

WRANGLER TJ INSTALLATION INSTRUCTIONS

1997-02 Models Kit# TJ251K/TJ401K
2003-06 Models Kit# TJ253K/TJ403K



Before beginning the installation, read these instructions and the enclosed driver's "WARNING NOTICE" thoroughly and completely. Also affix the "WARNING" decal in passenger compartment in clear view of all occupants. If any of these items are missing from this instruction packet, do not proceed with installation, but call SKYJACKER® to obtain needed items. If you have any questions or reservations about installing this lift kit, call SKYJACKER® at 318-388-0816 for Technical Assistance or Customer Service departments.

Due to the inconsistency of vehicles when manufactured and the various options available, the amount of actual lift gained by this lift kit will vary.

IMPORTANT NOTES:

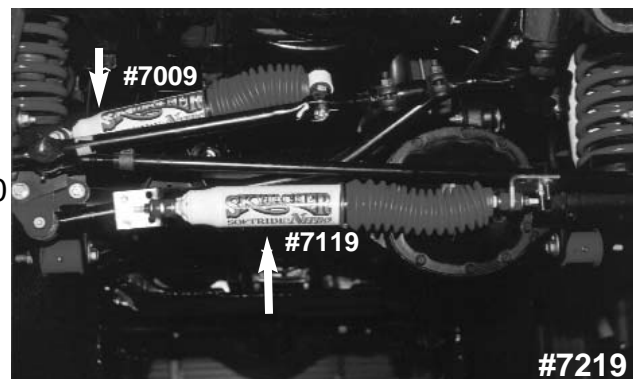
- 6-Speed Transmission models may require additional modifications. Options are Trimming of the console or bending of the shifter, raising the transfer case to a 1" drop (4 inch kit).
- On models outfitted with extra bolt-on equipment and accessories, SKYJACKER® offers new coil spring isolator pads made from polyurethane to boost ride height 3/4", front or rear (order part #SIP275, pair).

PRE-INSTALLATION NOTES:

- A professional mechanic is recommended to perform the installation.
- Read the instructions *carefully* and *study* the photo illustrations before attempting the installation.
- Secure and properly block the vehicle on a level concrete or asphalt surface.
- Always wear safety glasses.

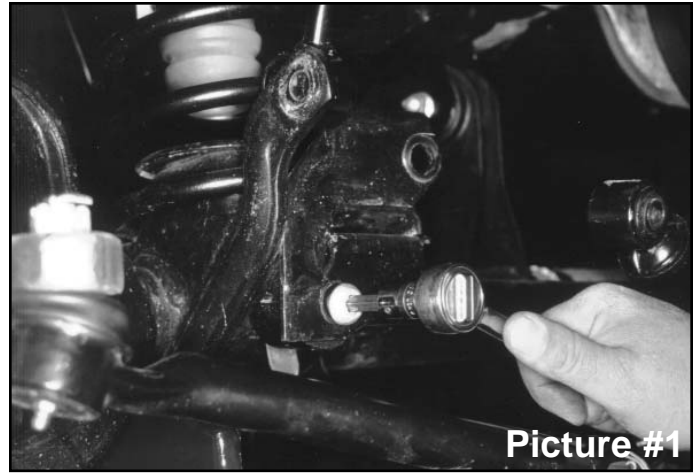
ACCESSORIES:

- | | <u>Part #</u> |
|--|---------------|
| • Heavy Duty OEM steering stabilizer | #7009 |
| • Single steering stabilizer kit w/bolt-on brkts | #7119 |
| • Dual steering stabilizer kit w/bolt-on brkts | #7219 |
| • Front sway bar extended double disconnect end links (included in 4" lifts) | #SBE120 |
| • Rear sway bar extended end links (included in 4" lifts) | #SBE500 |
| • 3/4" Spring isolator pad spacers, pr | #SIP275 |
| • Rear Driveline adjustable cam bolts | #CAM500 |
| • High Clearance Skid Plate | #SP28 |
| • Slip Yoke Eliminator Kit | #FIX231 |

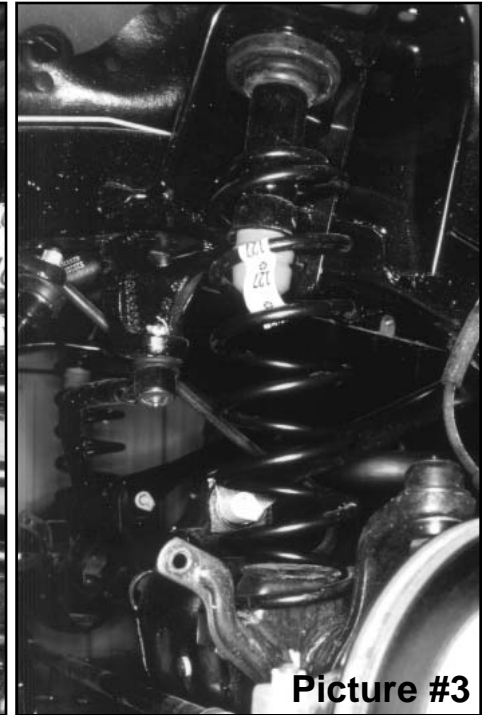


FRONT:

1. Secure and properly block the tires of vehicle on a level concrete or asphalt surface.
2. Jack up front of vehicle and install jack stands under frame behind the lower link rear brackets. Remove tires and front shocks. Now remove the track bar bolt on passenger side end only and lower track bar down (it may be necessary to pry bar loose). (See picture #1.)



3. Remove drag link assembly from pitman arm and lower it down. (For 4" lifts, remove pitman arm also.) Now remove the sway bar end link's lower bolt at axle housing on both sides (see picture #2). Lower front axle down until coil springs become loose. Remove the bottom bolt and clip from left front coil spring (see picture #3).

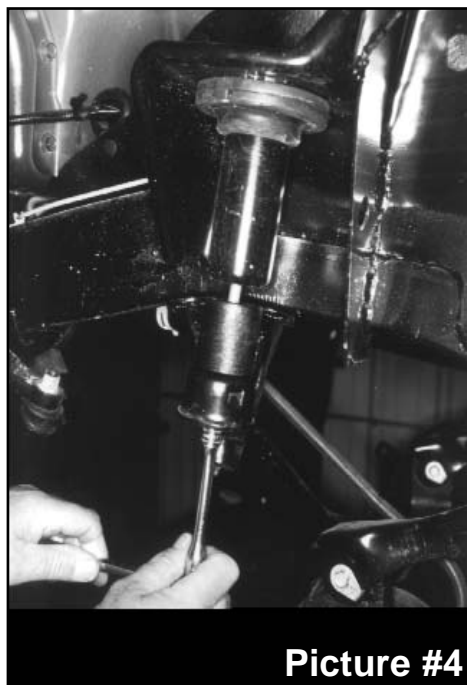


4. Now remove both coil springs. Remove upper bump stop (use channel lock pliers working bump stop back and forth).

2 1/2" Lifts: remove bolt from inside bump stop cup. Install bump stop spacer and original cup using 10mm x 2 3/4" long bolts furnished. Reinstall factory bump stop. (See picture #4.)

4" Lifts: Install new red polyurethane bump stops.

5. Install new coil springs. Raise jack up so that enough load is applied to hold coil springs in place. Reinstall spring bolt and clip at bottom of left front coil.
6. Install new shocks. (See picture #5.) On 4" lifts, install new drop pitman arm at this time. Reinstall drag link to pitman arm and tighten (be sure to install cotter pin). Install tires



and lower front to the ground.

7. 2½" Lifts: Reattach track bar in original axle mount (it may be necessary to rotate steering wheel left or right to align bolt hole).

4" Lifts: Locate the front track bar mounting bracket on the axle, measure straight across to the right (inward) ¾" and put a mark. Center punch and drill a 7/16" hole through both front and back plates, keeping the drill as straight and square to the bracket as possible (see picture #6). Reattach track bar (it may be necessary to rotate steering wheel left or right to align bolt hole).

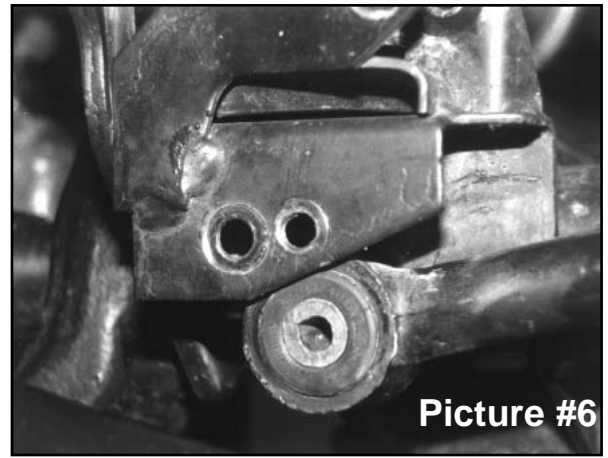
NOTE: For Best handling and steering, it is recommended to install the replacement adjustable track bar (Part# TBA10) shown on pg 8.

8. 2½" Lifts: Reinstall original sway bar end links on both sides and tighten (SBE120 double disconnects available).

4" Lifts: **NOTE:** Sway bar end must be drilled or filed to allow clearance for the provided 7/16" x 1 1/2" bolt (see arrow in photo #7). The new end link mounting bracket should be mounted to the bottom of the sway bar with the bolt pointing up through the sway bar and the nut and 7/16 USS washer applied on top (see picture 7). Apply lithium grease to the polyurethane bushings. Insert them into the end link eyes along with the metal sleeve (#54314). The top 1/2" x 2 1/2" bolt connecting the bracket to the end link must be installed with the nut to the outside of the vehicle to provide adequate clearance to the frame. Install new double disconnect end links on the inboard side of the axle bracket, being sure that the offset is turned inward. (see picture #7A).

9. At the front lower link adjustment cams, mark (with an ink marker, or scribe a mark) the vertical line on the cam and the reinforcement bracket for reference so you can realign the marks after installation. (See picture #8.)

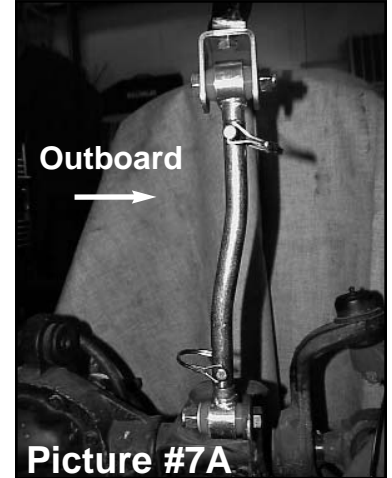
10. Install drive-in zirc fittings in each end of links by using a 1/4" socket over the fitting, tap with a hammer until fitting is completely tapped in.



Picture #6

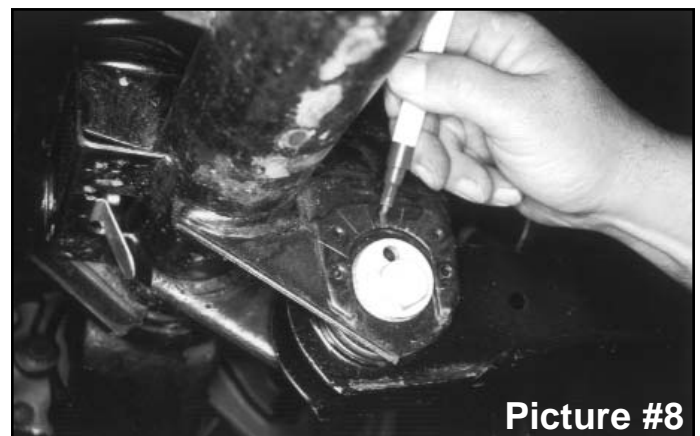


Picture #7

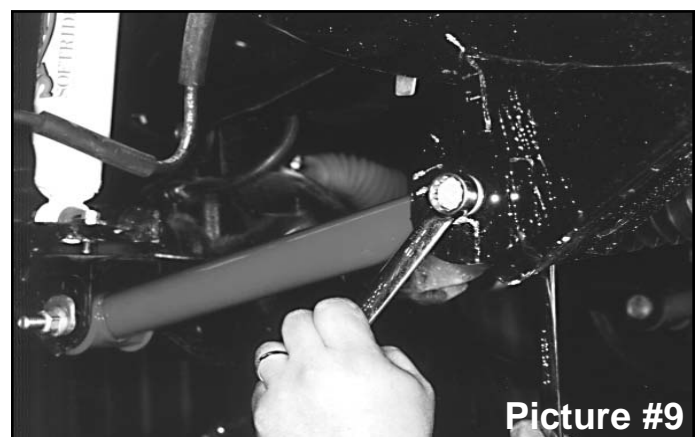


Picture #7A

Pictures 7 and 7A apply to 4" lifts only.



Picture #8



Picture #9

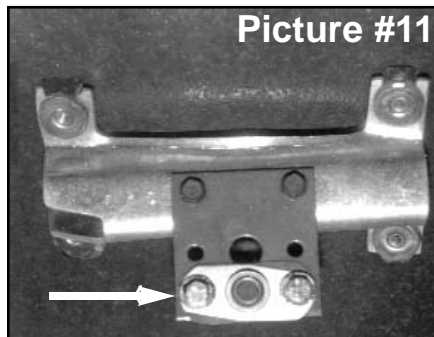
11. Install poly bushings #2617 and steel sleeves (2.645" long) in each end of links. Be sure to slightly grease them prior to the installation. Remove and replace the lower links with new Skyjacker® extended links (one side at a time). See picture #9. Only start these bolts and nuts, do not tighten at this time. NOTE: so that the links may be greased while on the vehicle, install them with the zirc fittings positioned as follows: **front** eye of link has fitting pointing out the **end**, **rear** eye of link should have the fitting pointing **down**.

Once both links are installed, tighten each lower link being sure to realign the marks on the eccentric cams. Thoroughly grease all zirc fittings.

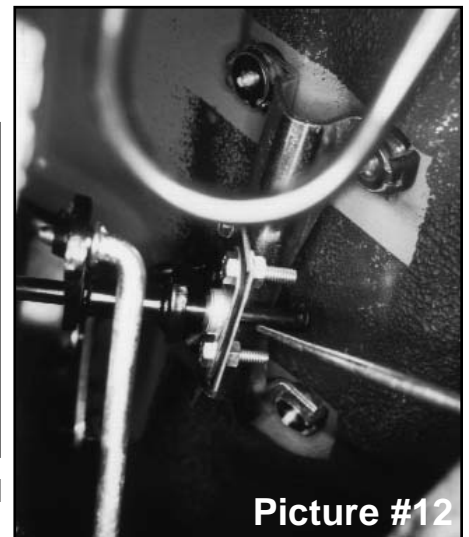
12. Place a jack under transfer case crossmember and remove the 4 screws that mount the transfer case pivot assembly from the body of vehicle (it will be necessary to roll floor mat back to gain access to bolts).



13. Remove the 3 bolts on each side of transfer case skid plate and lower down enough to install new square tube spacers between skid plate and frame. 1997-02 models use the flat socket head tapered bolts supplied. **(2003 models will use the 12mm bolts and washers supplied)**. Also apply a few drops of supplied thread lock compound on bolt threads prior to installing. Tighten bolts to 75-80 ft.lbs. (Picture #10)



- * **On 2003 models, also remove the 2 engine skid plate bolts. Install the small square tube spacers at the mounting points on the frame rails, along with the 12mm bolts supplied. 2.5" kits will use the 1" square tube spacers. 4" kits will use the 1.5" spacer.**



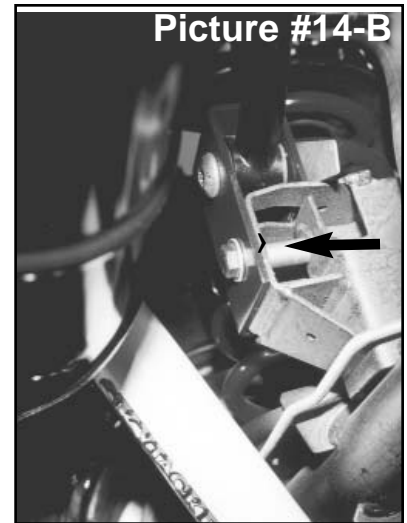
14. Install the new transfer case linkage pivot drop bracket to stock pivot bracket using stock screws. Using the two 1/4 x 1" bolts with a flat washer and self-locking nut, bolt the ball swivel bracket (arrow in picture #11) to new drop bracket (bracket now has 2 sets of holes: bottom holes for 4" lift as shown, or next to bottom for 2 1/2" lift). Placing pivot bracket back in location, start end of rod through ball swivel. Now bolt bracket back into location with original hardware (picture #12).



REAR:

1. Place a floor jack under rear axle and raise vehicle. Place jack stands under the frame ahead of lower link bracket to support vehicle and remove the rear tires and shock absorbers.
2. Remove rear track bar and sway bar end link bolts at axle housing. Lower rear axle down to remove coil springs.

3. After removing both coil springs, remove the bump stops (it may help to use channel lock pliers working bump stop back and forth). Remove 10mm bolt from inside bump stop cup. Install bump stop spacer and original cup using furnished 10mm bolts. Reinstall factory bump stop. (See picture #13.)



4. Referring to pictures 14 A & B, place new rear track bar relocation bracket in position and place track bar in new bracket (do not start its bolt). Start the new 12mm x70mm (2³/₄" long) bolt through the original lower track bar location using the supplied spacer sleeve (#54314) with a self-locking nut. Tighten bolt to hold bracket in place.

Now drill a 1/2" hole through the hole in end of new bracket. Remove the 12mm x 70mm bolt, installed before drilling, and install a 1/2 x 1 1/2" bolt, with a washer on each side, through the new drilled hole, and then tighten with self-locking nut. Reinstall the new 12mm x70mm (2³/₄" long) bolt through the original track bar location using the supplied spacer sleeve (#54314, see arrow in photo #14-B) with a self-locking nut and tighten. Still do not bolt up the track bar yet (must wait till on the ground).



5. Install new coil springs. Raise jack up so that enough load is applied to hold coil springs in place.

6. Install drive-in zirc fittings in each end of links by using a 1/4" socket over the fitting, tap with a hammer until fitting is completely tapped in. Install poly bushings #2617 and steel sleeves (2.645" long) in each end of links. Be sure to slightly grease them prior to installation.

7. Remove and replace the lower links with new Skyjacker® extended links (one side at a time). Only start these bolts, do not tighten at this time. NOTE: so that the links may be greased while on the vehicle, install the rear lower links with the zirc fittings positioned as follows: **rear** eye of link has fitting pointing out the **end**, **front** eye of link should have the fitting pointing **down**. (See picture #15, Black arrow.)



8. Attach track bar into new relocation bracket on axle then into the original upper location on passenger side frame (use original bolts, but do not tighten bolts at this time).

9. 2 1/2" Lifts: Reattach sway bar links to axle housing and skip to step 10, unless purchased extended rear sway bar end links.

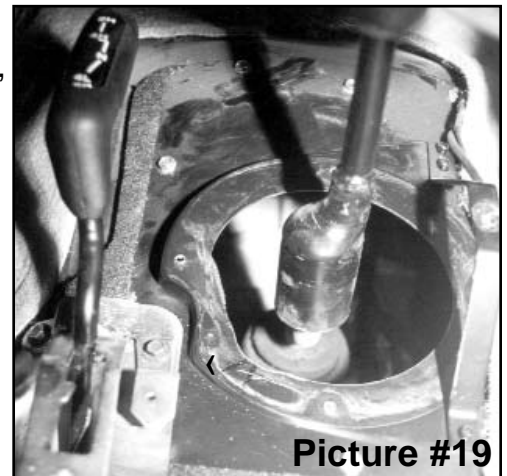
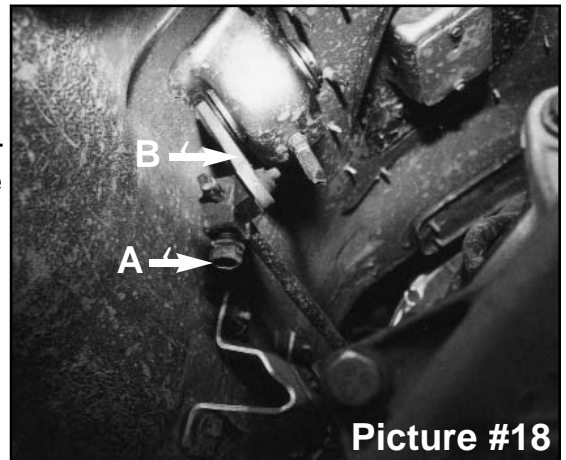
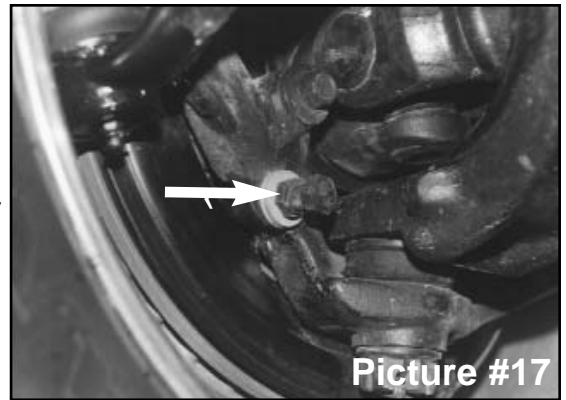
4" Lifts: Assemble the rear extended sway bar links by applying grease to the polyurethane bushings and inserting them into each eye along with a sleeve #54587. Install using original bolts. (See picture #15, White arrow.)

10. Install new shocks (see picture #16), install tires and lower rear to the ground. Now tighten the rear track bar bolts on each end and also the new bolt in relocation bracket. Thoroughly grease all zirc fittings in suspension links.

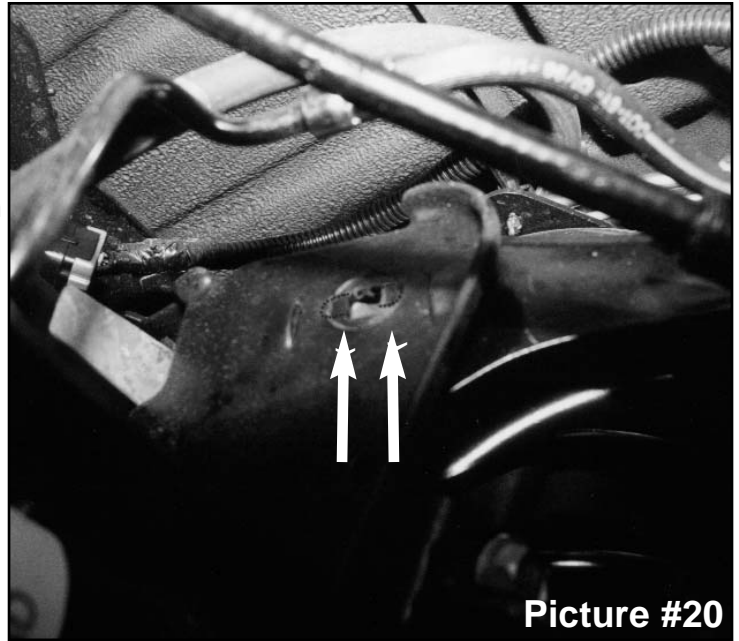
WARNING: On these Wrangler TJ Jeep models, only the shock absorbers limit the extended position of the front and rear suspension! The use of shocks other than those supplied in this system, may cause coil disengagement, adverse steering angles, brake hose failure, driveline component failure, and/or other related component failure! The use of other shocks will void your Skyjacker® warranty!

FINAL NOTES:

- Check clearance between inner side wall of tires and links. It may be necessary to adjust steering stops (by adding 2-3 washers on bolt) to eliminate interference. (See picture #17)
- Check the transfer case shifter to see if it will move to **4L**. If not, the linkage will need adjusting as follows. Place the shifter in **4L**, loosen adjustment bolt ("A" arrow in picture #18), and push the linkage ("B" arrow in picture #18) forward until it stops. Now retighten adjustment bolt. Check to be sure 4WD works properly.
- On 5 speed models, engage the clutch and check the transmission shifter to see if it will go into 2nd gear. If not, the shifter housing on the floor will need trimming. Remove center console, pull back carpet, remove the screws holding shifter boot to floor and trim or grind floor board at arrow in picture #19 until sufficient clearance is obtained. Shift through each gear to check clearance at this time. Now reinstall boot, carpet and console.
- Front end realignment is necessary so after the lift is installed have a qualified alignment center realign front end to factory specifications.
- Rotate driveshafts and check for interference at differential yoke and cardan joint. If necessary, lightly dress casting(s) and/or U-joint tabs in order to eliminate binding.
- Ensure there is adequate clearance between exhaust and brake lines, fuel lines, fuel tank, floor board, and wiring harnesses. Check steering gear for interference and proper working order. Inspect brake lines for damage and adequate clearance. Test brake system before driving.
- With the vehicle on the floor, cycle steering lock to lock and inspect steering, suspension, driveline and brake line systems for proper operation, tightness and adequate clearance.
- Have headlights readjusted to proper settings



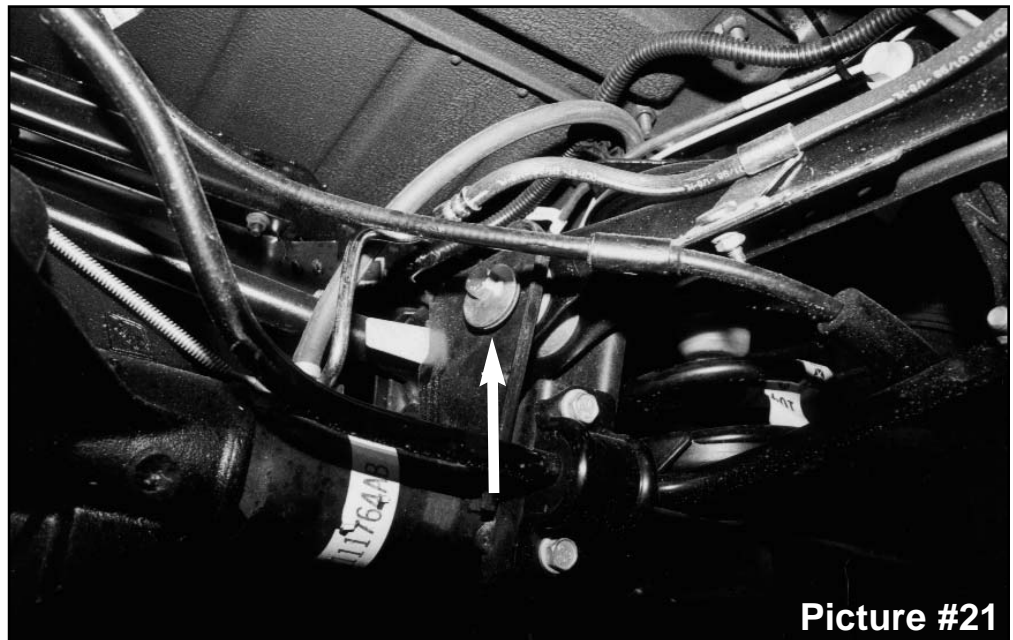
- Driveline vibrations can be caused from the removal or addition of the hardtop which changes the rear vehicle weight, and the rear height, which affects the rear drive shaft pinion angle. Skyjackers, adjustable eccentric upper cam-bolt kit, Part # CAM500, will eliminate such vibrations by adjusting / rotating the rear pinion angle up or down as needed.
- If you purchased the optional (Part # CAM500) Skyjacker® TJ rear driveline cam-bolt kit, install as follows. Remove the bolt in rear upper link (the end toward rear bumper) and raise link up out of mounts.



Picture #20

Note the hole is notched so that it can be a slotted hole. Knock out the notches on the front and rear half of the holes on each side of the link mounts (see arrows in picture #20). Repeat on other side.

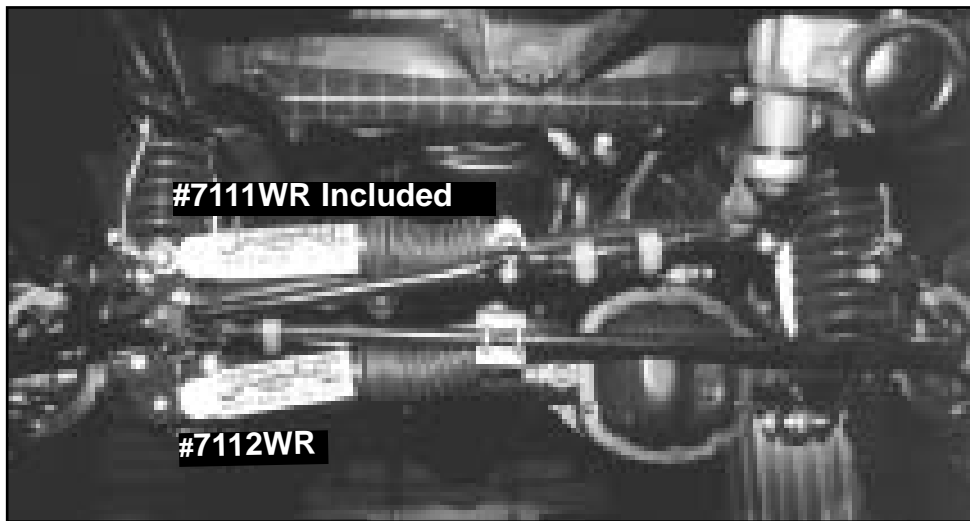
Lower links back into mounts. Install new eccentric cam-bolts, eccentric washers and nuts on each link and tighten. These bolts can be rotated to adjust the axle pinion angle to eliminate any driveline vibration.



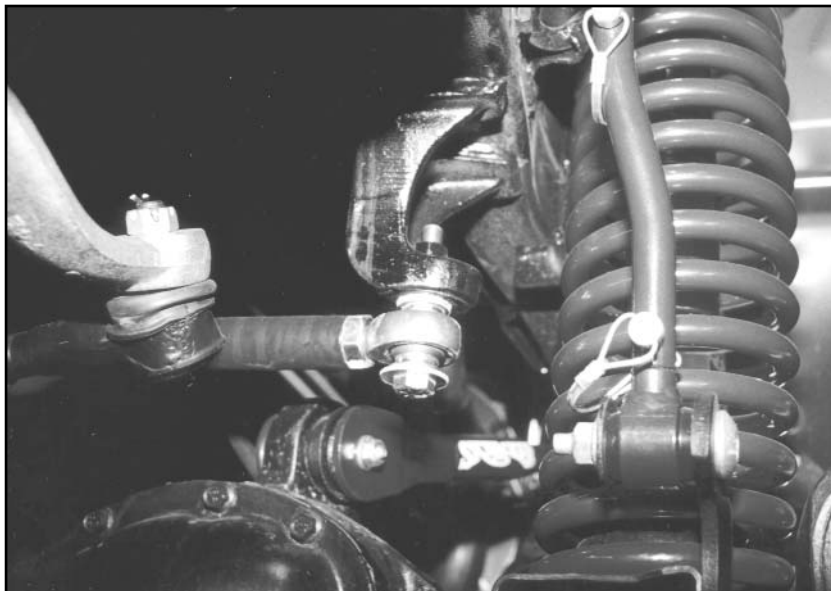
Picture #21

ADJUSTABLE REPLACEMENT TRACK BAR Fits any TJ lift!

- Uniquely designed replacement front track bar relocated from bottom of axle to top, keeping a straighter plain to allow for maximum articulation and reduced bump steer.



- Swivel 3 pc. Rod End Joint horizontal mounting at the frame allowing a tremendous 24" of track bar articulation.



- Heavy Duty steering damper and relocation brackets are included (#7111W).

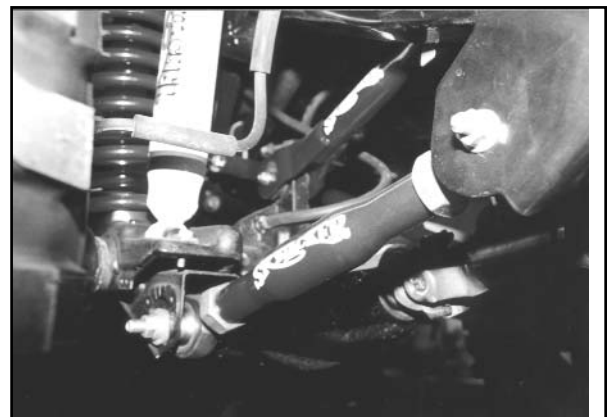
- Double disconnect extended sway bar end links also available!

- Additional steering damper available that mounts in the original track bar location (#7112W).

Complete FLEX SERIES™ Lifts

Include upgrades:

- Replacement Adjustable Track Bar
- Lower Control Links (front and rear) with 3 pc. rod end joints and adjustable in length
- Upper Control Links (front and rear) with 3 pc. rod end joints and adjustable in length
- Replacement Front Adjustable Track Bar
- Heavy Duty Replacement Steering Damper
- Extended Double-Disconnect Sway Bar End Links (front and rear)
- Available in Single Flex and Double Flex options



SKYJACKER®

THE BEAR OF SUSPENSIONS

Skyjacker® 97-05 Jeep Accessories

- Steering Box Skid Plate Part # SSP10



- Heavy-Duty Tie Rod Tube Part# TR300



- High Capacity Oil Pan
(97-02 Models w/ Automatic Transmission)
Part# OPA999



- Shifter Relocation Bracket
(Included in Rock Ready® Kits)
Regular TJ with NP231 Transfer Case
Part# JSRB231A
Unlimited, Rubicon and Rubicon Unlimited
Part# JSRB2315U



- 1" Motor Mounts Part # MM100



- Rear Shock Relocation
Brackets Part# TJRSB10



- Heavy-Duty Limiting Straps

LS16K 16" LS28K 28"
LS20K 20" LS32K 32"
LS24K 24"



- Rock Ready® Grab Handles

RRGH20-K 2" Black
RRGH20-R 2" Red
RRGH30-K 3" Black
RRGH30-R 3" Red



- C.V. Yoke (Rubicon Models Only)
Part# CVR680



- High Clearance Transfer Case Skid Plate.
97-02 Models Part# SP28
03-06 TJ Part# SP283/Unlimited SP284



- Heavy-Duty Adjustable Rear Sway Bar
Part #RSBA410



- Stainless Steel Brakelines 4 - 10" Lift
Front Part# FBL44 Rear Part# RBL98



Contact your distributor and get your Skyjacker® Jeep Accessories Today!!