

1997-2006 Jeep TJ & LJ Wrangler **4" FLEX Suspension Lift Installation Instructions** 

www.skyjacker.com

#### **Required Tools List:**

- SAE Hex Key & SAE Sockets \Wrenches (5/16" & 5/32" Hex Key Socket & 7/16", 3/4" & 1-13/16")
- Metric Hex Key & Metric Sockets \ Wrenches (10mm, 13mm, 15mm, 17mm, 18mm, 21mm & 33mm)
- Star-Shaped T40 & T55 Torx Head Bit
- Sawzall, Dremel Tool or Similar Cutting Tool
- Pitman Arm Puller Tool
- Channel Lock Pliers
- Power Drill • Drill Bit (7/16" & 1/2")
- Hammer
- Center Punch Safety Glasses
   Wheel Chock
- Floor Jack
- Jack Stands
- Paint Marker • Measuring Tape
- Torque Wrench

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

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

Driver Side Front: _	/	Passenger Side Front:	/
	<b>BEFORE / AFTER</b>	0	BEFORE / AFTER
Driver Side Rear:	/	Passenger Side Rear:	/
-	BEFORE / AFTER		BEFORE / AFTER

#### **Important Notes:**

- The Drag Link Must Be Adjusted to Center the Steering Wheel Before the Vehicle Is Driven. Failure to Do So Will Cause Computer Errors, Odd Handling Characteristics, & Poor Performance.
- If Larger Tires (10% More Than the OEM Diameter) Are Installed, Speedometer Recalibration Will Be Necessary. Contact Your Local JEEP Dealer or an Authorized Skyjacker

  Dealer for Details.
- After Installation, a Qualified Alignment Facility Is Required to Align the Vehicle to the OEM Specifications.
- 6-Speed Transmission Models May Require Additional Modifications. The Options Are Trimming of OEM Console or Bending of OEM Shifter.
- On Models Outfitted with Extra Bolt-On Equipment & Accessories, Purchase Skyjacker
   Part # SIP275 Polyurethane Coil Spring Isolator Pads to Increase the Ride Height 3/4". (Front or Rear)

## **Component Box Breakdown:**

# Part # TJ40X

Item #	Description	Qty
A2025 (FRONT)	ADX 2.0 REMOTE RESERVOIR	2
A2028 (REAR)	ADX 2.0 REMOTE RESERVOIR	2

### Part # TJ401BLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL151	T-CASE LOWER KIT, 1997-2002 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX/403BLTX	1

#### Part # TJ401BPBLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL151	T-CASE LOWER KIT, 1997-2002 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX/403BLTX	1
B8525 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8528 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

### Part # TJ401BPHLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL151	T-CASE LOWER KIT, 1997-2002 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX / 403BLTX	1
H7025 (FRONT)	HYDRO SHOCK W/RED BOOT	2
H7028 (REAR)	HYDRO SHOCK W/RED BOOT	2

#### Part # TJ401BPMLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL151	T-CASE LOWER KIT, 1997-2002 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX/403BLTX	1
M9525 (FRONT)	M95 MONOTUBE SHOCK	2
M9528 (REAR)	M95 MONOTUBE SHOCK	2

#### Part # TJ401BPNLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL151	T-CASE LOWER KIT, 1997-2002 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX / 403BLTX	1
N8025 (FRONT)	NITRO SHOCK W/RED BOOT	2
N8028 (REAR)	NITRO SHOCK W/RED BOOT	2

## Component Box Breakdown:

## Part # TJ403BLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL153	T-CASE LOWER KIT, 2003-2006 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX / 403BLTX	1

#### Part # TJ403BPBLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL153	T-CASE LOWER KIT, 2003-2006 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX/403BLTX	1
B8525 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8528 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

### Part # TJ403BPHLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL153	T-CASE LOWER KIT, 2003-2006 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX / 403BLTX	1
H7025 (FRONT)	HYDRO SHOCK W/RED BOOT	2
H7028 (REAR)	HYDRO SHOCK W/RED BOOT	2

### Part # TJ403BPMLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL153	T-CASE LOWER KIT, 2003-2006 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX / 403BLTX	1
M9525 (FRONT)	M95 MONOTUBE SHOCK	2
M9528 (REAR)	M95 MONOTUBE SHOCK	2

#### Part # TJ403BPNLTX

Item #	Description	Qty
TJ40FS-DR	DUAL RATE COIL, FRONT	2
TJ40RS-DR	DUAL RATE COIL, REAR	2
JLL24-SX-ASY	LOWER FLEX LINKS, FRT & RR	4
TCL153	T-CASE LOWER KIT, 2003-2006 TJ	1
H-BOX TJBHX	HDWR BOX: TJ401BLTX / 403BLTX	1
N8025 (FRONT)	NITRO SHOCK W/RED BOOT	2
N8028 (REAR)	NITRO SHOCK W/RED BOOT	2

## Hardware Box Breakdown:

## Part # H-BOX TJBHX

Item #	Description	Qty
SBE120	SWAY BAR DBL DISC, FRONT	1
SBE500	SWAY BAR END LINK, REAR	1
TJRTB	TRACK BAR BRACKET, REAR	1
HB-BPS30	HDWR BAG: BUMP STOP SPACER	1
JA750	PITMAN ARM W/POWER STRG	1
I-TJ4013BX	INST SHEET: TJ401BLTX/403BLTX	1

## **Component Breakdown:**

#### Part # JLL24-SX-ASY

Item #	Description	Qty
JLL24-SX-L	LOWER FLEX LINKS	1
RE114-916R	ROD END, 1-1/4 RH /.562 ID	1
114RFTJN	1-1/4 RIGHT HAND JAM NUT	1

#### Part # SBE120

Item #	Description	Qty
SBE102-L	SWAY BAR END LINK, FRONT	2
SBE-E2	SWAY BAR END LINK EYE	4
14X112SPIN	1/4 X 1-1/2 SNAPPER PIN	4
HB-SBENB01	HDWR BAG: SWAY BAR LINK	1

#### Part # SBE500

Item #	Description	Qty
SBE500-L	SWAY BAR END LINK, REAR	2
HB-142118-4	HDWR BAG: 142118 SLEEVE (4)	1

#### Part # TCL151

Item #	Description	Qty
TCL15SX2012-R	TRANSFER CASE LWR 1.5SQX20	1
TCL15SX2358-L	TRANSFER CASE LWR 1.5SQX23	1
TCLTJ40	HDWR BAG: T-CASE 1997-2002 TJ	1

#### Part # TCL153

Item #	Description	Qty
TCL15SX2234-1	TRANSFER CASE LWR 1.5SQX22	2
TCL15SX2-1	TRANSFER CASE LWR 1.5SQX2	2
TCLTJ43	HDWR BAG: T-CASE 2003-2006 TJ	1

#### Part # TJRTB

Item #	Description	Qty
TJRTB-B	TRACK BAR BRACKET, REAR	1
HB-TJRTB	HDWR BAG: TRACK BAR BRKT	1

# Hardware Bag Breakdown:

#### Part # HB-BPS30

Item #	Description	Qty
BPS30-B	BUMP STOP SPACER, 3	4
10MMX90MMB	10MM X 90MM METRIC BOLT	4

#### Part # HB-SBENB01

Item #	Description	Qty
SBB2	SWAY BAR U-BRACKET FOR SBE	2
141509	ES25 SLEEVE, 1.50 LONG	4
10X35MMB	10MM X 35MM METRIC BOLT	2
10MMN	10MM NYLON INSERT LOCK NUT	2
12X212CTBG5	1/2 X 2-1/2 COARSE THD BOLT	2
12CTCLN	1/2 COARSE-CENTER LOCK NUT	2
12SAEW	1/2 SAE WASHER	2
38SAEW	3/8 SAE WASHER	2

#### Part # HB-TJRTB

Item #	Description	Qty
SSTJRTB	SPACER SLEEVE FOR TJRTB	1
12X70MMB	12MM X 70MM METRIC BOLT	1
12MMN	12MM NYLON INSERT LOCK NUT	1
12X112FTB	1/2 X 1-1/2 FINE THREAD BOLT	1
12FTN	1/2 FINE THREAD N/I LOCK NUT	1
12SAEW	1/2 SAE WASHER	3

### Part # HB-142118-4

ltem #	Description	Qty
142118	ES34 SLEEVE, 1.66 LONG	4

#### Part # TCLTJ40

Item #	Description	Qty
12X3FSB	1/2 X 3 FLAT SOCKET BOLT	6
TCL24-B	T-CASE LINKAGE RELOC BRKT.	1
14X1FTB	1/4 X 1 FINE THREAD BOLT	2
14FTN	1/4 FINE THREAD N/I LOCK NUT	2
14SAEW	1/4 SAE WASHER	2
LT100	THREAD LOCK COMPOUND, 1ML	1

#### Part # TCLTJ43

Item #	Description	Qty
12MMX80B	12MM X 80MM METRIC BOLT	8
12SAEW	1/2 SAE WASHER	8
TCL24-B	T-CASE LINKAGE RELOC BRKT.	1
14X1FTB	1/4 X 1 FINE THREAD BOLT	2
14FTN	1/4 FINE THREAD N/I LOCK NUT	2
14SAEW	1/4 SAE WASHER	2
LT100	THREAD LOCK COMPOUND, 1ML	1

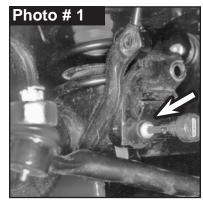
#### Front Installation: Note: Save all factory components & hardware for reuse, unless noted.

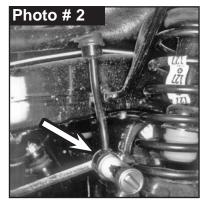
- 1. With vehicle on flat level ground, set emergency brake & chock rear tires \ wheels.
- 2. From inside the engine compartment, disconnect both OEM front shock upper stud mounts using a 15mm socket \ wrench.
- 3. Raise front of vehicle, support frame rails using jack stands at indicated lift points in OEM service manual.
- 4. Remove the front tires \ wheels using a 3/4" or 18mm socket.
- 5. Place a floor jack underneath front axle for support. Disconnect OEM front shock lower mount using a 13mm socket \ wrench. Retain factory lower mounting hardware for re-use.
- 6. <u>Note</u>: If installing a Skyjacker OEM Replacement Steering Stabilizer, remove OEM steering stabilizer using a 15mm socket\wrench.
- 7. Disconnect OEM front track bar from lower passenger side axle mount using a 15mm socket wrench or a T55 Torx head bit. (See Photo # 1)
- 8. Disconnect OEM drag link assembly from OEM pitman arm. Use a pitman arm puller tool to detach drag link from pitman arm. Take caution not to tear the draglink grease boot.

Mark the position of OEM pitman arm on steering gear box. Remove OEM nut & washer from steering gear box using a 33mm socket \ wrench. Align & install Skyjacker # JA750 Pitman Arm on OEM steering gear shaft. Install with OEM washer & nut. Tighten using 33mm socket \ wrench. Torque 185 ft-lbs.

 Disconnect OEM sway bar end links from axle brackets using a 18mm socket \wrench & a T55 Torx head bit. (See Photo # 2)

10. Disconnect OEM brake line bracket from frame using a T40 Torx socket. (See Photo # 3)





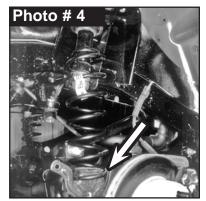
11. Support front axle with a floor jack. While checking for appropriate slack in ABS lines, brake lines, differential vent hose & etc, lower the front differential until the OEM front coil springs become loose.

Remove OEM bottom bolt & clip from driver side OEM coil spring using a 13mm socket \ wrench. (See Photo # 4)

Remove OEM coil spring. <u>Tech Note</u>: If front axle cannot be lowered enough to allow coil spring to be installed, carefully rotate the pinion up to provide more clearance.

12. Remove OEM upper bump stop. <u>Tech Note</u>: Use channel lock pliers working OEM bump stop back & forth to remove.





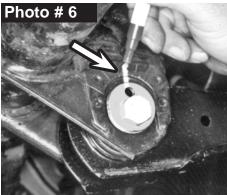
13. Remove the OEM 10mm bolt from inside the OEM bump stop cup using a 15mm socket \ wrench.

Install Skyjacker # BPS30-B Bump Stop Spacer into OEM bump stop cup with supplied 10mm x 90mm Bolt using a 17mm socket. Re-install OEM bump stop into OEM bump stop cup. (See Photo # 5) **Tech Note:** A silicon spray or lubricant will help installation.

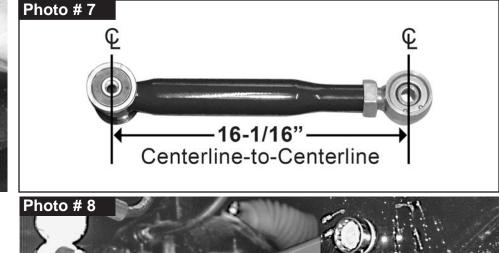
- 14. At the front axle lower link arm mount, mark the vertical line on the adjustment cam & the reinforcement bracket. This mark will be used for installation reference (See Photo # 6)
- 15. One at a time, remove OEM lower link arm using a 21mm socket \wrench. <u>Note</u>: If equipped with ABS brakes, remove ABS sensor wire / clamp from the inside of the lower arms.

Assemble Skyjacker # JLL24-SX-L Lower Flex Link Arm with # RE114-916R Right Hand 1-1/4" Rod End & # 114RFTJN Jam Nut. (See Photo # 7)

Measure length of Skyjacker Flex Link Arm assembly from centerline of rod end to centerline of bushing. Skyjacker Flex Link centerline-to-centerline measurement = 16-1/16". **Note:** Be sure to keep ends square with each other.



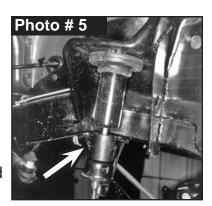
Rotate rod end in or out as needed. Tighten supplied 1-1/4" Jam Nut using a 1-13/16" wrench. One at a time, install Skyjacker # JLL24-SX-ASY Lower Link Arm with OEM hardware using a 21mm socket \ wrench. (See Photo # 8)





**Note:** Install with rod end at OEM lower axle mount & bushing end to upper frame mount. Secure, but **Do Not Completely Tighten**. To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires\wheels. **Note:** Once both lower link arms are installed, realign to marks on the eccentric cams.

16. Install Skyjacker front coil springs. Insert coil spring into upper tower first. Be sure that the coil & OEM spring isolator are indexed to seat properly, then raise axle enough to hold coil spring in place. Re-install OEM bottom clip & bolt to driver side OEM coil spring using a 13mm socket \wrench. Torque 20 ft.-lbs.



#### NOTE: Kit With HYDRO, NITRO, Black MAX, or M95 Monotube: Proceed to Step 17. Kit With ADX 2.0 Remote Reservoir: Proceed to Step 18. Photo # 9

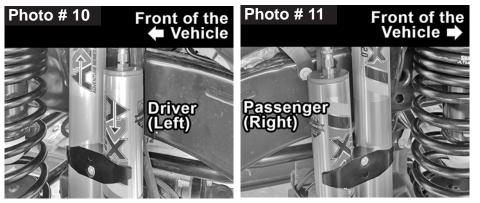
 Install Skyjacker front shock at upper shock tower mount with supplied stud bushings, cup washers & nut using a 15mm socket wrench. (See Photo # 9)

Connect Skyjacker shock at lower axle mount with OEM hardware using a 13mm socket \ wrench. Secure, but **Do Not Completely Tighten**. To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires \ wheels.

 Install Skyjacker ADX front shock. <u>Tech Note</u>: ADX Remote Reservoir are to be mounted with the remote reservoir toward rear for proper clearance (opposite side of coil spring mount).

(See Photo # 10 & # 11)

Loosely assemble two (2) supplied reservoir clamps with two (2) supplied hex head bolts using a 5/32" Hex Key socket. Position clamp into place around shock & reservoir cylinder. Secure, but **Do Not Completely Tighten**.



Install Skyjacker ADX front

shock at upper shock tower mount with supplied stud bushings, cup washers & nut using a 15mm socket\wrench.

Connect Skyjacker shock at lower axle mount with OEM hardware using a 18mm socket \ wrench. Secure, but **Do Not Completely Tighten** at this time. These will be tightened once vehicle is on ground with full vehicle weight on tires \ wheels.

- 19. Connect OEM drag link to Skyjacker Pitman Arm using OEM hardware. Torque 55 ft.-lbs. **Note:** Always tighten, never loosen castellated nut to align cotter pin hole.
- 20. Connect OEM brake line bracket to frame with OEM bolt using a T40 Torx socket. (See Photo # 3)
- 21. If installing replacement Skyjacker Steering Stabilizer, install now per separate instructions.
- 22. Install the front tires\wheels using a 3/4" or 18mm socket & lower the vehicle to the ground.
- 23. Go to OEM front track bar lower passenger side axle mount. Measure from center-line of OEM mounting hole inward toward driver side 3/4". (See Photo # 12)

Mark, center punch & drill a pilot hole. (See Photo # 13)

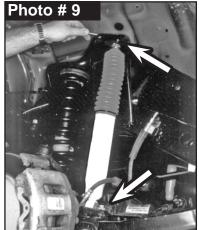
Drill out pilot hole using a 7/16" drill bit. (See Photo # 14)

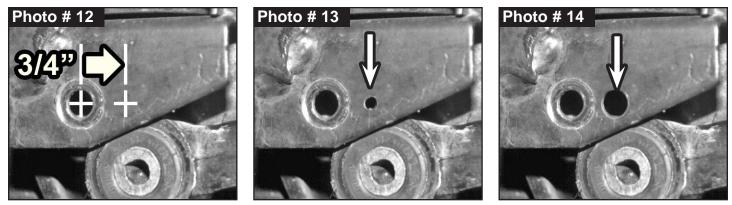
Center punch axle mount back plate through drilled hole. Drill back plate using a 7/16" drill bit. **Tech Note:** Keep drill as straight & square to front bracket as possible.

Connect OEM front track bar to drilled hole with OEM hardware front-to-rear a using a 15mm socket \ wrench or a T55 Torx head bit. <u>Tech Note</u>: It may be necessary to turn steering wheel to align track rod end with mount.

• 1997-2002 Models Torque 55 ft-lbs. • 2003-2006 Models Torque 40 ft-lbs.

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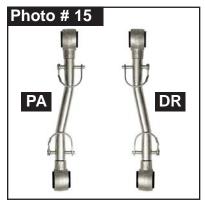


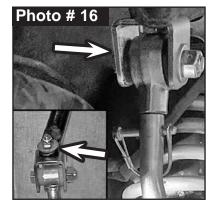
24.Locate Skyjacker # SBE120 Front Sway Bar Double Disconnect End Links. (See Photo # 15) Coat # ES25 1.50 Long Steel Sleeves with a water resistant grease & press into upper & lower end links mounts.

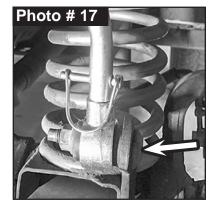
Install Skyjacker # SBB2 Sway Bar End Link U-Bracket to bottom of OEM sway bar. Connect with 10mm x 35mm Bolt up through u-bracket & sway bar with 3/8" SAE Washer & 10mm Nut on top. Tighten using a 15mm socket \ wrench. (See Photo # 16)

Install upper end link mount into Skyjacker U-Bracket. Connect with supplied 1/2" x 2-1/2 Bolt from frame side out to provide adequate clearance Attach 1/2" Center Lock Nut toward outside of vehicle using a 3/4" socket \ wrench. (See Photo # 16)

Attach lower end link to axle mount with OEM hardware using a 18mm socket \ wrench & a T55 Torx head bit. (See Photo # 17) Secure, but **Do Not Completely Tighten** at this time.







25. Place a jack under OEM transfer case crossmember \ skid plate.

Remove six (6) OEM bolts of the transfer case crossmember\skid plate: three (3) on each frame rail. (See Photo # 18) • 1997-2002 Models use 3/4" socket \

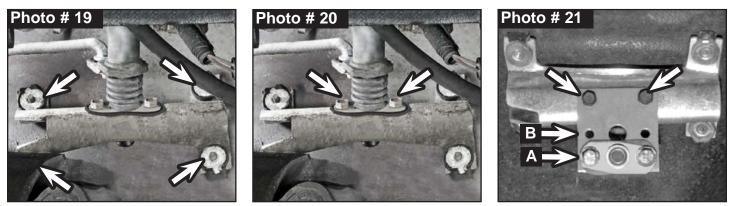
wrench. • 2003-2006 Models use a 18mm sock

• 2003-2006 Models use a 18mm socket \wrench.

Lower skid plate down.



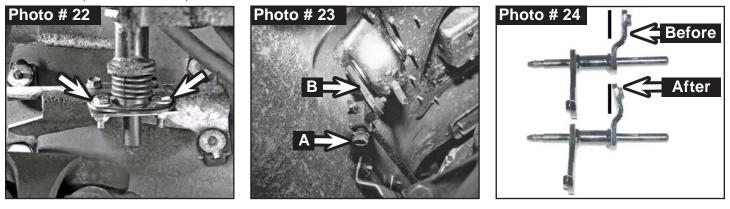
- 26. From underneath the vehicle, locate the transfer case torque shaft bracket. It is attached to the inside of the transmission tunnel on the driver side & acts as a pivot for the transfer case shift lever. (See Photo # 19) <u>Note</u>: From the inside of the vehicle, roll back the floor mat back to gain access to the OEM bolts. Remove the four (4) OEM bolts that mount the transfer case torque shaft bracket to the body of the vehicle.
- 27. Remove OEM shifter linkage from transfer case torque shaft bracket using a 10mm socket \ wrench. (See Photo # 20) Connect Skyjacker # TCL24-B Transfer Case Relocation Bracket to OEM transfer case torque shaft bracket with OEM hardware using a 10mm socket \ wrench. Note: Skyjacker bracket has two (2) sets of mounting holes. Lower mounting holes are for a 4" lift (See Photo # 21 A-Arrow). The upper holes are for 2-1/2" lift. (See Photo # 21 B-Arrow)



- 28.Connect OEM shifter linkage ball swivel bracket to Skyjacker bracket in lower mounting holes. Connect with supplied 1/4" x 1" Bolts with 1/4" SAE Washers & attach with 1/4" Nylon Insert Lock Nut using a 7/16" socket \ wrench. (See Photo # 22) Bolt OEM transfer case torgue shaft bracket into OEM location with OEM hardware.
- 29.Check to make sure that the transfer case will fully engage at each end of the shifter travel. If linkage adjustment is required, See Note Below.

**Note:** 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. (Photo # 23 A-Arrow) Push the linkage forward until it stops. (Photo # 23 B-Arrow) Re-tighten adjustment bolt. Check to be sure the 4WD works properly.

**Tech Note:** Due to OEM shifter rod bracket variations, it may be necessary to modify the OEM shifter bracket by slightly bending the mount on the rod to clear the shifter bracket and \or shifter bracket bolts. Note how much to bend the bracket to clear. Remove the shifter assembly & bend the bracket as shown to slightly clear the bracket \bolts. **Take Caution to Not Over Bend!** (See Photo 24)



**5-Speed Manual Transmission Models Note:** Manual transmission models may have to trim the floor pan if the vehicle exhibits problems shifting after lift is installed. (See Step 18 on Page 11)

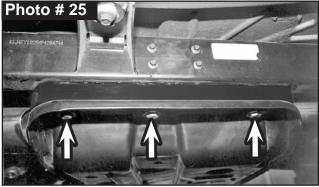
30. Install Skyjacker Transfer Case Crossmember \ Skid Plate Lowering Brackets.

**1997-2002 TJ Models Note:** Lowering Brackets Are Side Specific: # TCL15SX2012-R Driver Side & # TCL15SX2358-L (Longer Length) Passenger Side.

Apply a few drops of supplied # LT100 Thread Lock Compound onto supplied 1/2" x 3" Flat Socket Tapered Head Bolts. Tighten using a 5/16" hex head socket. (See Photo # 25) Secure, but **Do Not Completely Tighten** until all six (6) are installed. Torque 90 ft-lbs.

2003-2006 TJ Models Note: Lowering Brackets Are Not Side Specific: # TCL15SX2234-1.

If equipped with 4-speed automatic transmission & with additional engine skid plate, use the two (2)



supplied # TCL15SX2-1 1.5" Lowering Brackets & hardware listed below.

Apply a few drops of supplied # LT100 Thread Lock Compound onto supplied 12mm x 80mm Metric Bolts. Install with 1/2 SAE Washer on bolt & tighten using a 18mm socket\wrench. (See Photo # 25) Secure, but **Do Not Completely Tighten** until all six (6) are installed. Torque 75 ft-lbs.

#### **Rear Installation:** Note: Save all factory components & hardware for reuse, unless noted.

- 1. Chock front tires\wheels. Raise rear of vehicle & support frame rails using jack stands at indicated lift points in OEM service manual.
- 2. Remove the rear tires \wheels using a 3/4" or 18mm socket.
- 3. Remove OEM rear shocks. Disconnect upper mount bar pin using a 13mm socket\wrench. Disconnect lower axle mount using a 18mm & a 15mm socket\wrench.
- 4. Disconnect OEM rear track bar at axle mount using a using a T55 Torx bit.
- 5. Disconnect OEM rear sway bar end links using a 18mm & a 15mm socket \ wrench.
- 6. Support rear axle with a floor jack. While checking for appropriate slack in ABS lines, brake lines, differential vent hose & etc, lower the rear axle until the OEM rear coil springs become loose. Remove OEM coil spring.
- 7. Remove OEM upper bump stop. <u>Tech Note</u>: Use channel lock pliers working OEM bump stop back & forth to remove.
- 8. Remove OEM 10mm bolt from inside OEM bump stop cup using a 15mm socket \ wrench.

Install Skyjacker # BPS30-B Bump Stop Spacer to OEM bump stop cup with supplied 10mm x 90mm Bolt using a 15mm socket \ wrench. Install OEM bump stop into OEM bump stop cup. (See Photo # 26)



9. Install Skyjacker # TJRTB-B Rear Lower Track Bar Bracket over OEM rear lower track bar bracket at axle.

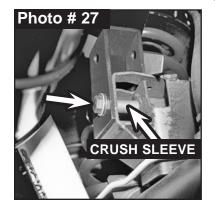
With Skyjacker bracket seated flush, insert supplied 12mm x 70mm Bolt with 1/2" SAE Washer from rear-to-front through bottom hole of bracket\axle mount. Place # SSTJRTB Crush Sleeve inside OEM mount & insert bolt through bracket\axle mount. Attach with 12mm Nylon Insert Lock Nut using a 18mm socket\wrench. (See Photo # 27) Tighten.

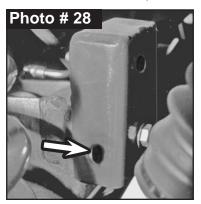
With bracket \axle mount tightly in place, use the Skyjacker bracket hole as a guide & mark / center punch the OEM bracket. (See Photo # 28)

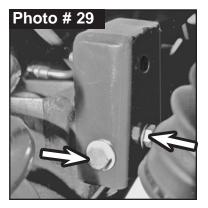
Remove Skyjacker bracket & supplied hardware. Drill axle mount using a 1/2" drill bit.

Re-install Skyjacker bracket. Insert supplied 1/2" x 1-1/2" Fine Thread Bolt with 1/2" SAE Washer through bracket \axle mount at drilled hole. Attach with 1/2" SAE Washer & 1/2" Nylon Insert Lock Nut using a 3/4" socket \wrench. (See Photo # 29) Torque 60 ft.-lbs.

Re-install supplied hardware for bracket \axle mount as stated before & tighten all mounting hardware. 1/2" Bolt Torque 65 ft-lbs. 12mm Bolt Torque 75 ft-lbs.







10. Install Skyjacker rear coil spring. Be sure coil spring is seated properly at lower axle mount by rotating the coil until the pigtail hits the spring stop. <u>Note</u>: Be sure OEM upper coil spring isolator is properly aligned with coil & upper coil spring mount.

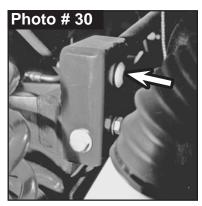
Raise rear axle to load Skyjacker rear coil springs.

11. One side at a time, remove OEM lower link arm using a 21mm socket \ wrench.

One at a time, install Skyjacker # JLL24-SX-ASY Lower Link Arm with OEM hardware using a 21mm socket \ wrench. <u>Note</u>: Install with rod end at OEM lower axle mount & bushing end to upper frame mount.

Secure, but **Do Not Completely Tighten**. To set bushings properly for ride height, these will be tightened once full vehicle weight vehicle is on the ground.

12. Connect OEM rear track bar to Skyjacker rear track bar bracket with OEM hardware from rear-to-front using a using a T55 Torx bit. (See Photo # 30) Secure, but **Do Not Completely Tighten** at this time. <u>Tech Note</u>: It may be necessary to raise \lower axle to align track bar bolt. A rachet strap can be helpful to align track bar / bracket together.



Locate Skyjacker # SBE500-L Rear Sway Bar End Links.
 Coat # 142118 Steel Sleeves with a water resistant grease & press into upper & lower end link mounts.

One side at a time, install Skyjacker End Links with OEM hardware with large washer to bushing side of end link using a 18mm socket \wrench. (See Photo # 31) Secure, but **Do Not Completely Tighten** at this time.

#### NOTE: Kit With HYDRO, NITRO, Black MAX, or M95 Monotube: Proceed to Step 14. Kit With ADX 2.0 Remote Reservoir: Proceed to Step 15.

14. Install Skyjacker rear shock. Connect upper bar pin mount with OEM hardware using a 15mm socket \ wrench.

Connect lower axle mount with OEM hardware using a 18mm socket \ wrench. Secure, but **Do Not Completely Tighten** at this time. (See Photo # 32)

15. Assemble Skyjacker ADX rear shock. Loosely assemble two (2) supplied reservoir clamps with two (2) supplied hex head bolts using a 5/32" Hex Key socket. Position clamp into place around shock & reservoir cylinder. Secure, but **Do Not Completely Tighten** at this time.

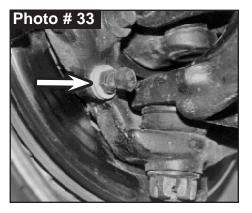
Install Skyjacker ADX rear shock. Connect upper bar pin mount with OEM hardware using a 15mm socket \ wrench.

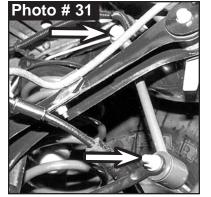
Connect lower axle mount with OEM hardware using a 18mm & a 15mm socket \ wrench. Secure, but **Do Not Completely Tighten** at this time. <u>Tech Note</u>: Remote reservoir is to be mounted toward rear of vehicle & rotated for proper clearance.

- 16. Install the rear tires\wheels using a 3/4" or 18mm socket & lower the vehicle to the ground.
- Turn the steering wheel & check clearance between the inner side wall of the tires & the lower links. <u>Note:</u> It may be necessary to adjust the steering stops by adding 2-3 washers on the bolt to eliminate interference. (See Photo # 33)
- 18. **On 5-Speed Manual Transmission Models**, test drive the vehicle & shift through all gears. If it is difficult to shift into 2<sup>nd</sup>, 4<sup>th</sup> or Reverse or if the transmission jumps out of gear, the

shifter may be contacting the edge of the transmission tunnel due to the transfer case drop. Examine the area & if the shifter is contacting in this area, proceed to the steps below.

- 1. Move the seats to full rearward position.
- 2. Pry up the shift boot & bezel from the floor console.
- 3. Remove bolts attaching the console to the floor pan. Lift the console upward & remove.
- 4. Remove the four (4) screws attaching the cover boot to the cover. Slide the boot upward to expose the opening in the floor pan.







- 5. Shift the transmission into 2<sup>nd</sup>, 4<sup>th</sup> or Reverse verifying a Minimum of 1/8" Clearance between the shifter lever & the floor pan. If necessary, enlarge the opening in the floor pan with a round file. (See Photo # 34)
- Reposition the boot clock wise to match the increased floor pan opening. Mark & drill three (3) new mounting holes. Reinstall the cover boot, console, & shift boot.

## Final Clearance Check & Torque Steps:

Photo # 34

**Notes:** Check Front Center Axle Disconnect (CAD) connection & on **RUBICON** Models: Check Front & Rear locker connections.

The Drag Link Must Be Adjusted to Center the Steering Wheel <u>Before</u> the Vehicle Is Driven. Failure to Do So Will Cause Computer Errors, Odd Handling Characteristics, & Poor Performance.

- 1. Start vehicle. Make sure there are no dash lights pertaining to suspension.
- 2. Jounce vehicle a couple of times. This will help suspension settle to new ride height. Cycle steering lock-to-lock & check all components for proper operation & clearances. Pay special attention to clearance between tires\wheels, ADX Shocks & Reservoirs, control arms, brake hoses, ABS wiring, etc.

Rotate the drive shafts & 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.

#### 3. Front Tighten & Torque Sequence.

Track bar at axle mount using a 15mm socket\wrench or a T55 Torx head bit.
1997-2002 Models Torque 55 ft-lbs.
2003-2006 Models Torque 40 ft-lbs.
Front shock absorber upper mount using a 15mm socket\wrench. Torque 17 ft-lbs.
Front shock absorber lower mount using a 13mm socket\wrench. Torque 250 in-lbs.
ADX Reservoir clamp. Double check position & clearance. Tighten with 5/32" Hex Key socket.
Sway bar end link upper bolt using a 3/4" socket\wrench. Torque 90 ft-lbs.
Sway bar end link lower bolt using a 18mm socket\wrench & T55 Torx bit. Torque 75 ft-lbs.
Lower link arm at axle & frame mounts using a 21mm socket\wrench. Torque 130 ft-lbs.

#### 4. Rear Tighten & Torque Sequence.

Skyjacker track bar bracket bolts. 1/2" Bolt Torque 65 ft-lbs. 12mm Bolt Torque 75 ft-lbs. Track bar at Skyjacker bracket using a T55 Torx bit. Torque 74 ft-lbs. Rear shock absorber upper mount using a 13mm socket\wrench. Torque 26 ft-lbs. Rear shock absorber lower mount using a 18mm & a 15mm socket\wrench. Torque 74 ft-lbs. ADX Reservoir clamp. Double check position & clearance. Tighten with 5/32" Hex Key socket. Sway bar end link mounts using a 18mm & a 15mm socket\wrench. Torque 40 ft-lbs. Lower link arm at axle & frame mounts using a 21mm socket\wrench.

- 1997-2002 Models Torque 130 ft-lbs. 2003-2006 Models Torque 150 ft-lbs.
- 5. Driveline vibrations can be caused from the removal or addition of a hardtop which changes the vehicle's rear weight & rear height. The weight 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 already purchased, install eccentric upper cam-bolt kit using the next steps.

## **Cam Bolt Installation:**

Use Skyjacker # CAM500 Eccentric Cam Bolts for Rear Upper Control Arms at OEM axle 1. mount brackets. Perform Steps on One Side at a Time.

Disconnect rear OEM upper control arm from OEM rear axle mount using a 15mm socket \ wrench. Note: Only Disconnect One (1) Side at a Time.

The OEM control arm axle mount brackets have 'knockout' alignment inserts. Use inserts as a guide & cut a slotted rectangular hole. Using a Sawzall. Dremel or other small cutting device, cut out a notch on each side of rear upper OEM axle mount bracket. (See Photo # 35)

Connect OEM rear upper control arm to modified OEM rear axle

mount using Skyjacker Eccentric Cam Bolt, Eccentric Washer & Nut using a 15mm & a 17mm socket \ wrench. (See Photo # 36)

2. With vehicle on ground & weight of vehicle on tires \ wheels, tighten front & rear eccentric cam bolts using a 15mm & a 17mm socket \ wrench. Note: These bolts can be rotated to adjust the axle pinion angle to eliminate any driveline vibration.

## **Final Notes:**

- After installation is complete, double check that all nuts & bolts are tight. Refer to the following chart for proper torgue specifications. (Note: Do not re-tighten nuts & bolts where thread lock compound was used.)
- With vehicle placed on ground, cycle steering lock to lock & inspect steering, suspension, brake lines, front & rear drivelines, fuel lines & wiring harnesses for proper operation, tightness & adequate clearance.

**TORQUE SPECIFICATIONS** 

- Have headlights readjusted to proper settings.
- Have a qualified alignment center align vehicle to OEM specifications.

**INCH SYSTEM** 

Grade 5

180 in-lbs

• After first 100 miles, check all hardware for proper torque & periodically thereafter.

Grade 8

240 in-lbs

Bolt Size

5/16

3/8 7/16

1/2

9/16

5/8

3/4

		• • • • • • • • • • • • • • • • • • • •					
30 ft-lbs	35 ft-lbs	8MM	16 ft-lbs	23 ft-lbs			
45 ft-lbs	60 ft-lbs	10MM	32 ft-lbs	45 ft-lbs			
65 ft-lbs	90 ft-lbs	12MM	55 ft-lbs	75 ft-lbs			
95 ft-lbs	130 ft-lbs	14MM	85 ft-lbs	120 ft-lbs			
135 ft-lbs	175 ft-lbs	16MM	130 ft-lbs	165 ft-lbs			
185 ft-lbs	280 ft-lbs	18MM	170 ft-lbs	240 ft-lbs			
The Above Specifications Are Not to Be Used							
When the Bolt Is Being Installed With a Bushing.							
Page							

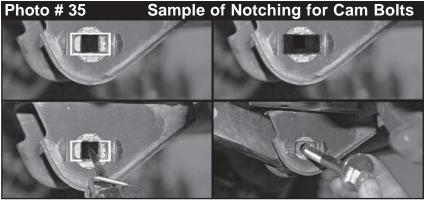
Bolt Size

6MM

METRIC SYSTEM

Class 8.8

102 in-lbs





**Class 10.9** 

108 in-lbs





# Jesus Christ Died For You.

John 3:16

For God so loved the world that He gave His only Son, so that everyone who believes in Him should not perish, but have everlasting life. Romans 3:23

For all have sinned; all fall short of God's glorious standard. Ephesians 2:8

God saved you by his special favor when you believed. And you can't take credit for this; it is a gift from God. Psalms 18:2

The Lord is my Rock, my fortress, and my savior; my God is my Rock, in whom I find protection. He is my shield, the strength of my salvation, and my stronghold. Romans 10:9-10

That if you shall confess with thy mouth the Lord Jesus, and shall believe in your heart that God hath raised him from the dead, you shall be saved. For with the heart man believeth unto righteousness; and with the mouth confession is made unto salvation.

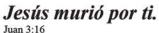
#### Pray This Simple Prayer:

God, I come to You admitting I have sinned against You and I need you to take control of my life. The Bible says anyone who calls on the name of the Lord will be saved. I am calling on You, Jesus. I ask that You come live in my heart and be the Lord over my life today. I do believe You died on the cross for me and came back to life to give me life! Thank You, Lord Jesus for a new life in You!

Now, go and tell somebody about your new life in Jesus, get a Bible, begin to read it, and go to a Bible believing church.

If you would like someone to pray with you, call Kenneth Copeland Ministries anytime at 800-600-7395.

To listen to commercial free Christian radio on the web, go to www.887fm.org



"Porque tanto amó Dios al mundo, que dio a su Hijo unigénito, para que todo el que cree en él no se pierda, sino que tenga vida eterna." Romanos 3:23

"Pues todos han pecado y están privados de la gloria de Dios." Efesios 2:8

"Porque por gracia ustedes han sido salvados mediante la fe; esto no procede de ustedes, sino que es el regalo de Dios." Salmos 18:2

"El Señor es mi roca, mi amparo, mi libertador; es mi Dios, el peñasco en que me refugio. Es mi escudo, el poder que me salva, ¡mi más alto escondite!" Romanos 10:9-10

"9 Que si confi esas con tu boca que Jesús es el Señor, y crees en tu corazón que Dios lo levantó de entre los muertos, serás salvo. 10 Porque con el corazón se cree para ser justifi cado, pero con la boca se confi esa para ser salvo."

#### Ahora dí esta simple oración:

Dios, vengo a Ti y admito que he pecado contra Ti, necesito que tomes el control de mi vida. La Biblia dice que todo aquel que invoca el nombre del Señor escapará con vida. En este momento yo clamo ante Ti, Jesús; te pido que vengas a vivir en mi corazón y que tomes el control de mi vida. ¡Yo creo que tu moriste en la cruz y resucitaste para darme vida! ¡Gracias Señor Jesús, por una nueva vida que tengo en Ti! Amen.

Ahora ve y dile a alguien sobre la nueva vida que tienes en Cristo. Compra una Biblia y empieza a leerla. Busca una Iglesia que cree en la Biblia y hazte parte de esa Iglesia.

Si te gustaría orar con alguien, puedes llamar a este número 800-600-7395

Puedes ir a este sitio de Internet para escuchar música Cristiana sin anuncios, www.887fm.org

