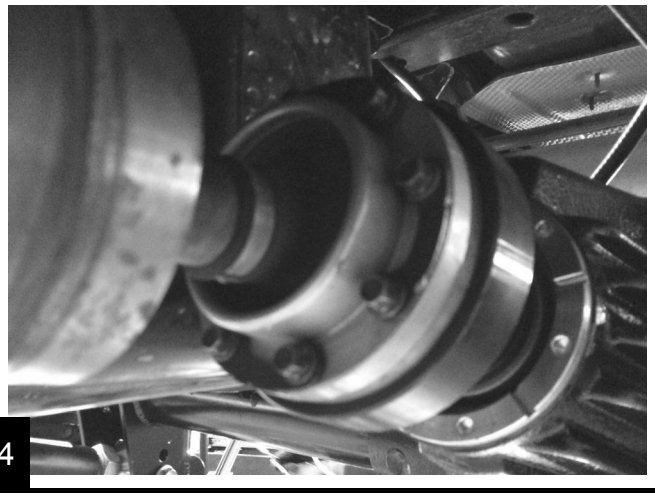
2

Disconnect the e-brake cables from the axle.



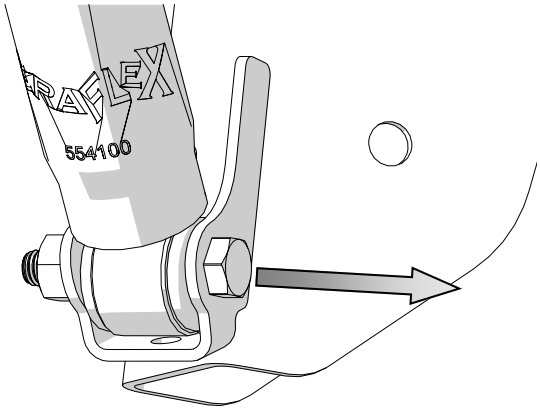
3

Unbolt the rear driveline from the axle end and support.



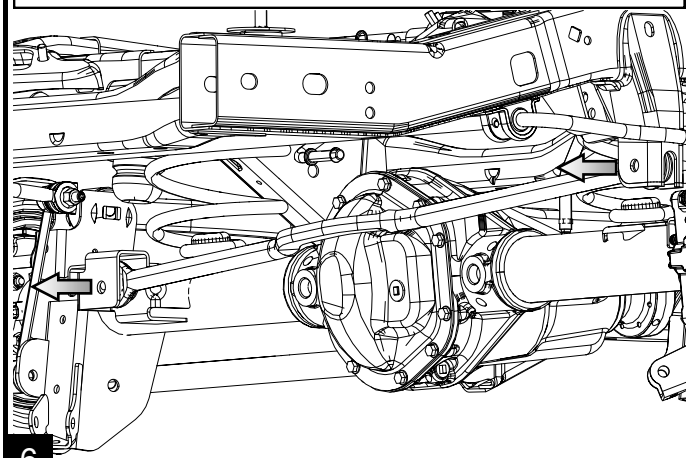
4

Completely remove the rear shocks.
Lower the rear axle and remove the springs.



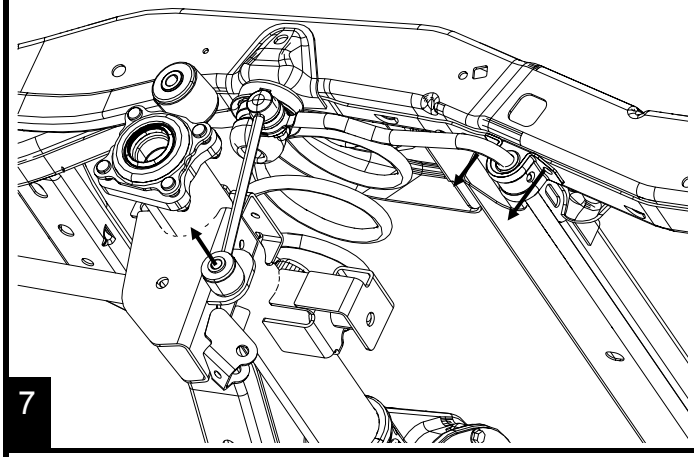
5

Using a 21mm, remove the rear track bar.



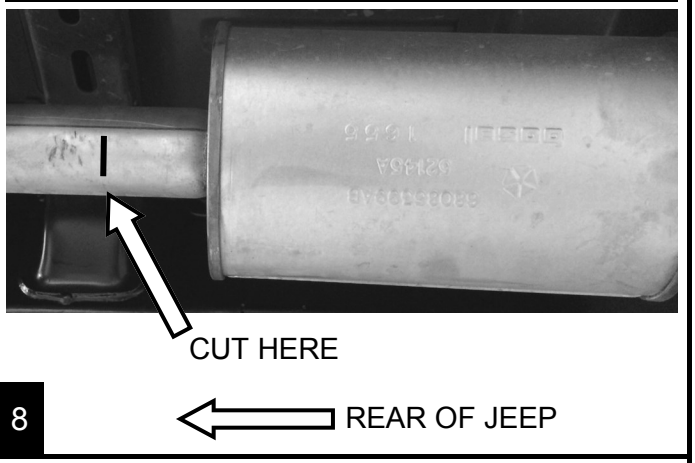
6

Completely remove the rear sway bar.



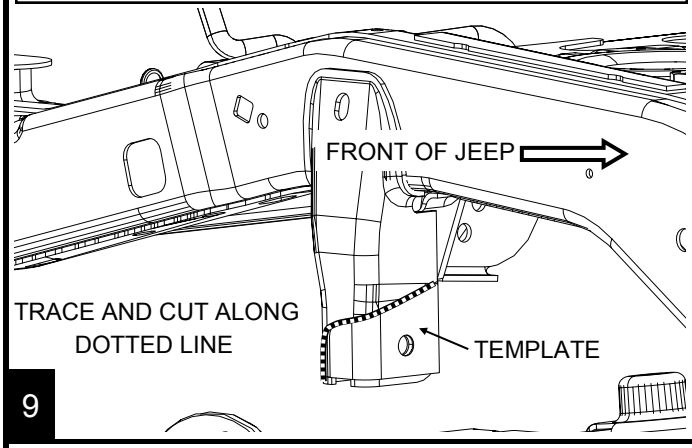
7

Cut the exhaust approximately 3 inches behind the resonator and remove exhaust from the resonator



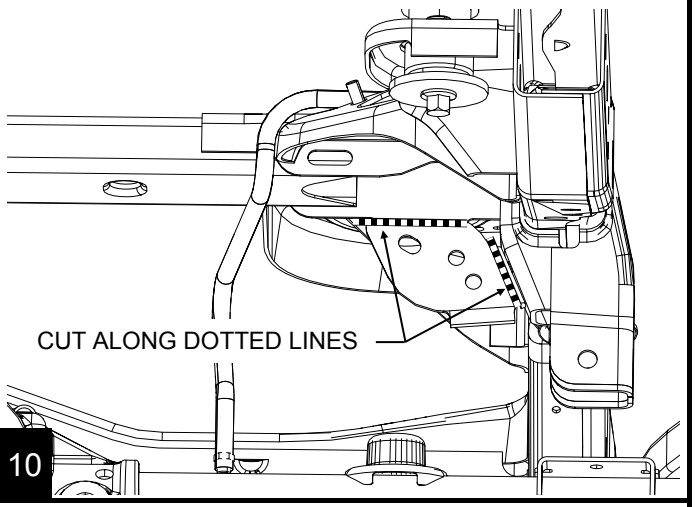
8

Using the template found on the last page of these instructions, trace and cut the front ear of the frame side track bar bracket.



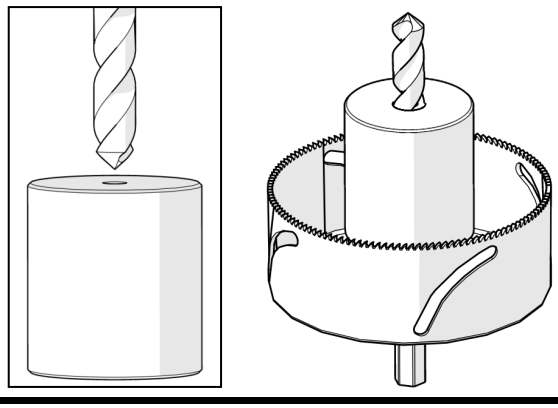
9

Use a cutoff wheel to remove the track bar brace.



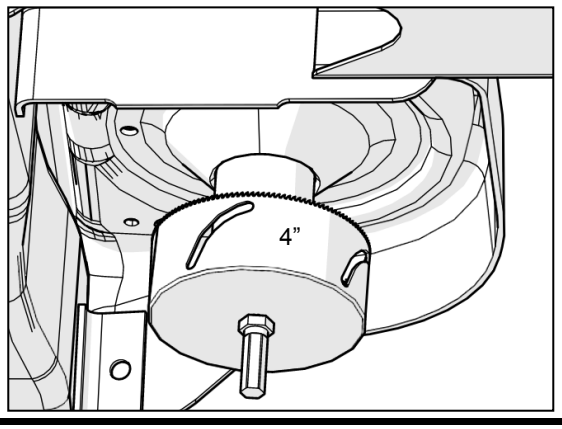
10

Use provided spacer as a guide when cutting out spring perch dimples. A pilot hole is already in the center of the spacer and will need to be drilled to match the drill bit size being used in the hole saw.



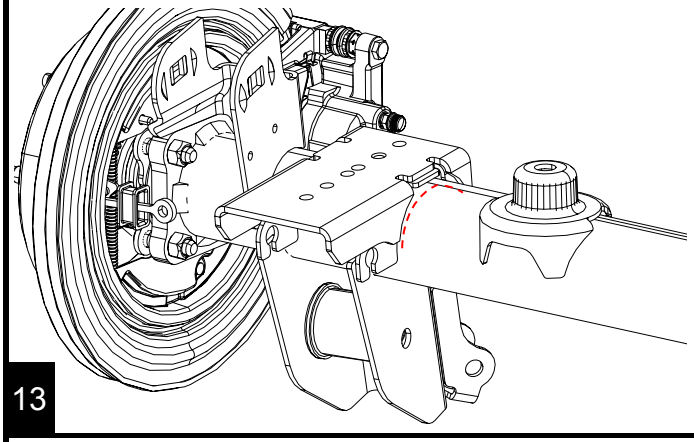
11

Use a 4” hole saw, with the centering spacer installed, to cut holes in the spring perches. Use centering spacer to help center the hole saw. Clean up as required until spring perch relocation bracket fits.



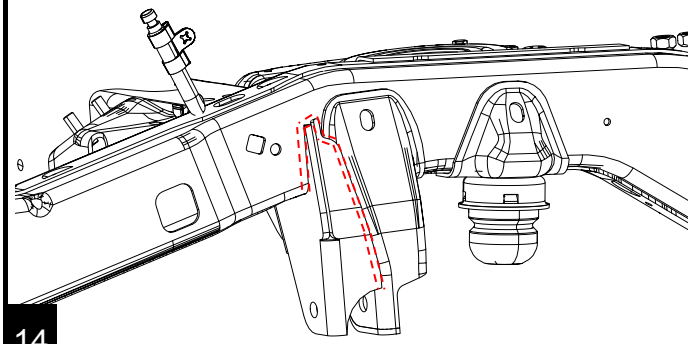
12

Orient the extended bump stop striker pads on top of factory brackets as shown. Verify the holes are aligned and surfaces are prepped for welding. Weld in place.



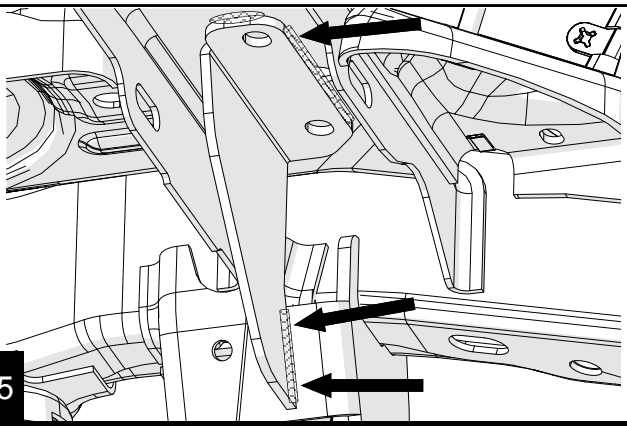
13

Orient track bar relocation bracket as shown. Prep surfaces for welding. Verify holes are aligned by installing the track bar. Tack in place. Remove track bar and weld bracket.



14

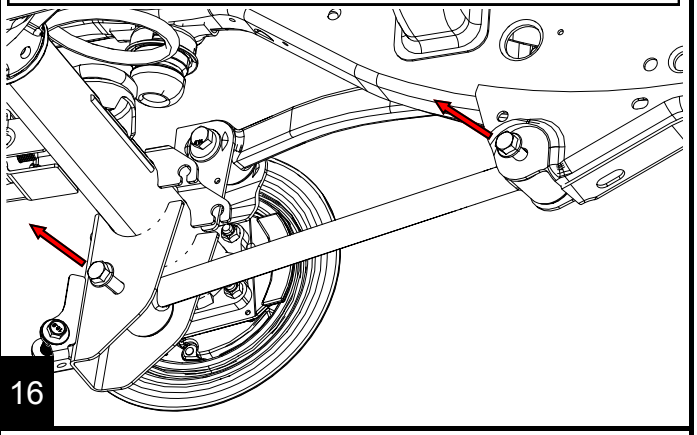
Place frame brace as shown. Prep surfaces for welding and weld in place. Note: Some models will have holes in the cross member. If so, use supplied hardware to bolt the brace to the cross member. Primer and paint all uncoated surfaces.



15

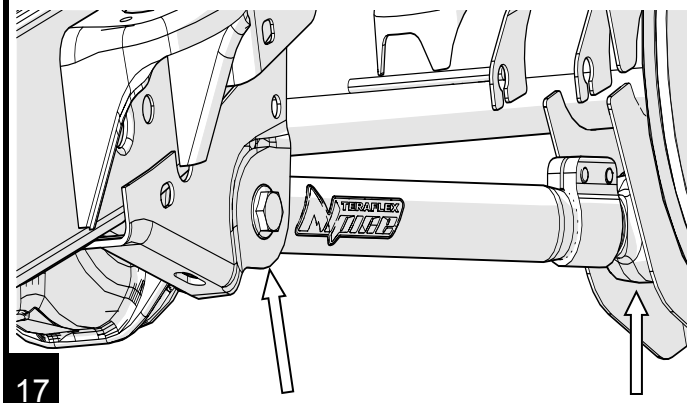
REAR LOWER CONTROL ARMS

Remove the axle and frame side bolts with a 21mm. Remove both lower control arms.



16

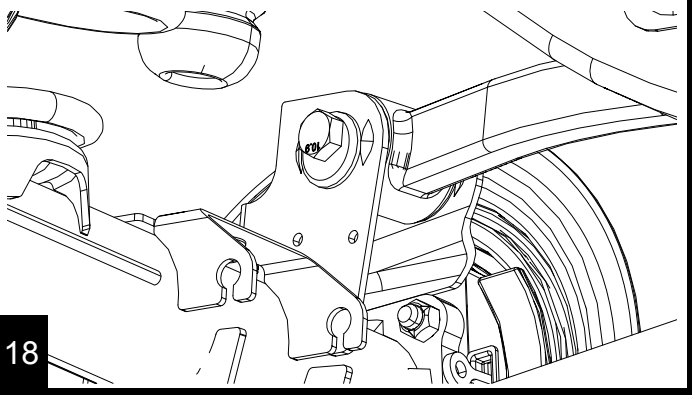
Install the lower control arms the fixed end at the frame and the stickers facing out. Install all bolts finger tight.



17

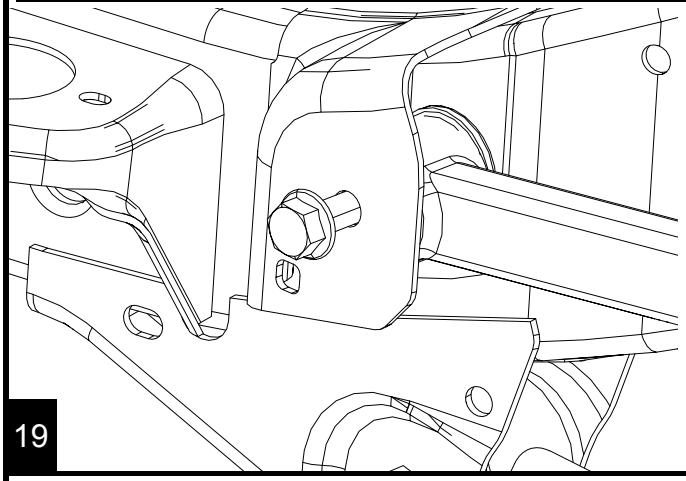
REAR UPPER CONTROL ARMS

Remove the axle side bolt with an 18mm. If your vehicle is equipped with cam washers, they will be reused.



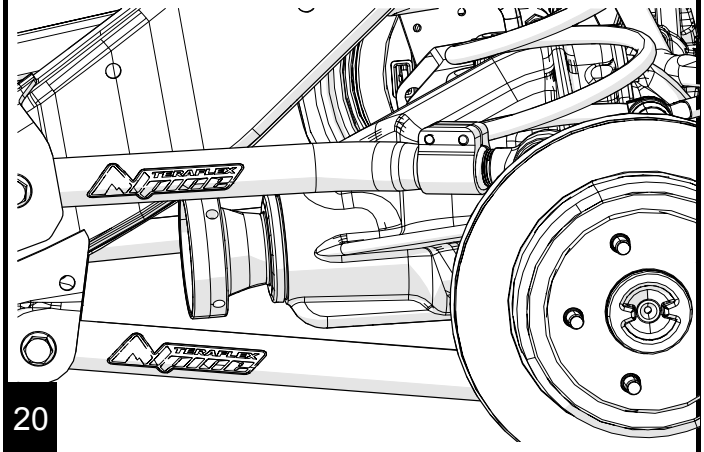
18

Remove the frame side bolt with an 21mm, the nut is a flag nut. Remove both upper control arms.



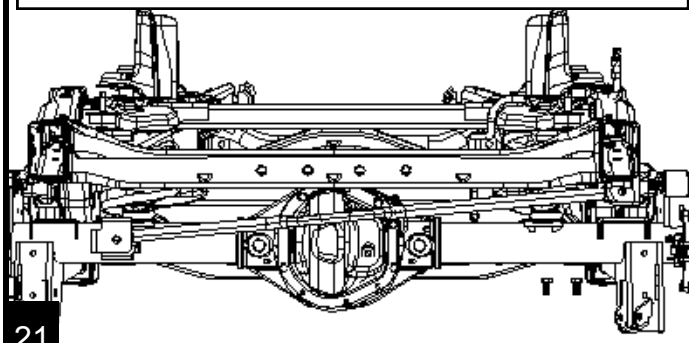
19

Install the new arms with the fixed end at the frame and the stickers facing out. Install all bolts finger tight.



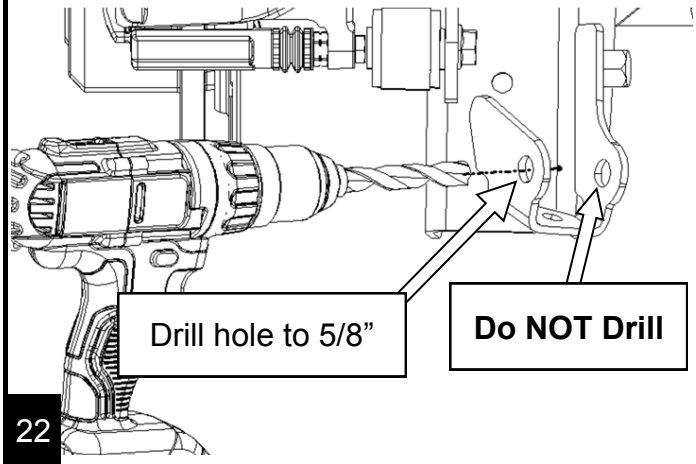
20

Reinstall the track bar. For added clearance, make sure the bolts are installed from the front and make finger tight. Note: If Teraflex rear upper Speedbumps have been installed, the bolt cannot be installed from the front.



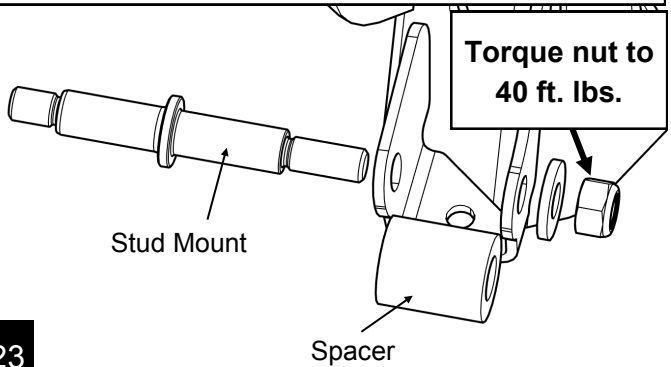
21

Modify rear axle shock brackets. Drill (5/8”) outer tabs on lower shock brackets only. **Do NOT drill inner tab.**



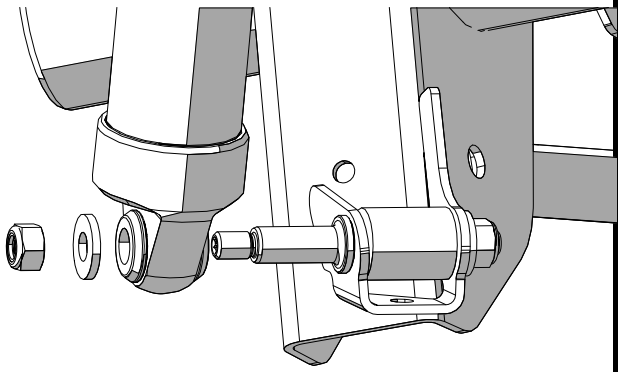
22

Position spacer in old shock mount location and install stud mount. Next install a washer and a Nylock nut securing spacer then torque. A 6mm hex wrench will prevent stud rotation.



23

Install shock, washer and Nylock nut, torque nut to 40 ft. lbs.

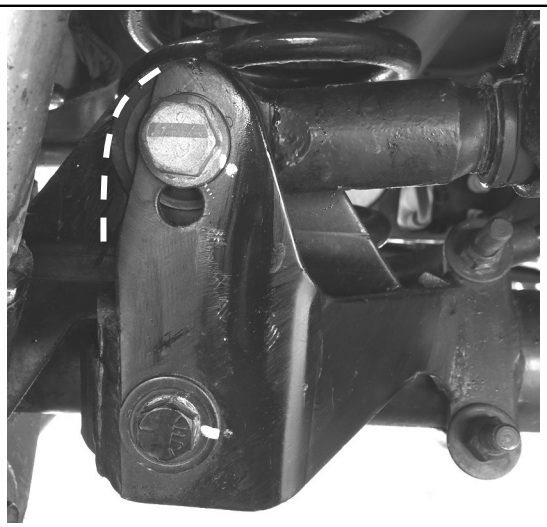


24

Before installing the springs, cycle the suspension. Check for shock clearance around the axle side track bar bracket. If you have an aftermarket axle side track bar bracket, you may need to clearance it. For larger body shocks, you will need to cut off the rear driver axle side shock bracket, and reposition it. If this action is not necessary, skip to step 28.

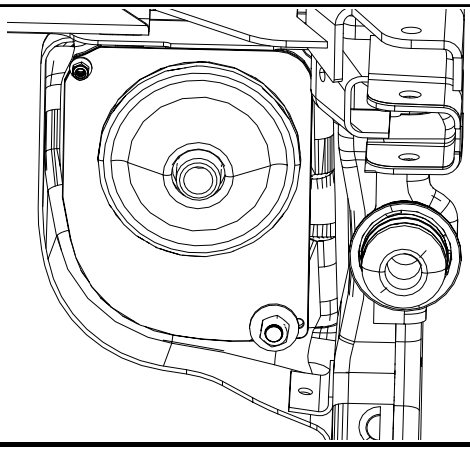
25

Example of trimmed TeraFlex track bar bracket.



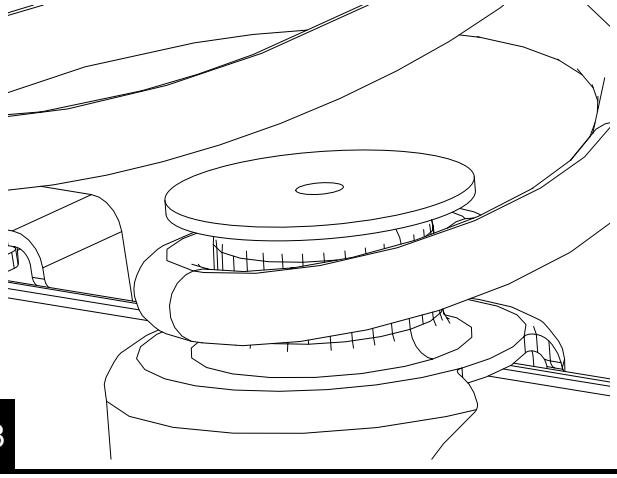
26

Install the spring perch relocation brackets using the supplied hardware pack (5051). Apply red thread locker. Slide factory spring isolator onto the bracket.



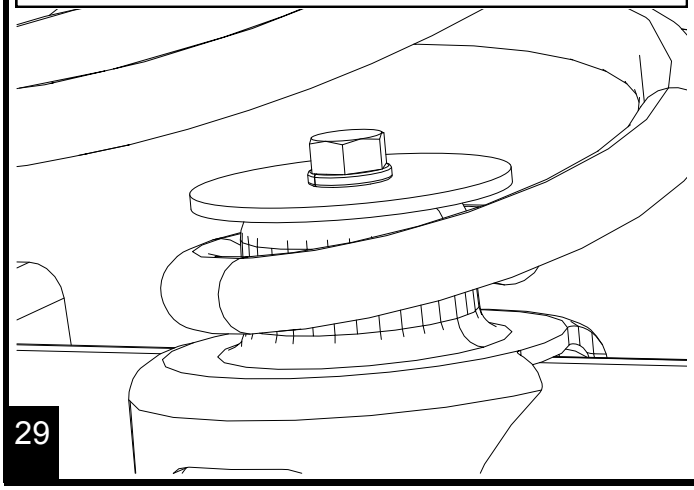
27

Install the springs and place the retainer on the lower spring pad.



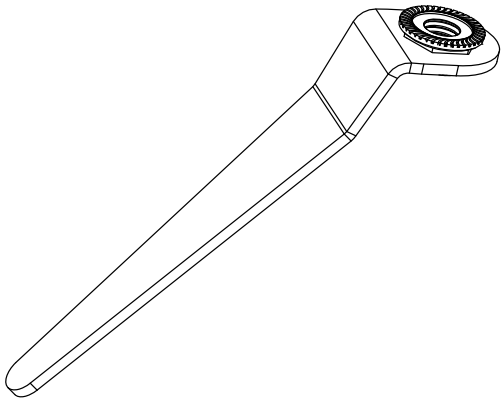
28

Install the 3/8” bolt and lock washer through the spring retainer and spring pad.



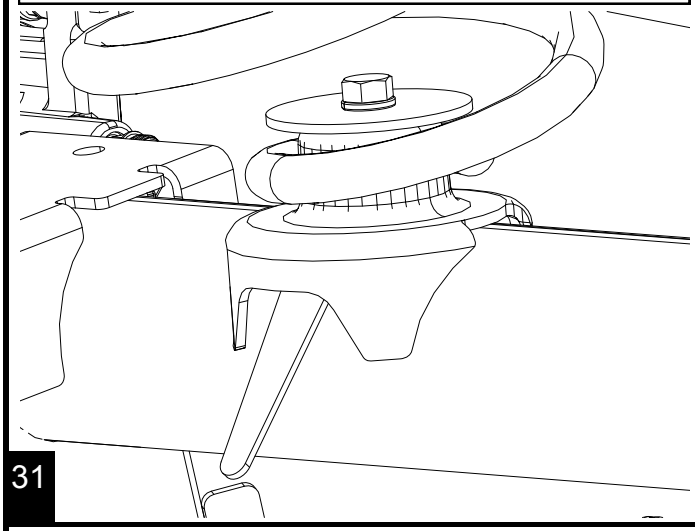
29

Place a nut in the provided tool. Slide the tool underneath the spring pad from the front of the axle and thread the bolt into the nut.



30

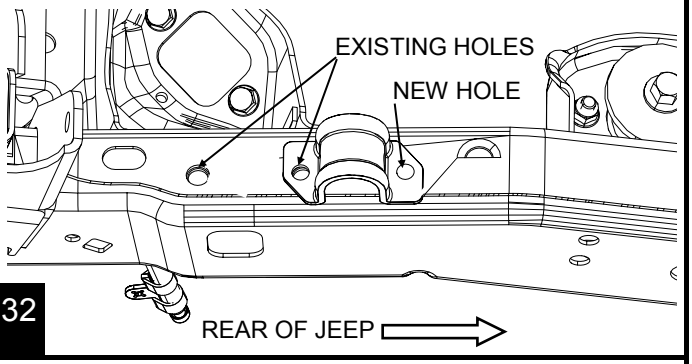
Torque the bolts to 30 ft-lbs.



31

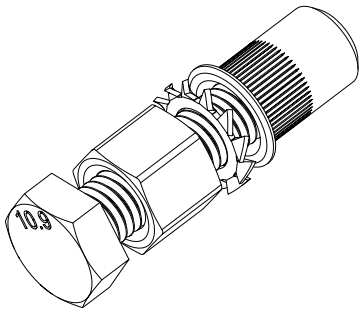
SWAY BAR RELOCATION

Use the sway bar retainer bracket as a guide and position the front hole of the bracket over the rear sway bar mounting hole in the frame. Mark and center punch the rear hole of the bracket. Drill a 17/32” (13.5mm) hole.



32

Thread a nutsert onto the supplied nutsert installation tool. Orient spacer and washer as shown.

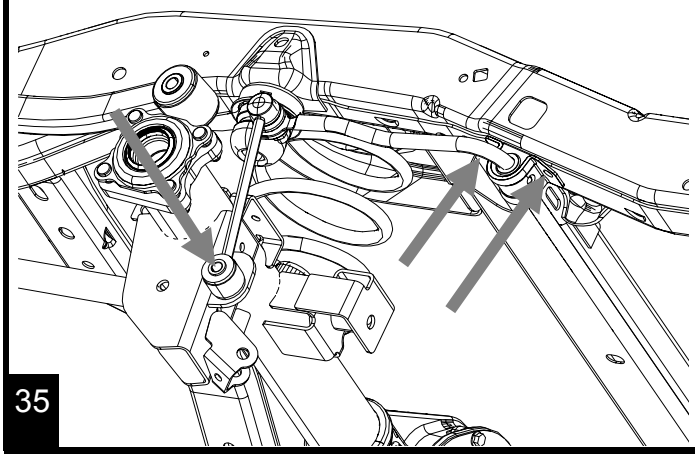


33

With the nutsert threaded onto the supplied bolt, insert the nutsert into one of the previously drilled hoes. It may be a tight fit and a mallet may be required to gently tap the nutsert into the hole. Hold the spacer with a 16mm and thread the bolt down tight. Do not overtighten.

34

Reinstall the sway bar using the two new holes. Torque to 45 ft-lbs (61 Nm).



35

Reinstall the e-brake cables and brake line brackets.

Reinstall the rear driveline using blue thread locker. Torque to 15 ft-lbs (20Nm).

Reinstall the tires and wheels. Torque lug nuts to 85-125 ft-lbs. (115-1170 Nm) Lower the jeep to the ground.

36

With the Jeep on the ground, torque control arm bolts, control arm pinch clamps, track bar bolts and all other bolts that have not been tightened. This will ensure that the bushing load is in a neutral position throughout the Jeep.

Rear Upper Control Arms	125ft-lbs	169Nm
Rear Lower Control Arms	125ft-lbs	169Nm
Rear Track bar	125ft-lbs	169Nm
Control Arm Pinch Clamps	40ft-lbs	55Nm

37

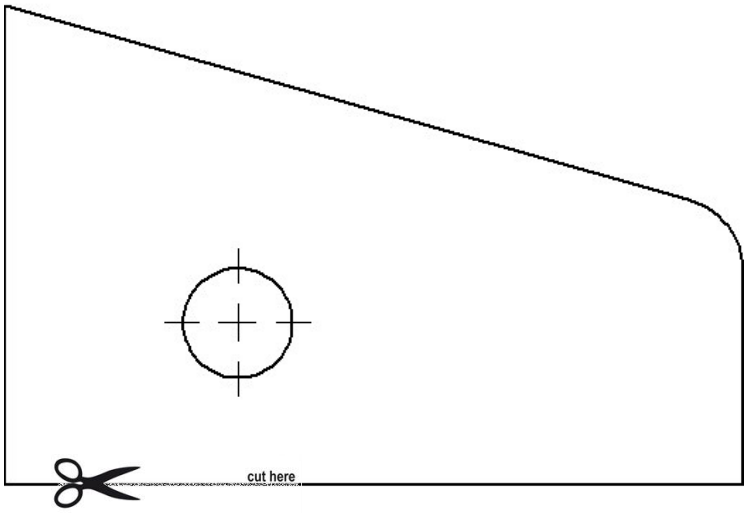
Take the jeep to a local exhaust shop to finish the exhaust

38

We recommend a full 4 wheel alignment be performed by your local ASE Certified mechanic. Failure to do so may result in uneven tire wear and undesired handling characteristics.

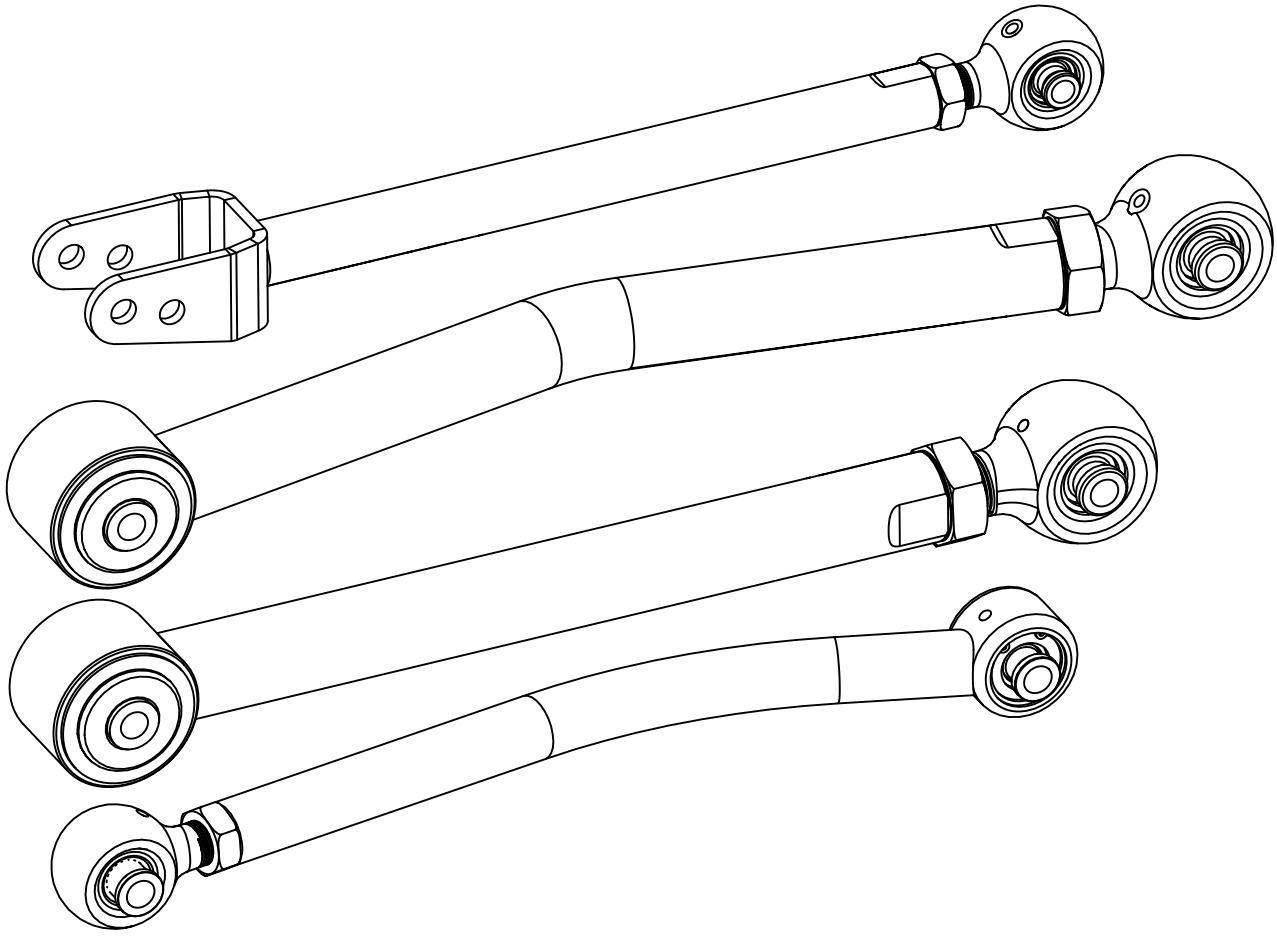
Maintenance Note: After the first 100 miles and every 3,000 miles after that, re-torque all the suspension components and bolts.

39



40

JK Short Control Arms



Important Notes:

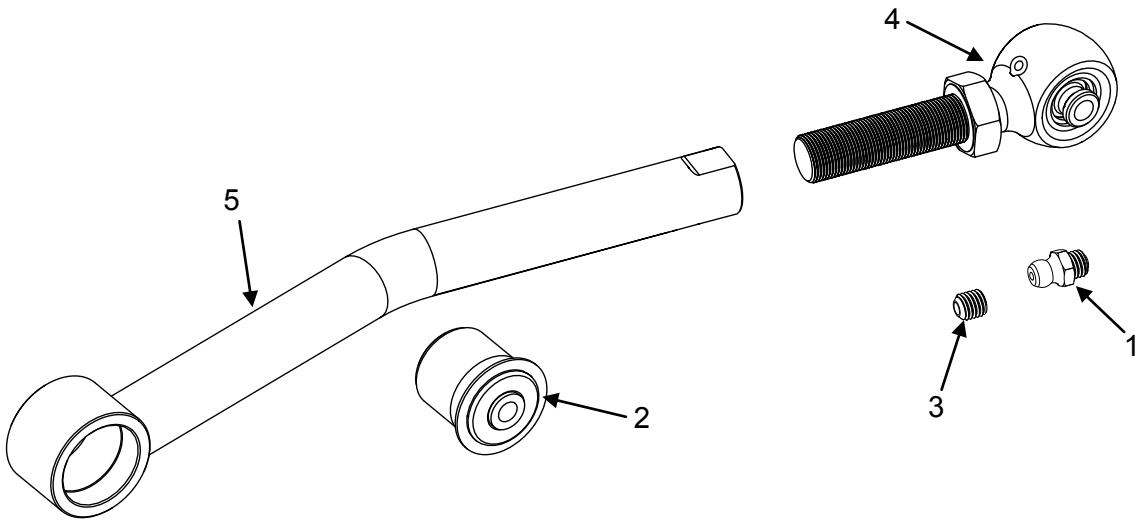
Prior to beginning this or any installation read these instructions to familiarize yourself with the required steps and evaluate if you are experienced and capable to personally perform these modifications. A factory service manual should be used in conjunction with these installation instructions.

The given arm lengths are for a 3" lift. Installation of this kit requires a full four-wheel alignment.

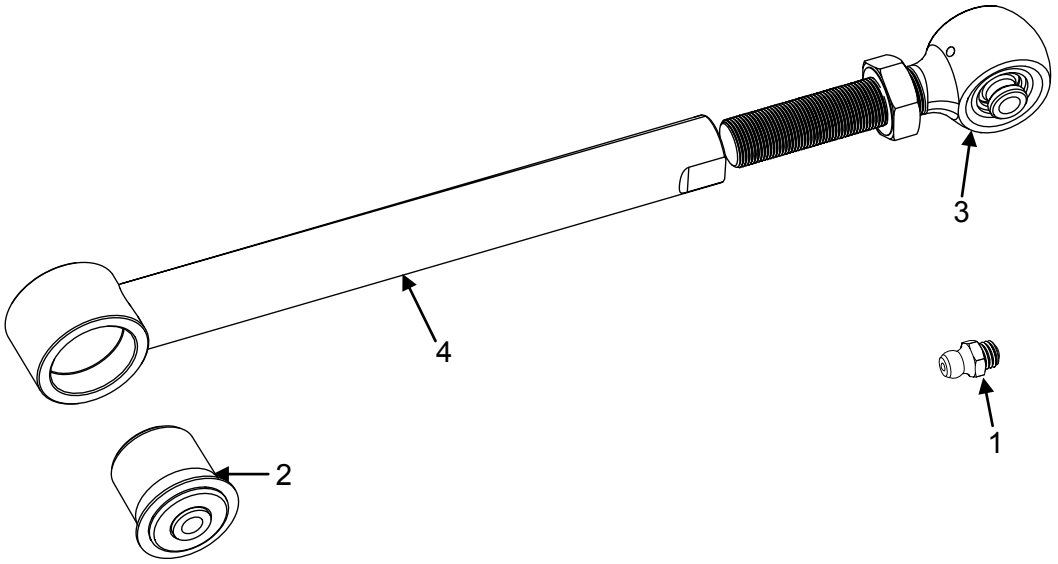
Refer to the parts list to ensure that all necessary components and hardware has been included. If any parts are missing please contact your local TeraFlex dealer for assistance.

Tools needed:

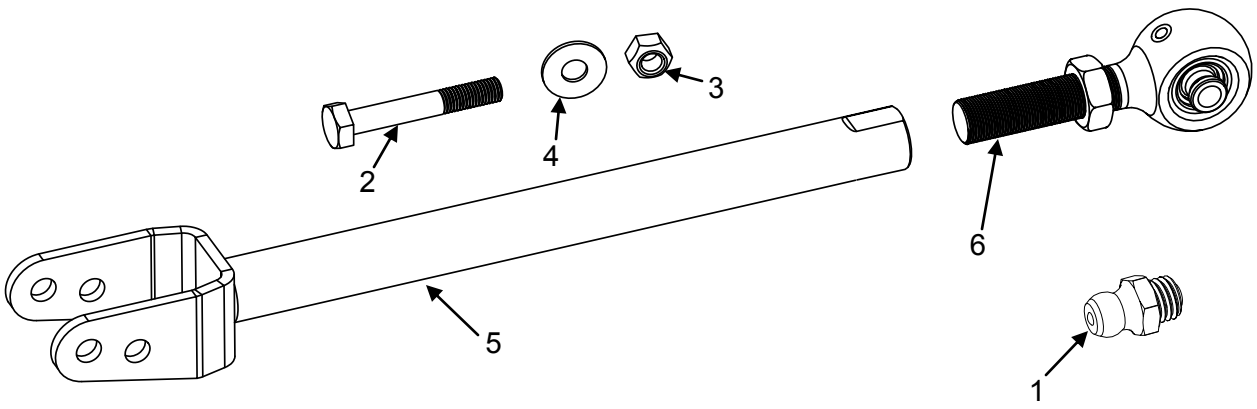
- This installation guide
- Basic mechanics tool set
- 1-7/8" End Wrench
- 1-1/4" End Wrench



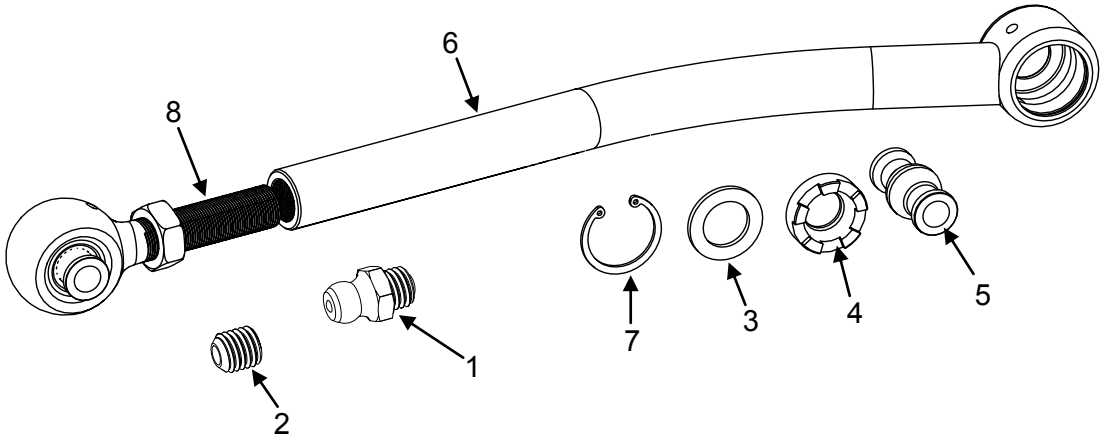
Parts List-1653701 Front Lower Single Arm			
Item Number	Part Number	Description	Quantity
1	308	Grease Zerk 1/4"-28	1
2	4915161	Large Clevite Rubber Bushing	1
3	307	Set Screw 1/4"-28 x 1/4"	1
4	116250	Joint JK Front Lower Offset FlexArm	1
5	653700	JK Front Lower FlexArm Tube Only	1



Parts List-16547001 Rear Lower Single Arm			
Item Number	Part Number	Description	Quantity
1	308	Grease Zerk 1/4"-28	1
2	4915161	Large Clevite Rubber Bushing	1
3	116260	Rear Lower Right Hand Thread FlexArm Joint	1
4	654700	Rear Lower Short FlexArm Tube Only	1



Parts List-1653801 Front Upper Single Arm			
Item Number	Part Number	Description	Quantity
1	308	Grease Zerk 1/4"-28	1
2	404	Bolt M12-1.75 x 80mm	1
3	165	Nut M12-1.75 Stover Locknut	1
4	134	Washer 7/16" Flat	1
5	653800	JK Front Upper Short Tube Only	1
6	116230	JK Front Upper Right Hand FlexArm Joint	1



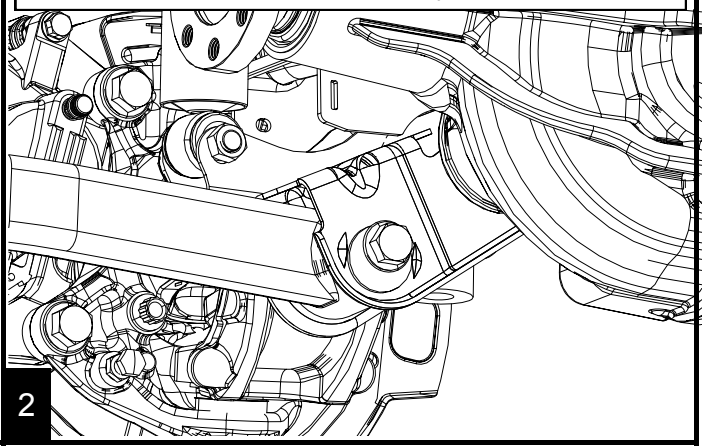
Parts List-1654801 Rear Upper Single Arm			
Item Number	Part Number	Description	Quantity
1	308	Grease Zerk 1/4"-28	1
2	307	Set Screw 1/4"-28 x 1/4"	1
3	9865	Washer 986 Small FlexArm Joint	1
4	9864	Bushing Urethane 1/2	2
5	654803	Ball Metal JK Rear Upper Eyelet Short Arm	1
6	654800	FlexArm Tube Only	1
7	600514	Snap Ring Internal 40mm	1
8	116220	Joint JK Rear Offset FlexArm	1

Front Lower Control Arms

Raise and support the vehicle. Remove the wheels and tires. See the factory service manual for safe support locations. Do not remove more than 2 arms at a time.

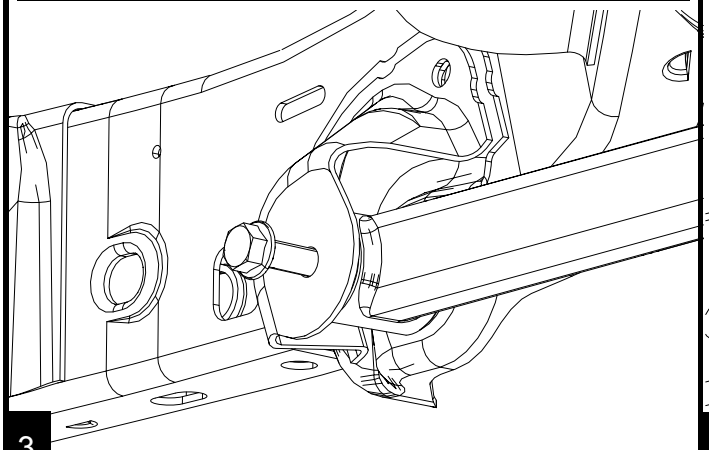
1

With a 21mm, remove the axle side bolt. If your vehicle is equipped with cam washers, they will be reused.



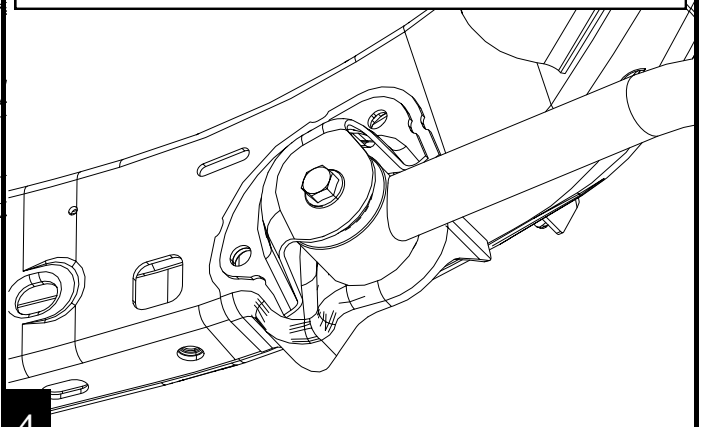
2

Remove the frame side bolt with a 21mm, remove the arm. Repeat on remaining front lower arm.



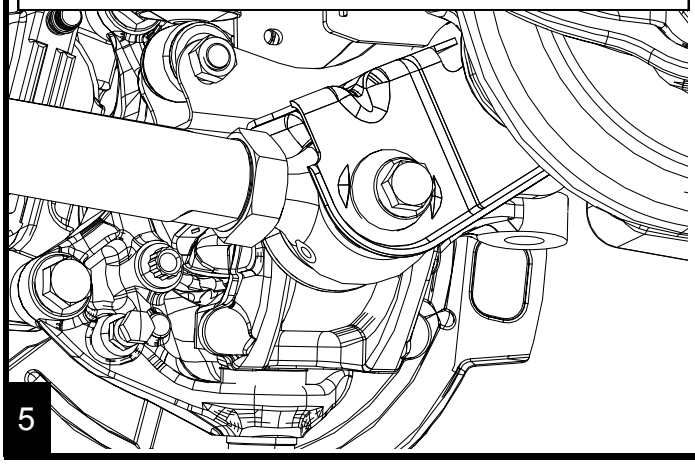
3

Install the zerk and plug. Lengthen the new Flexarms to 23 1/8". Install the rubber bushing end to the frame side bracket with the bend to the inside. Install the bolt **finger tight.**



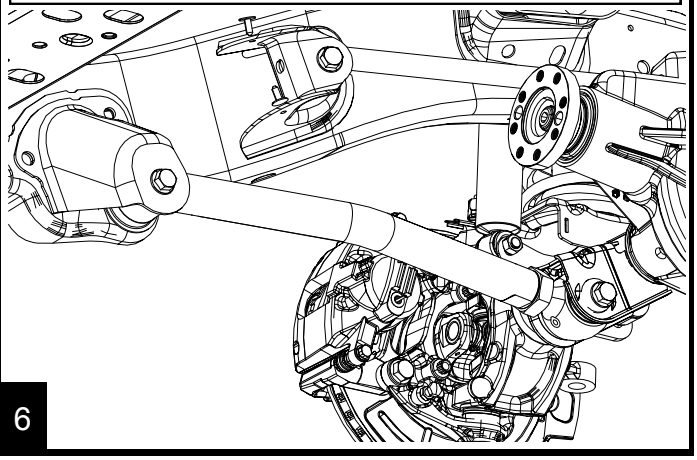
4

Install the flex joint end into the axle side bracket. If your vehicle has cam-bolts, either use cam-bolt eliminator washers or rotate the cam to the full forward position as shown.



5

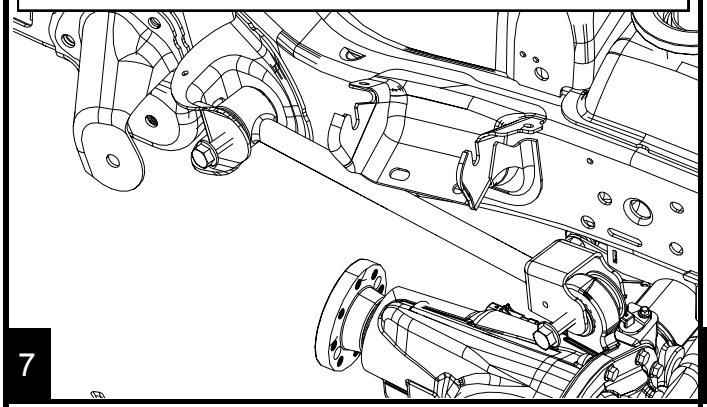
After the vehicle is on the ground at ride height, torque the axle side bolt to 117 ft-lbs (159 Nm) and the frame side bolt to 125 ft-lbs (169 Nm)



6

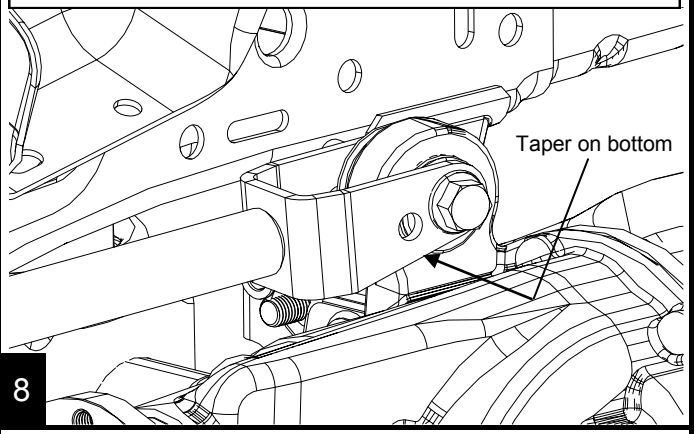
Front Upper Control Arms

Remove any wiring attached to the upper control arms. Remove the axle side and frame side bolts with a 21mm. Remove both upper control arms.



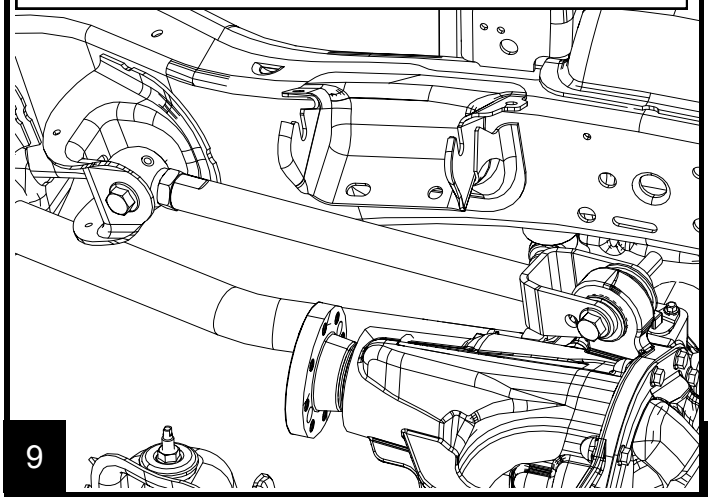
7

Install the grease zerk and plug. Lengthen the new Flexarms to 18 7/8". Install the flex joint end into the frame side and the forked end taper oriented as shown. Use the new provided hardware on the axle side. Install all bolts **finger tight**.



8

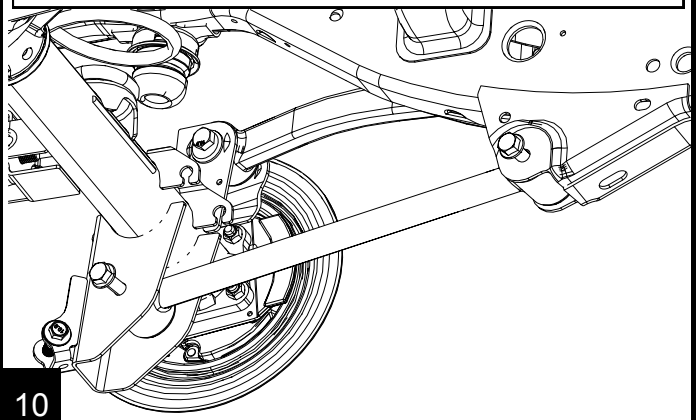
Reattach any removed wiring. After the vehicle is on the ground, torque all bolts to 75 ft-lbs (102 Nm).



9

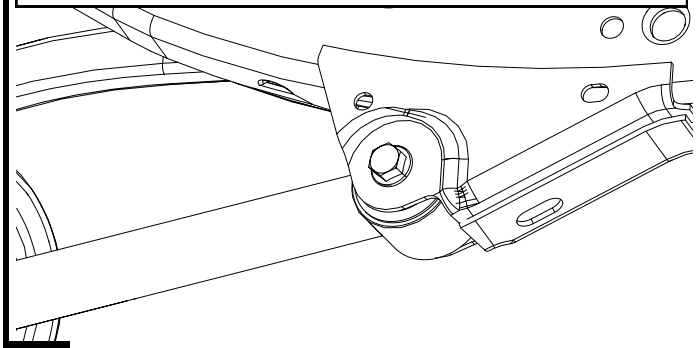
Rear Lower Control Arms

Remove the axle side and frame side bolts with a 21mm. Remove both lower control arms.



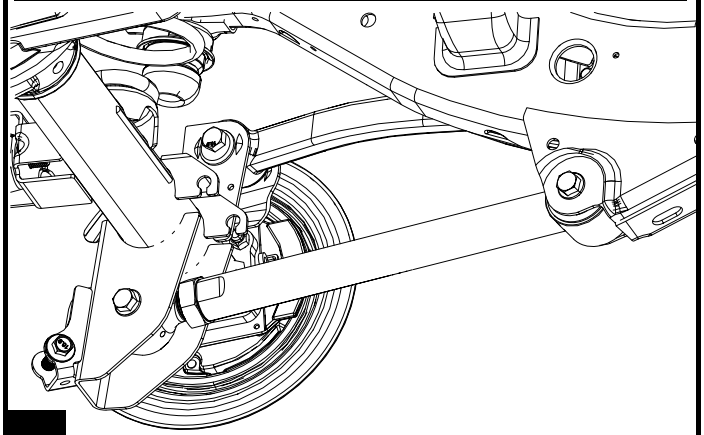
10

Install the grease zerks. Lengthen the new control arm to 20 1/8" for 2 door models and 20 1/2" for 4 door models. Install the arm into the vehicle with the rubber bushing on the frame side. Install all bolts **finger tight**.



11

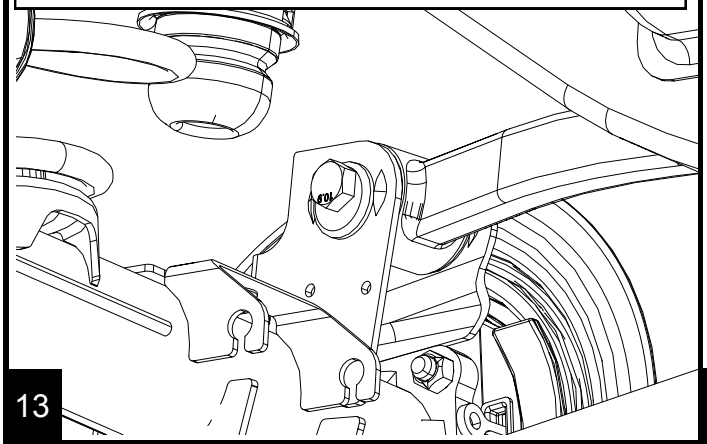
After the vehicle is on the ground, torque all bolts to 125 ft-lbs (169 Nm)



12

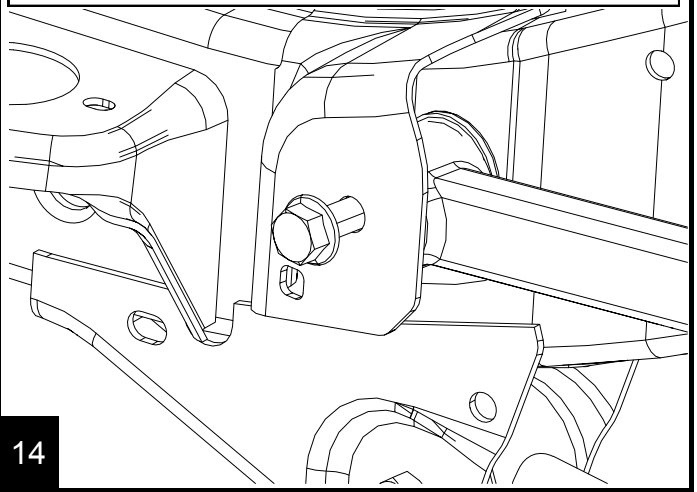
Rear Upper Control Arms

Remove the axle side bolt with an 18mm. If your vehicle is equipped with cam washers, they will be reused.



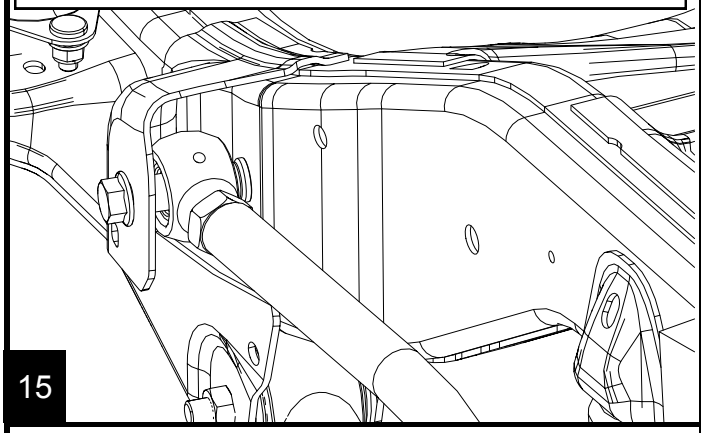
13

Remove the frame side bolt, the nut is a flag nut, with an 18mm and remove the arm.



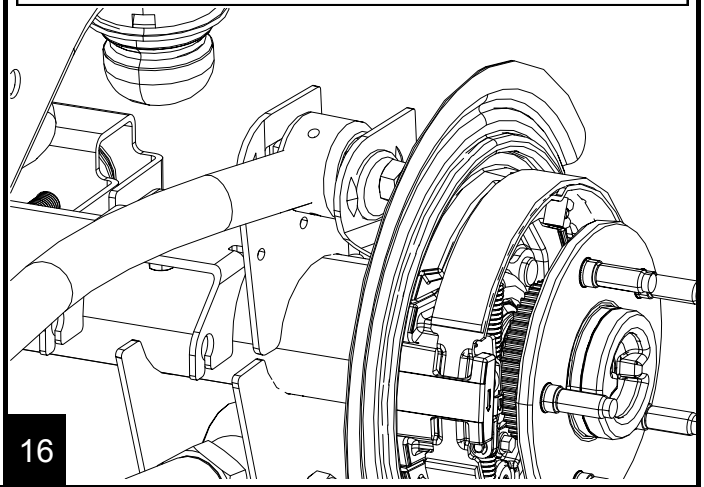
14

Install the grease zerks and plugs. Lengthen the new Flexarm to 18 5/16” for 2 door models and 18 1/2” for 4 door models. Install the flex joint into the frame side bracket with the bend to the inside. Tighten the nuts **finger tight**.



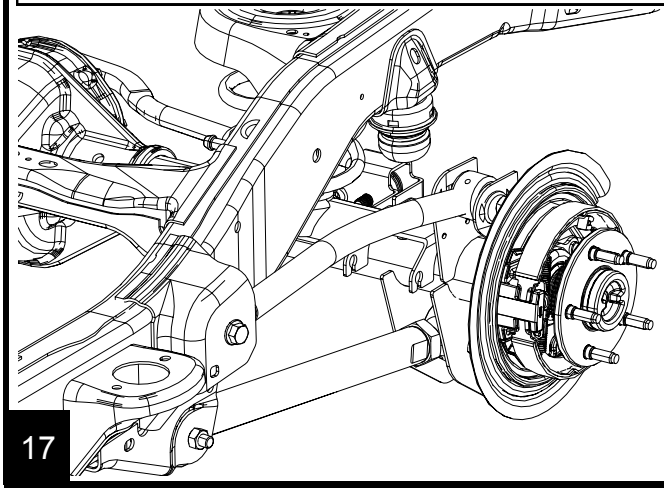
15

Install the rubber joint into the axle side bracket. If your vehicle has cam washers, rotate the washer to the full rear position.



16

Once the vehicle is on the ground, torque all bolts to 125 ft-lbs (169 Nm).



17

Important Notes

Be sure to tighten each jam nut to prevent unwanted joint rotation and thread wear. Re-torque all hardware after 500 miles. All serviceable joints require greasing every 3000 miles or after water crossings. This will greatly lengthen the lift of your joints. Installation of these arms requires a full 4 wheel alignment. We recommend your local ASE Certified mechanic. Failure to do so may result in uneven tire wear and undesired handling characteristics.

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 Tera-Flex 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.