



# 97-06 Jeep TJ Wrangler 4" Suspension Lift Installation Instructions

### REQUIRED TOOL LIST:



- Safety Glasses
- Metric / Standard Wrenches & Sockets
- Drill / Assorted Drill Bits
- Floor Jack
- Jack Stands
- Measuring Tape
- Torque Wrench

Before beginning the installation, thoroughly & completely read these instructions & the enclosed driver's WARNING NOTICE. Affix the WARNING decal in the passenger compartment in clear view of all occupants. Please refer to the Parts List to insure that all parts & hardware are received prior to the disassembly of the vehicle. If any parts are found to be missing, contact SKYJACKER® Customer Service at 318-388-0816 to obtain the needed items. If you have any questions or reservations about installing this lift kit, call SKYJACKER® Technical Assistance at 318-388-0816.

Make sure you park the vehicle on a level concrete or asphalt surface. Many times a vehicle is not level (side-to-side) from the factory & is usually not noticed until a lift kit has been installed, which makes the difference more visible. Using a measuring tape, measure the front & rear (both sides) from the ground up to the center of the fender opening above the axle. Record this information below for future reference.

Driver Side Front: \_\_\_\_\_ Passenger Side Front: \_\_\_\_\_

Driver Side Rear: \_\_\_\_\_ Passenger Side Rear: \_\_\_\_\_

### IMPORTANT NOTES:

- This lift is determined from the amount of lift to the front of the vehicle, while only lifting the rear to a position level with the front.
- If larger tires (10% more than the stock diameter) are installed, speedometer recalibration will be necessary. Contact your local Jeep dealer or an authorized dealer for details.
- After installation a qualified alignment facility is required to align the vehicle to factory specifications.
- 6-speed transmission models may require additional modifications. The options are trimming of the console or bending of the shifter.
- On models outfitted with extra bolt-on equipment & accessories, SKYJACKER® offers new coil spring isolator pads made from polyurethane to increase the ride height 3/4", front or rear (Part # SIP275, pair).

## Kit Box Breakdown:

### Part #: TJ401BH

<u>ITEM#</u>	<u>DESCRIPTION</u>	<u>QTY</u>
TJLL24-L	JEEP LWR LINKS TJ/XJ/ZJ 2-4	4
TJRTB	TJ REAR TRACK BAR BRACKET	1
JA750	PITMAN ARM TJ,YJ W/PWR STRG	1
HB-LL175	HDWR BAG/ LWR LINK 1.75"ID	2
TCLTJ40	TRANSFER CASE LWR TJ 4"	1
SBE401-L	SWAY BAR END LINK	2
HB-SBE120	HDWR BAG:SBE120,225,228,401	1
SBE500	SWAY BAR END LINKS REAR PR	1
BPS30-B	BUMP STOP SPACER BLK, 3"	4
10MMX90MMB	10 X 90 METRIC BOLT/10.9	4
TCL15SX2012-R	TRANSFER CASE LWR 1.5SQX20	1
TCL15SX2358-L	TRANSFER CASE LWR 1.5SQX23	1
H7025	HYDRO SHOCK W/RED BOOT	2
H7028	HYDRO SHOCK W/RED BOOT	2

### Part #: TJ403BH

<u>ITEM#</u>	<u>DESCRIPTION</u>	<u>QTY</u>
TJLL24-L	JEEP LWR LINKS TJ/XJ/ZJ 2-4	4
TJRTB	TJ REAR TRACK BAR BRACKET	1
JA750	PITMAN ARM TJ,YJ W/PWR STRG	1
HB-LL175	HDWR BAG/ LWR LINK 1.75"ID	2
TCLTJ43	TRANSFER CASE HDWR BAG/ 4"	1
SBE401-L	SWAY BAR END LINK	2
HB-SBE120	HDWR BAG:SBE120,225,228,401	1
SBE500	SWAY BAR END LINKS REAR PR	1
BPS30-B	BUMP STOP SPACER BLK, 3"	4
10MMX90MMB	10 X 90 METRIC BOLT/10.9	4
TCL15SX2234-1	TRANSFER CASE LWR 1.5SQX22	2
TCL15SX2-1	TRANSMISSION LWR 1.5SQX2"	2
H7025	HYDRO SHOCK W/RED BOOT	2
H7028	HYDRO SHOCK W/RED BOOT	2

### Part #: TJRTB

<u>ITEM#</u>	<u>DESCRIPTION</u>	<u>QTY</u>
TJRTB-B	TJ REAR TRK BAR RELOC BRKT	1
HB-TJRTB	HDWR BAG:2.5-4"RR TRAC BRKT	1

**Hardware Bag Breakdown:****HB-TJRTB                    HARDWARE BAG**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
SSTJRTB	SPACER SLEEVE FOR TJRTB	1
12X70MMB	12 X 70 METRIC BOLT/10.9	1
12MMN	12 MM NUT (METRIC)	1
12X112FTB	1/2 X 1 1/2 FINE THRD BOLT	1
12FTN	1/2-20 FINE N/I LOCK NUT	1
12SAEW	1/2 SAE WASHER	3

**Hardware Bag Breakdown:****HB-LL175                    HARDWARE BAG**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
2617	BUSHING DGE RAM LWR LNK	8
LS2645	LINK SLEEVE 2.645" LOWER	4
ZF316	ZERK FITTING ALEMITE, 3/16"	4

**Part #: TCLTJ40**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
12X3FSB	1/2 X 3 FLAT SOCKET BOLT	6
TCL24-B	TRANS CASE LNKG RELOC B-TJ	1
14X1FTB	1/4 X 1 FINE THD BOLT G8	2
14FTN	1/4-28 FINE N/I LOCK NUT	2
14SAEW	1/4 SAE WASHER	2
LT100	NUTS N' BOLTS 427 1 ML TUBE	1

**Part #: TCLTJ43**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
12MMX80B	12 X 80 METRIC BOLT/10.9	8
12SAEW	1/2 SAE WASHER	8
TCL24-B	TRANS CASE LNKG RELOC B-TJ	1
14X1FTB	1/4 X 1 FINE THD BOLT G8	2
14FTN	1/4-28 FINE N/I LOCK NUT	2
14SAEW	1/4 SAE WASHER	2
LT100	NUTS N' BOLTS 427 1 ML TUBE	1

**Hardware Bag Breakdown:**

**HB-SBE120                      HARDWARE BAG**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
SBB2	SWAY BAR U-BRACKET FOR SBE	2
HOURGLASS 5/8	HOURGLASS 5/8 SHOCK BUSHING	4
141509	ES25 SLEEVE/403646 1.50"	4
12X212CTBG5	1/2 X 2 1/2 CRS THD BLT,GR5	2
10X35MMB	10MM X 35 METRIC BOLT/10.9	2
12CTCLN	1/2"COARSE-CENTER LOCK NUT	2
10MMN	10 MM N/I LOCKNUT	2
38SAEW	3/8 SAE WASHER	2
12SAEW	1/2 SAE WASHER	2

**Part #: SBE500**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
SBE500-L	SWAY BAR END LINK,REAR SGL	2
HB-SBE500	HARDWARE BAG FOR SBE500	1

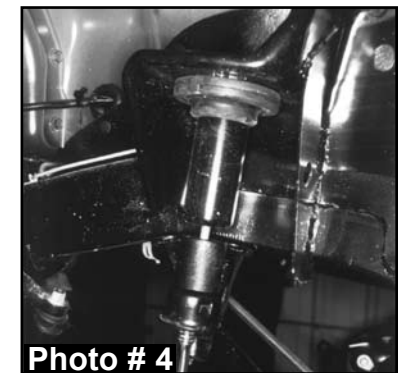
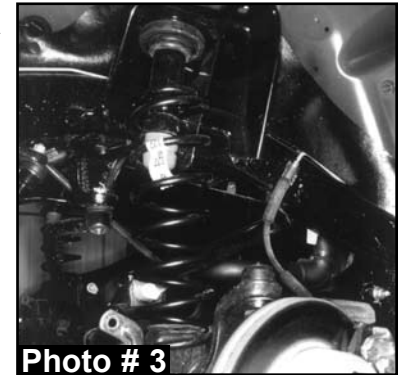
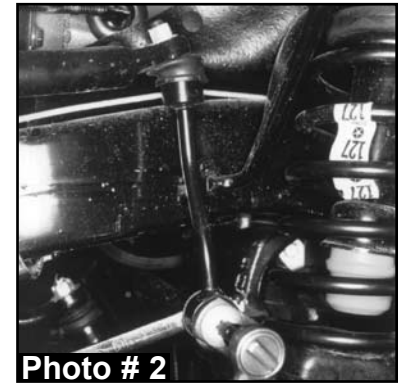
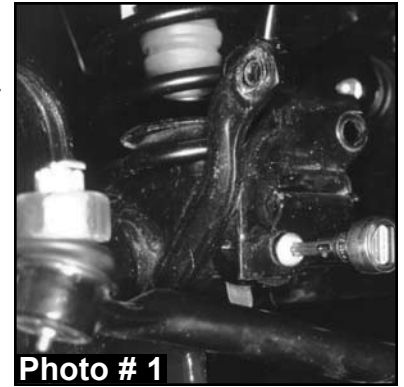
**Hardware Bag Breakdown:**

**HB-SBE500                      HARDWARE BAG**

<b>ITEM#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
HOURGLASS 3/4	HOURGLASS 3/4 SHOCK BUSHING	4
142118	ES34 SLEEVE/404094 1.66"	4

## Front Installation:

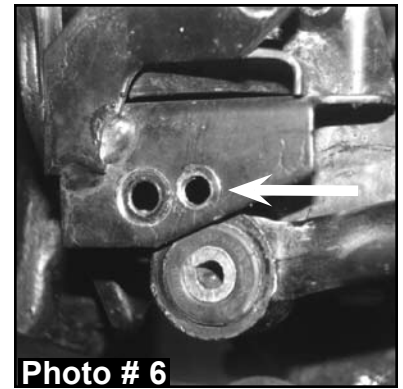
1. Secure & properly block the tires of the vehicle on a level concrete or asphalt surface.
2. Jack up the front of the vehicle & install jack stands under the frame behind the lower link rear brackets.
3. Remove the front tires & OEM front shocks.
4. Remove the OEM lower track bar bolt on the passenger side end & lower the OEM track bar down. **Note:** It may be necessary to pry the track bar loose. (See Photo # 1)
5. Remove the OEM drag link assembly from the OEM pitman arm & lower it down. Remove the OEM pitman arm using a pitman arm puller & install the new Skyjacker drop pitman arm.
6. Remove the OEM sway bar end link lower bolts at the axle on both the driver & passenger side. (See Photo # 2)
7. Lower the front axle down until the OEM coil springs become loose & remove the OEM bottom bolt & clip from the left front OEM coil spring. (See Photo # 3)
8. Remove both the OEM coil springs & the OEM upper bump stops. **Note:** Use channel lock pliers working the OEM bump stop back & forth to remove.
9. Remove the OEM 10mm bolt from inside the OEM bump stop cup. Install the new Skyjacker bump stop spacer & OEM bump stop cup using the supplied 10mm x 90mm bolts. Reinstall the OEM bump stop in the OEM bump stop cup. (See Photo # 4)
10. Install the new Skyjacker coil springs. Raise the jack up so that enough load is applied to hold the new Skyjacker coil springs in place. Reinstall the OEM spring bolt & clip at the bottom of the left front coil spring.
11. Install the new Skyjacker front shocks. (See Photo # 5)



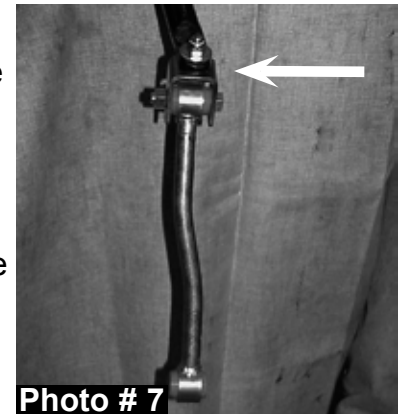
12. Reinstall the OEM drag link to the new Skyjacker pitman arm & tighten. **Note:** Be sure to install the OEM cotter pin.

13. Install the front tires & lower the vehicle to the ground.

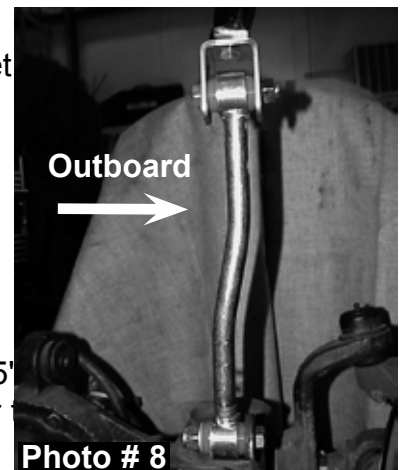
14. Locate the OEM front track bar mounting bracket on the axle, measure straight across (Inward) 3/4" & put a mark. Center punch & drill a 7/16" hole through both front & back plates, keeping the drill as straight & square to the bracket as possible. (See Photo # 6) Reattach the OEM front track bar using the OEM hardware.



15. The new Skyjacker end link mounting bracket should be mounted to the bottom of the OEM sway bar with the bolt pointing up through the sway bar & the nut & washer applied on top. (See Photo # 7) **Note:** Apply lithium grease to the polyurethane bushings. Insert the bushings into the end link eyes along with the metal sleeve. 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 the new Skyjacker end links on the inboard side of the axle, being sure that the offset is turned correctly. (See Photo # 8)



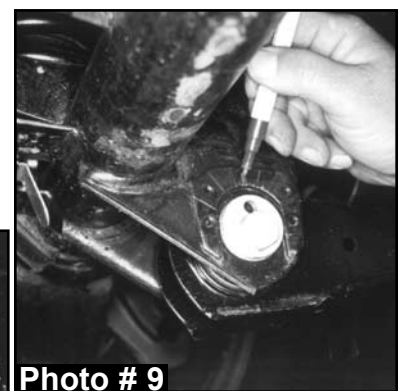
16. At the front lower link adjustment cams, mark (with an ink marker or scribe a mark) the vertical line on the cam & the reinforcement bracket realign the marks after installation. (See Photo # 9)



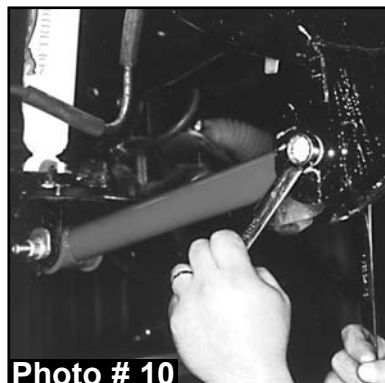
17. Install the drive-in grease fittings in each end of the new Skyjacker lower links by using a 1/4" socket over the grease fittings. Tap with a hammer until the grease fitting is completely tapped in.

18. Install the polyurethane bushings (Part # 2617) & steel sleeves (2.645" new Skyjacker lower links. **Note:** Be sure to slightly grease them prior

19. Remove the OEM lower links & replace the OEM lower links with the new Skyjacker extended lower links (One side at a time). (See Photo # 10) **Note:** Only start these bolts & nuts, do not tighten at this time.



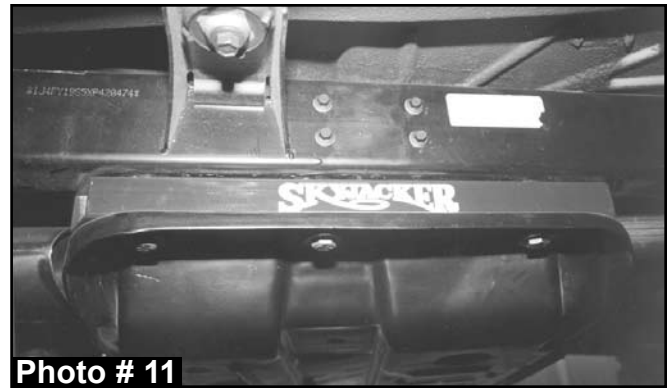
**Note:** So that the lower links may be greased while on the vehicle, install them with the grease fittings positioned as follows: **Front** eye of lower link has the fitting pointing out the end & the **Rear** eye of the lower link should have the grease fitting pointing down. **Note:** Once both lower links are installed, tighten each lower link being sure to realign the marks on the eccentric cams.



20. Place a jack under the OEM transfer case I-TJ4013B

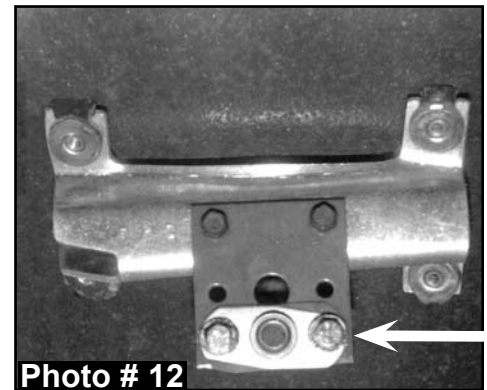
crossmember & remove the four screws that mount the transfer case pivot assembly from the body of the vehicle. **Note:** It will be necessary to roll the floor mat back to gain access to the OEM bolts.

21. Remove the three bolts on each side of the transfer case skid plate & lower it down enough to install the new Skyjacker square tube spacers between the skid plate & the frame. **Note:** 97-02

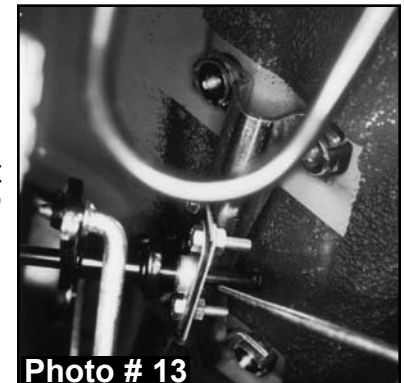


TJ models use the 1/2" x 3" flat socket head tapered bolts supplied & 03-06 TJ models will use the 12mm x 80mm flat socket tapered head bolts supplied. Apply a few drops of supplied thread lock compound on the bolt threads prior to installing. Tighten the bolts to 75-80 ft.lbs. (See Photo # 11)

**Note:** On 03-06 TJ models equipped with an engine skid plate, remove the two engine skid plate bolts. Install the small square tube spacers at the mounting points on the frame rails, along with the 12mm bolts supplied.



22. Install the new Skyjacker transfer case linkage pivot drop bracket to the OEM pivot bracket using the OEM hardware. Using the two 1/4" x 1" bolts with a flat washer & self-locking nut, bolt the ball swivel bracket (See Arrow in Photo # 12) to the new Skyjacker drop bracket **Note:** The bracket has two sets of holes. The bottom holes are for 4" lifts as shown & the upper holes are for 2 1/2" lifts. Placing the pivot bracket back in location & start the end of the rod through the ball swivel. Bolt the bracket back into location with the OEM hardware. (See Photo # 13)



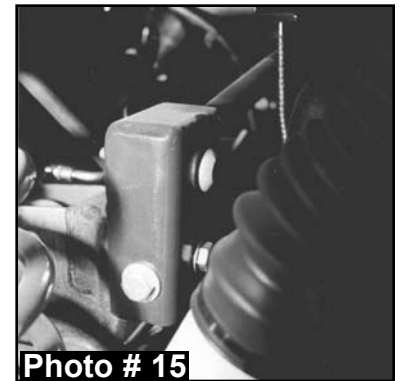
## **Rear Installation:**

1. Place a floor jack under the rear axle & raise the vehicle. Place jack stands under the frame ahead of the lower link bracket to support the vehicle.
2. Remove the rear tires & OEM rear shocks.
3. Remove the OEM rear track bar & OEM sway bar end link bolts at the axle.
4. Lower the rear axle down to remove the OEM rear coil springs. Remove both the OEM coil springs & the OEM upper bump stops. **Note:** Use channel lock pliers working the OEM bump stop back & forth to remove.

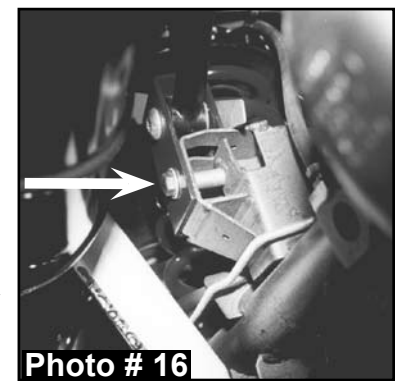
5. Remove the OEM 10mm bolt from inside the OEM bump stop cup. Install the new Skyjacker bump stop spacer & OEM bump stop cup using the supplied 10mm x 90mm bolts. Reinstall the OEM bump stop in the OEM bump stop cup. (See Photo # 14)



6. Place the new Skyjacker rear track bar relocation bracket in position & place the track bar in the new Skyjacker bracket. **Note:** Do not start its bolt. Start the supplied 12mm x 70mm bolt through the OEM lower track bar location using the supplied spacer sleeve with a self-locking nut & tighten the bolt to hold the bracket in place. (See Photo # 15)



7. Drill a 1/2" hole through the hole in the end of the new Skyjacker bracket. Remove the 12mm x 70mm bolt, installed before drilling, & install the 1/2" x 1 1/2" bolt, with a washer on each side, through the newly drilled hole & tighten the self-locking nut. Reinstall the new 12mm x 70mm bolt through the OEM track bar location using the supplied spacer sleeve (See Arrow in Photo # 16) with a self-locking nut. **Note:** Do not tighten at this time.



8. Install new Skyjacker rear coil springs. Raise the jack up so that enough load is applied to hold the coil springs in place.

9. Install the drive-in grease fittings in each end of the new Skyjacker lower links by using a 1/4" socket over the fitting. Tap with a hammer until the grease fitting is completely tapped in.

10. Install the polyurethane bushings (Part # 2617) & steel sleeves (2.645" Long) in each end of the lower links. **Note:** Be sure to slightly grease them prior to installation.



11. Remove & replace the OEM lower links with the new Skyjacker extended lower links (One side at a time). **Note:** 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 grease fittings positioned as follows: **Rear** eye of the lower link has the grease fitting pointing out the end & the **Front** eye of the lower link should have the grease fitting pointing down. (See Arrow in Photo # 17)

12. Attach the OEM track bar to the new Skyjacker relocation bracket on the axle & to the OEM upper location on the passenger side frame using the OEM hardware. **Note:** Do not tighten at this time.

13. Assemble the new Skyjacker rear extended sway bar links by applying grease to the polyurethane bushings & inserting them into each eye along with a sleeve. Install using the OEM hardware. (See Arrow in Photo # 17)



14. Install the new Skyjacker rear shocks. (See Photo # 18)
15. Install the rear tires & lower the vehicle to the ground.
16. Tighten the rear track bar bolts on each end & the new bolt in the track bar relocation bracket.

**Note:** Thoroughly grease all grease fittings on the new Skyjacker extended lower links.

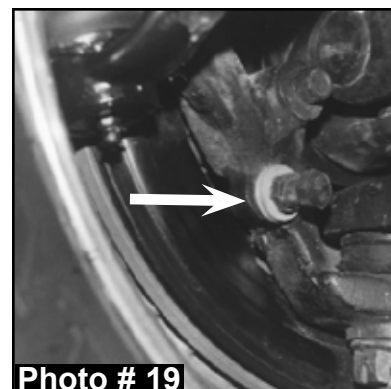
**WARNING:** On the Jeep Wrangler TJ models, only the shock absorbers limit the extended position of the front & rear suspension! The use of shocks other than those supplied in this system, may cause coil disengagement, adverse steering angles, brake hose failure, driveline component failure, and/or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

### **FINAL NOTES:**

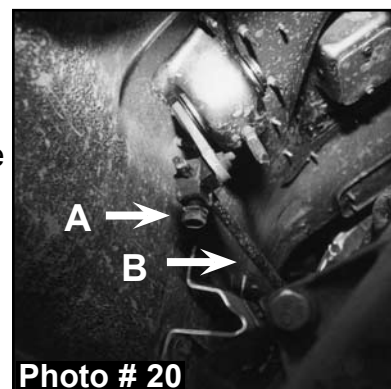
- Check the clearance between the inner side wall of the tires & lower links. **Note:** It may be necessary to adjust the steering stops by adding 2-3 washers on the bolt to eliminate interference. (See Arrow in Photo # 19)
- Check the transfer case shifter to see if it will move to **4L**. If not, the linkage will need adjusting as follows. Place the shifter in **4L**, loosen the adjustment bolt ("A" Arrow in Photo # 20) & push the linkage ("B" Arrow in Photo # 20) forward until it stops. Now retighten the adjustment bolt. Check to be sure 4WD works properly.
- On 5 speed models, engage the clutch & check the transmission shifter to see if it will go fully into 2nd gear. If not, the shifter housing on the floor will need trimming. Remove center console, pull back the carpet, remove the screws holding the shifter boot to the floor & trim or grind the floor board (See Arrow in Photo #21) until sufficient clearance is obtained. Shift through each gear to check the clearance at this time. Now reinstall the shifter boot, carpet, & console.
- Front end realignment is necessary so after the lift is installed have a qualified alignment center realign the vehicle to factory specifications.
- Rotate the driveshafts & check for interference at the differential yoke & cardan joint. If necessary, lightly dress the casting(s) and/or U-joint tabs in order to eliminate binding.
- Ensure there is adequate clearance between the exhaust, brake lines, fuel lines, fuel tank, floor board, & wiring harnesses. Check the steering gear for interference & proper working order. Test the brake system before driving.



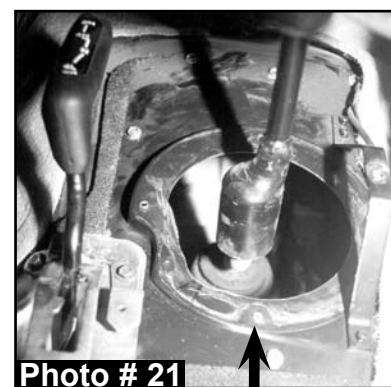
**Photo # 18**



**Photo # 19**

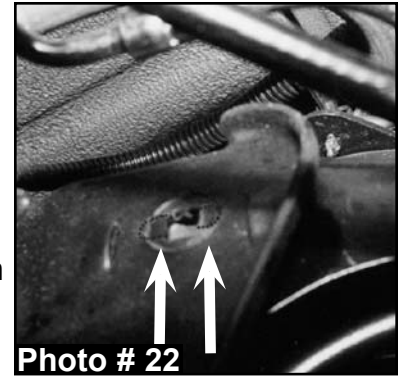


**Photo # 20**



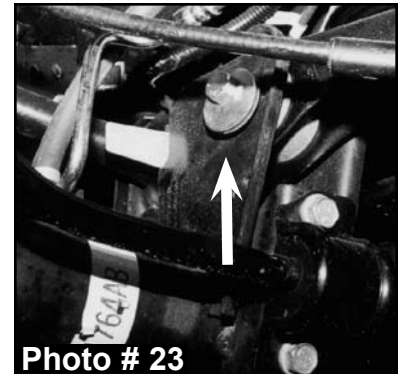
**Photo # 21**

- With the vehicle on the floor, cycle the steering lock to lock & inspect the steering, suspension, driveline, & brake line systems for proper operation, tightness, & adequate clearance.
- Have the headlights readjusted to proper settings.
- Driveline vibrations can be caused from the removal or addition of the hardtop which changes the rear vehicle weight, & the rear height, which affects the rear drive shaft pinion angle. Skyjacker's 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 them using the steps below.



1. Remove the bolt in the rear upper link (The end toward the rear bumper) & raise the link up out of the mount.

**Note:** The hole is notched so that it can be a slotted hole. Knock out the notches on the front & rear half of the holes on each side of the link mounts. (See Arrows in Photo # 22)



2. Lower the link back into the mount & install the new Skyjacker eccentric cam-bolt, eccentric washers, & nut on each link & tighten. These bolts can be rotated to adjust the axle pinion angle to eliminate any driveline vibration. (See Arrow in Photo # 23)

# SKYJACKER® SUSPENSIONS

## Skyjacker® 97-06 Jeep Accessories

- Steering Box Skid Plate Part # RRSP20



- 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 & Rubicon Unlimited  
Part # JSRB2315U



- Rear Shock Relocation  
Brackets Part # TJRSB10



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



- 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 Models Part # SP283



- Heavy-Duty Adjustable Rear Sway Bar  
Part # RSBA410



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