

# TERAFLEX

## PRODUCT INSTALLATION GUIDE

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## JK 3-Inch Spring Lift

Part # 1251200



### **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. Aftermarket wheels with 4.5" backspacing or less are required.*

*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 retailer for assistance.*

### Required Tools:

10,14,15,16,17,18,19,21mm sockets and wrenches  
7/16",5/8",3/4", sockets and wrenches  
3",6",12" extensions Ft-lbs  
torque wrench  
Breaker bar  
Large crescent wrench  
Pipe wrench  
Slip joint pliers  
Floor jack  
Jack stands  
Wheel chocks  
Hammer  
Pry bar  
Pliers  
Safety glasses

Component Item ID	Item Name	Qty Per Assy
754300	Link Rear 3 4" JK LSX 12.25" c c	2
753000	Link Front 4" JK QD 10" c c	2
953800	Bumpstop JK Front Upper	2
954700	Bumpstop JK Rear Lower	2
954777	Bracket JK Rear Trackbar Axle End	1
1853200	Spring JK Front 3" JK SF3JK	2
1854200	Spring JK Rear 3" JK SR3JK	2
1953100	Spacer Front JK 1/2"	2
1954105	Spacer Rear JK 1/2"	2
4353300	Brake Line Front 1 Pair 26" JK TM 39	1
8621	Bracket L Brake Line	2
86291	Washer Brass	4
600441	Clip Brake Hose	2
600270	Rtnr Spring JK Raw, TMG269	2
97732	U Bolt 1.5Rad.5X3X4.5 977 3D	1
600513	Spacer 1.62L 1Od	1
600276	Bracket JK Rear Brake Ext, TMG276	2
600277	Bracket QD JK Retainer Upper Frame Raw, TMG277	2
600499	Stud SS Lower 3/4	2
600503	Stud SS Upper 5/8	2
600504	Pin Quick Disc Bow Tie	2
600271	Tool Retainer Nut Wrench 3 4JK, TMG269W	1
<b>5012</b>	<b>Nut Nut Bolt 888HRWJKRRSPR THB</b>	
85	Nut 3/8 16 Flange	2
98	Bolt 3/8 16X1	2
123	Washer Lock 3/8	2
<b>5018</b>	<b>Nut Bolt RR Ext BI Kit JK 888HRWBLKJK THB</b>	
76	Nut 1/4 28 Nylock	2
77	Bolt 1/4 28 X.75 Hex Zinc	2
458	Wsr Flat 1/4	4
<b>5019</b>	<b>Nut Bolt Rear Bs JK 888HRWBSJK THB</b>	
38	Washer Flat 5/16 Zink 00038	8
153	Bolt 5/16 18X1.25 Hex Zinc	4
632	Nut 5/16X18 Stover	4
<b>5020</b>	<b>Nut Bolt Lsx JK 888HRWLSXJK THB</b>	
134	Washer flat 7/16 zinc	4
165	Nut 12Mm 1.75 Stover Metric Hex Zinc	2
401	Bolt 12Mx55M1.75P Zink Metric Hex	2
<b>5021</b>	<b>Nut Bolt QD Hardware Nut, JK 888HRWQDJK THB</b>	
37	Washer Flat 1/2" Zinc	2

## Installation:

1. Remove track bar bolts using a 21mm socket, at both the front and rear axle and remove track bars.



2. Loosen all control arm bolts using a 21mm socket, **DO NOT REMOVE ARMS OR BOLTS!**
3. Lift the vehicle and support under the frame with jack stands. Make sure that the axle will drop far enough to remove and install the coil springs.
4. Remove the wheels.

## Rear Installation:

5. Support the rear axle with a jack and slightly lift one or two inches so that it is easy to remove the bolts from the shocks and sway bar links. (If you remove the nut from the bolt prior to jacking up on the axle you can put slight pressure on the bolt with your hand while jacking the axle and see where it is easiest to remove the bolts.)
6. Remove shocks using an 18mm socket and wrench for the axle side bolt and a 16mm socket for frame side.



7. Remove sway bar links using an 18mm socket and wrench,



8. Remove the clips that secure the ABS wiring harness to the upper control arm mount.



9. Disconnect the brake line bracket at the frame using a 10mm socket. **DO NOT DISCONNECT THE BRAKE LINES FROM THE CALIPERS.**



10. Remove the bracket that holds the park brake cables to the body using a 10mm deep well socket.



11. Carefully lower the rear axle far enough to remove the rear springs. Be careful not to let the coils fall out as you lower the axle. You will want to lower the axle far enough to install the new 3" springs in place. While lowering the axle make sure the brake lines, ABS wires and axle vent do not stretch as this could cause damage to these vital parts.



12. Use grease and install new upper spring guide spacer by popping it into the factory location.



13. Install the factory isolator on the new spring guide spacer. Don't forget to reuse the factory spring isolator. If the isolator is left out your ride height will be about 1/2 inch lower in the rear. The isolator also helps dampen noise.



14. Install the new rear springs.  
15. Install the new rear coil spring retainers on the bottom end of the coil springs. First insert the flanged nut into the provided wrench tool, insert the bolt with the lock washer on top of the flat plate, into the rear lower spring retainer. Holding the flange nut in place using the provided wrench tool and begin tightening the bolt. Remove wrench when finished.



16. Install new rear sway bar links on the inside of the sway bar and the inside of the axle bracket. Use the factory bolt on the axle side with the nut on the outside so excess threads will not interfere with the shock. Use the provided 12mm bolt and washer for the top side with the 12mm nut and washer on the inside to give the most possible room for tire clearance. Torque to 75 ft-lbs.



17. Install new rear bump stop spacer by placing the spacer on the axle pad. The extended part of the pad facing forward. Use the provided 5/16" x 1 1/4" bolts with 5/16" washers and 5/16" nuts. Tighten with 1/2" wrenches.



18. Install rear brake line extensions provided in the kit. Bolt the bracket to the factory brake line bracket by removing the 10mm bolt and installing the bracket in that location with the bend of the bracket going flush with the frame. **NOT STICKING OUT AWAY FROM THE FRAME.** Torque to 14 ft-lbs. (If bracket gets installed the wrong way it will rub on your tires) Then use the supplied hardware to attach the factory bracket to the drop bracket by using 1/2" socket and wrench.



19. Install the new rear track bar bracket by removing the lower control arm bolt. Place the bracket into place, reinstall the control arm bolt. Install the supplied bolt and sleeve into the factory track bar location. Using the supplied u-bolt and nuts install the u-bolt around the axle tube. Torque the u-bolt nuts to 85 ft-lbs and the supplied bolt to 75 ft-lbs.



20. You can choose to add welds to this bracket for additional strength.  
21. Remove jack from under axle.  
22. Rear installation complete.

## Front installation:

23. Place jack under the axle and slightly lift the front axle so you can easily remove factory hardware from shocks, sway bar links, and track bar bolt at axle.
24. Remove the front shocks by using a 18mm wrench and socket at the axle side and a 16mm wrench for the frame side. (If the shock spins with the top nut you can use a 5/8 wrench to hold the shock just below the shock mount. Ratchet wrenches are best for the top nut)



25. Remove sway bar links using 18mm socket and wrench at the axle and 18mm socket and 20mm wrench at the sway bar. Lower the jack enough to remove the springs.



26. Remove front coil springs.
27. Remove the stock yellow bump stop with a pair of channel lock pliers. Using grease, lube the bump stop extension to install it into the spring tower. (You may need a piece of wood or equivalent to put in between the extension and the coil perch and jack up the axle to install extension. Do one side at a time).



28. Use grease to lube the yellow bump stop and pop it into the extension.



29. Install new 3 inch coil springs. Do the drivers side first.



30. Install the new sway bar links, on the outside of the sway bar and inside of the axle mount. Torque to 75 ft-lbs.



31. Remove the factory brake lines and replace with the supplied brake lines. Use the factory bolt to mount the new tab to the frame. Insert the retaining clip into the brake line as shown.
32. Bleed the brakes.



33. Reinstall wheels, torque lug nuts to 95- 115 ft-lbs, Remove jack stands, lower the vehicle onto its own weight, and torque all the control arm bolts. Torque the uppers to 75 ft-lbs and the lowers to 125 ft-lbs.
34. Install the rear track bar. There are 3 hole locations on the new track bar bracket, the lowest hole is for 2"-3" of lift. The second hole is for 3"-4" of lift and the top hole is for 4"-6" of lift. This is just a starting location alignment adjustments may have to be made to properly align the vehicle. To align the rear track bar to the axle have someone push on the body of the jeep until the bolt hole lines up. Torque to 125 ft-lbs.

35. To straighten the steering wheel, loosen the adjuster sleeve on the drag link by using 15mm sockets. Mark the position by making a line across the sleeve and the threads this line will indicate the original position. Looking from the drivers side rotate the adjuster sleeve counter clockwise 3/4 of a turn. This should get your steering wheel close to center. Every vehicle is different so test drive yours and determine if yours needs further adjustment. Once steering wheel is straight torque pinch clamp bolts to 45 ft-lbs.



36. Re-torque all fasteners after 300 miles.



## PRODUCT INFORMATION & WARRANTY

### **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:**

Tera Manufacturing 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 TeraFlex's two (2) year warranty to be free of defects in material and workmanship for two years from date purchased.

Tera 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. Tera Manufacturing 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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