

97-06 Jeep TJ Wrangler 4" Suspension Lift

Front

With the vehicle in park (auto) or in gear (standard), chock the rear wheels and raise the front axle with a jack. Support with jack stands on the frame rails just behind the lower control arms. Remove the front tires.

Remove the sway bar end link from the axle using a T-55 Torx bit and wrench. Remove the end link from the sway bar by firmly striking the end of the sway bar as seen in below.



Place the floor jack under the front axle to provide support. Remove the factory shock. Retain the factory mounting hardware ((2) 13mm bolts) these will be reused with the Mammoth shock.



Mark the factory eccentric bolt on both the washer and the control arm for ease of re-installation. If applicable, remove the ABS sensor wires and clips from the inside of the factory control arm, these will be reused.

Next, remove the factory track bar.



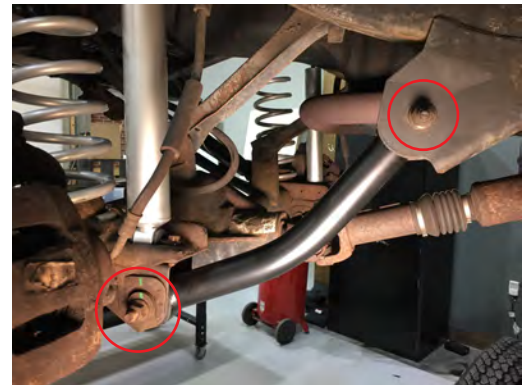
Remove the 13mm spring retaining clamp from the lower spring mount. Then slowly lower the axle to remove the factory coil spring. ****Note:** A spring compressor may be needed to remove the factory spring.



Using a 21mm socket, loosen and remove the lower control bolts. ****Note:** Removal of the driver side eccentric bolt will take patience but it can be done.



Install the new lower control arm reusing the factory hardware. ****Note:** Loosely install the factory hardware, you will tighten the hardware once the vehicle is back on the ground.



If applicable, drill the lower control arm to re-install the ABS clips using a 23/64" drill bit.

Install the new coil spring, making sure to seat the spring properly in the spring perch. See picture. ****Note:** A spring compressor will be needed to install the new spring.



Install the supplied shock using the factory lower bolts. Use the supplied washers and bushings on the upper mount.

Stacking Order: large washer, rubber bushing, and then the strut will pass through the chassis mounting location. Followed by another rubber bushing, large washer, and the strut nut.

Re-install the factory spring clamp.



Drill the factory track bar bracket, measure from the center of the factory hole 3/4 of an inch to the driver side of the vehicle. Drill a new 7/16" hole being sure to drill level through both sides of the bracket.
**Note: Do not reinstall the track bar until the vehicle is back on the ground.



Install the new sway bar end link brackets to the sway bar using the supplied 3/8" x 1.25" bolt, washer, and nut.

Lubricate the provided 12mm sleeves and insert them into both the top and bottom of the sway bar end link.

Reinstall the end link with the factory lower bolt and washers. Use the provided 1/2" bolt, washer, and flange nut. **Note: The flange nut needs to be facing outward towards the tire for frame clearance.



Re-install the wheels torquing the lugs nuts to the factory spec. Remove the jack stands and lower the vehicle.

Align the marks on the eccentric bolts, tighten the lower control arm bolts to 130 ft/lbs.

With the steering wheel unlocked, ensure the body is centered over the axle by turning the steering wheel side to side until the track bar lines up with the newly drilled hole. Re-install the track bar using the factory hardware and the factory torque spec.

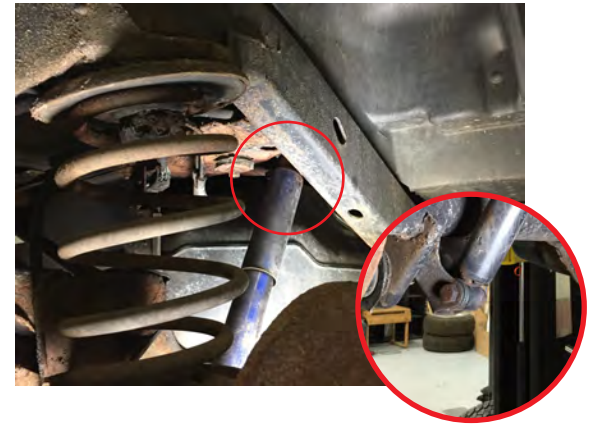


Rear

Chock the front wheels and raise the rear of the vehicle. Support vehicle with jack stands just in front of the rear control arms. Remove the wheels.



Place the floor jack under the axle to provide support. Remove the factory shock. Retain the factory hardware as it will be reused.



Remove the sway bar end link from the frame. Remove the end link from the sway bar.



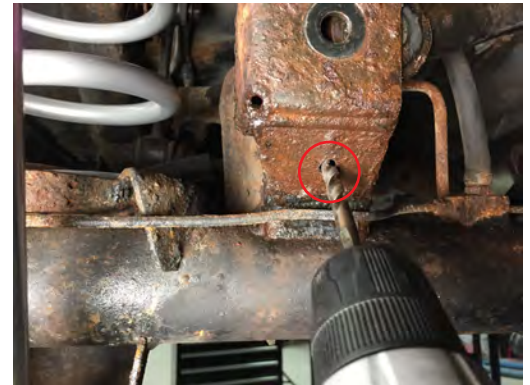
Remove the track bar from the driver side axle. The factory hardware will be reused.

Slowly lower the rear axle to remove the factory springs. **Note: The differential vent tube may need to be unclipped to prevent strain when lowering the axle. A spring compressor may be needed to remove the factory spring.

Remove the plastic clips holding on the plastic track bar mount cover and discard.



Using the supplied track bar relocation bracket as a template, enlarge the factory plastic clip holes on the top of the bracket and the bottom of the bracket with a 5/16" drill bit.



Loosely install the track bar bracket using the supplied 5/16" x 1" bolts, washer, lock washer and nut. Re use the factory bolt and the provided 1/2" x 1 1/2" sleeve. If the sleeve doesn't fit, lightly file one end of the sleeve until it fits. Then tighten down all hardware.



5/16" hardware to 15ft/lbs.
Factory track bar bolt to 75ft/lbs.

****Note:** Do not install the track at this time.

Using a 21mm socket, loosen and remove the lower control bolts. Remove the lower control arms and re-install the new lower control arms. ****Note:** Loosely install the factory hardware, you will tighten the hardware once the vehicle is back on the ground.

Install the new coil spring. ****Note:** A spring compressor will be needed to install the new spring.



Install the supplied shock using the factory hardware.

**Note: The lower mount may need to be spread open to accept the new shock. These brackets get pulled together with the factory hardware.

If rear sway bar is disconnected, a shock relocation bracket may be required to prevent interference.



Install the supplied straight sway bar end links, the mount on the sway bar uses the 10mm ID insert. The top mount will use the factory fastener with no insert. Install the sway bar mount to the sway bar using the supplied 10mmx65mm bolt, washer and nut.



Re-Install the wheels, torque lug nuts to factory spec.

Lower the vehicle to line up the track bar lines up with the new mounting point. Install using the supplied 1/2" x 2 1/2" bolt, washers, and lock nut.

Tighten the lower control arm bolts to 130 ft/lbs.

Tighten the track bar to 75 ft/lbs.



Transfer case drop brackets installation:

- Vehicle in neutral with the wheels chocked so it doesn't roll.
- Support the skid plate with a floor jack.
- Loosen the bolts on both sides some so that you can lower one side of the skid plate at a time.
- Remove the bolts on one side at a time, using the floor jacket gently lower the skit plate so there is enough room to insert the spacer between the skid plate and frame.
- Install the spacer using the supplied bolt ensuring the larger holes of the spacer point up.



Shifter Linkage Bracket

Fold back the carpet on the driver side and remove the (4) 10mm bolts.



Remove the (2) 10mm bolts holding the shifter linkage clamp to the chassis bracket. Reuse these bolts to mount the drop down bracket to the chassis bracket.

Using the supplied 7/16"x1" bolts and lock nuts, mount the linkage clamp to the drop down bracket.



In some cases, the linkage may hit the bracket. In this case the linkage needs to be slightly bent out of the way in order to clear the bracket. Make small adjustments at a time until the linkage no longer makes contact with the bracket.



Floor Pan Modifications (Manual Transmission Only)

In some cases lowering the transmission mount will cause shifter interference on the floor pan. First test drive the vehicle to determine if the shifter is making contact with the floor pan.

Symptoms will include:

- Popping out of gear
- Difficulty shifting gears (2, 4, reverse)

If this is the case, you will need to slightly trim the floor pan.

- Remove the center console.
- Remove the (4) screws holding down the shifter boot.
- Place the transmission in 4th gear and trim until there is 1/8" clearance between the shifter and the floor pan.
- Reposition the shift boot, drill new mounting hole to mount the shifter boot to cover the trimmed opening.

Check and adjust transfer case engagement as needed.

To adjust the transfer case linkage:

- Begin with putting the vehicle in 4L.
- Locate the linkage under the vehicle.
- Loosen the 13mm bolt, and push the rod all the way forward. Tighten bolt.



Prior to Driving

- Professional Alignment
- Adjust Headlights
- Ensure adequate brake line slack when sway bars are disconnected.

Maintenance:

- First 200 miles, re-torque all fasteners.
- Every 3000 miles, re-torque all fasteners, and visually inspect suspension bushings for premature wear.

Special consideration:

With any change to the factory suspension geometry there will be increased wear and tear, things such as suspension bushings etc. Ensure vehicle safety by frequently inspecting wear and tear components.

TJ Hardware List

Front Sway Bar Bracket

- (2) Front Sway Bar Conversion Brackets
- (2) 3/8" x 1 1/4" Bolt
- (2) 3/8" Washers
- (2) 3/8" Flanged Nut

Front Sway Bar

- (2) Offset Sway Bar End Links
- (4) 1/2 ID Sleeves
- (2) 1/2" x 2 1/2" Bolts
- (2) 1/2" Flanged Nuts
- (2) 1/2" Washer

Shift Linkage Bracket

- (2) 1/4"x 3/4" Bolt
- (2) 1/4" Lock Nut
- (1) Shift Linkage Bracket

Skid Plate Spacer

- (2) Drop Down Spacers
- (2) Cross Member Spacer (03-06 Automatic transmission only)
- (6) 1/2"-13 Bolts (97-02)
- (6) Washers(97-02)
- (8) M12x1.75 Bolts (03-06)

Rear Sway Bar

- (2) Straight Sway Bar End Links
- (2) 10mm ID Sleeves
- (2) 10mm x 65mm Bolts
- (2) 10mm Lock Nuts
- (2) 10mm Washers

Rear Track Bar Bracket

- (1) Track Bar Relocation Bracket
- (2) 5/16" x 1" Bolt
- (2) 5/16" Nut
- (2) 5/16" Lock Washers
- (2) 5/16" Washer
- (1) 1/2" x 2 1/2" Bolt
- (2) 1/2" Washers
- (1) 1/2" Lock Nut
- (1) 1/2" ID Sleeve (1.5" long)

Control Arms

- (4) Lower Control Arms

Springs

- (2) Front Springs (Long Pair)
- (2) Rear Springs (short Pair)

Shocks

- (2) Front (Stem Mount)
- (2) Rear (Flange mount)