

# TERAFLEX

## INSTALLATION GUIDE

**Tera Manufacturing, Inc.**  
5251 South Commerce Dr.  
Murray, Utah 84107  
Phone/801.288.2585  
Fax/801.713.2313  
www.teraflex.biz

## Installation Guide for the TJ 2-inch lift kit (2T)



Safety should be your first consideration when installing your new suspension system.

Use these instructions to install the TeraFlex two-inch lift kit. This kit you are about to install was designed specifically for the Jeep TJ.

### *Spring Spacer Warning:*

*The combination of spring spacers larger than the SSTX75 with any TeraFlex spring will void any applicable warranties. Spring spacers may also adversely affect vehicle handling and performance.*

### *Tire Sizes:*

*The maximum recommend tire size for use with this lift is a 32x11.50 with up to an eight-inch wide wheel. You may experience minor rubbing under extreme articulation.*

Please make sure that your kit includes the following items before installation:

- 2 Rear coils (6.5" OD)
- 2 Front coils (5.25 OD)
- 4 Bolts 10mm x 55mm (1.5p)
- 4 Bump stop spacers (1.75"ODx1.5"H)
- 1 Rear track bar bracket
- 1-1/2" x 3" bolt
- 1 Lockwasher
- 1 Flatwasher
- 1 Sleeve (steel)
- 1 10mm x 75mm bolt
- 1 10mm lock nut

### Needed tools:

- Metric/standard sockets and wrenches
- Torx bits (up to 55)
- Drill
- Floor jack
- Jack stands

## Rear Installation (first)

### Rear Track Bar

1. With the vehicle on the ground, remove the plastic dust shield that covers the bolt securing the rear track bar to the rear axle housing. You will no longer need this shield.
2. Remove the size T55, Torx headed bolt and set it aside. This bolt is located on the trackbar mounting bracket located midway between the rear differential and the driver side brake drum on the top of the axle. Keep the nut and bolt for later. Tie the track bar end up out of the way while you install the track bar extension bracket.
3. Hold the rear track bar bracket extension over the axle bracket positioned as show in Figure 1. Using one of the bolts (1/2" x 3" nc) and the spacer (1.5" x 1"OD x .5"ID) insert them in the hole vacated by the Torx headed bolt. Use the spacer to fill the spot the track bar once occupied. This will keep the bracket from collapsing when the new bolt is tightened.
4. With the track bar bracket in place, the two (2) smaller holes in the bracket should line up close to the holes in the axle bracket vacated by the plastic shield removed in Step 1.
5. Using a 5/16" drill bit, drill out the small holes upper and lower to make room for installing the (5/16" x 1") bolts and nuts and washers all 5/16"nf. Install and tighten the bolts and nuts.
6. Line up the track bar with the upper holes in the new track bar bracket and use the Torx bolt and nut you removed in Step 2 to secure the bar in place.



**Figure 1**

7. Set the brake, and chock the front tires securely.
8. Jack up the rear of the TJ by the frame and secure with jack stands.

9. Remove the rear tires and rear shocks. Disconnect the rear sway bar links.
10. Remove rear springs.
11. Remove the rear rubber bump stops by grasping the bump stop and pulling down with a side to side motion. They are located at the top of each coil spring.
12. Use a 15mm socket to remove the bolt inside both bump stop cups. Keep the bump stop cups.
13. Re-install the bump stop cup placing the bump stop spacer between the cup and the cup's original mounting location. Use a 16mm socket and the new bolt (10mm x 55mm 1.5p).
14. Install the new TeraFlex rear springs (6.50" OD). These are the shorter of the two pairs of springs.
15. Install the replacement shocks. Boots should go up.
16. Reconnect the rear sway bar links.

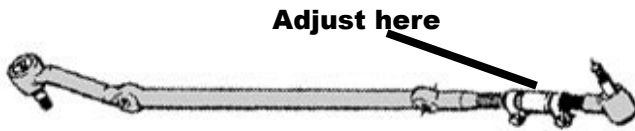
**Rear Installation Complete.**

## Front Installation (second)

1. Jack up the front of the TJ by the frame and set stands in place.
2. Remove the front tires and front shocks. Remember to save those lower bolts.
3. Remove the spring clamp and bolt and set aside.
4. Disconnect the lower end of the front sway bar link to allow the front axle to drop.
5. Remove the front springs. Passenger side first.
6. Using a 15mm socket, remove the bump stop cushions and the bolts in the bump stop cup. You will be putting these back after the new springs are in place.
7. With a 16mm socket and new bolt (10mm x 55mm 1.5 pitch) replace the bump stop cup with the bump stop spacer between the cup and the pedestal.
8. Install the front TeraFlex springs. Right side first. Once the spring is in place, rotate the spring so the cut end of the spring fits into the recessed groove in the axle pad support.
9. Replace the spring clamp and bolt taken out in Step 3.
10. Install the front shocks.
11. Put the tires and wheels back on and lower the TJ to the ground.
12. Use the drag link adjusting sleeve to straighten the steering wheel.

### Fine tuning the steering:

Adjust the sleeve on the front drag link by loosening the clamps and twisting the sleeve in a direction that causes drag link to become shorter. Find a place you can drive that is flat and straight. Adjust the sleeve and test drive the TJ until your steering wheel is centered to your satisfaction and tighten the adjuster sleeve clamps.



## Troubleshooting

### Driveline vibration

**Acceleration vibration** - The vibration is caused by the pinion angle being too high in relation to the transfer case output shaft.

**Deceleration vibration** - This vibration is caused by the pinion angle being too low in relation to the transfer case output shaft.

If you have constant vibration when accelerating or decelerating, see which of these actions causes the vibration to decrease in severity. If you accelerate and the vibration diminishes you need to bring the yoke up.

The best way to adjust pinion angle is to purchase Lower Flex Arms from TeraFlex, part # FATJ.

### Front Track Bar

With a two-inch kit, the front track bar is not a major concern. Anyone interested in making adjustments to the track bar should consider the use of TeraFlex's Adjustable Front Track Bar (part TBAF).

## Alignment notes

After installation of the TeraFlex suspension kit, it is imperative that the front end alignment angles be checked. It is recommended that your TJ be taken to a reputable alignment shop that understands 4WD vehicles and has experience with their alignment parameters.

There are three basic alignment angles: camber, caster, and toe-in. Camber is pre-set by the manufacturer and cannot be adjusted. If the camber angle is off, this could indicate that something is bent.

Caster might be changed with the installation of our suspension kit. It is recommended that the factory specifications be maintained. If this cannot be obtained with the caster adjustment eccentrics found on the lower control arms, you may opt for our FlexArms (flexible lower control arms) which allow for additional adjustment.

Toe-in is also important for tire wear. Toe-in may be affected on a three-inch kit, and will be affected on a four-inch kit. It has been recommended that the toe-in be set to minimum factory specifications if you go to the larger tire and wheel set up.

### Factory Alignment Specifications

ADJUSTMENT	PREFERRED	RANGE
Caster	7	+/- 1.0
Camber (fixed angle)	-2.5	+/- 0.63
Wheel Toe-In	.15	+/- 0.15
Thrust Angle	0	+/- 0.15

### Optional Accessories Available

#### Suspension System Kit (part #ST)

includes front/rear lower flexarms, steering box skidplate, and sway bar disconnects.

#### TeraFlex FlexArms

front/rear lower flexarms (part #FATJ)

front upper control arms (part# FAFU)

rear upper control arms (part# FARU)

#### Steering Box Skidplate (part #SBSPT)

#### Sway Bar Disconnects (part #QDFT)