

1997-2006 Jeep TJ & LJ Wrangler 2.5"- 3" Suspension Lift Installation Instructions

www.skyjacker.com

Required Tools List:

- SAE Hex Key & SAE Sockets \ Wrenches (5/32" Hex Key Socket & 3/4")
- Metric Hex Key & Metric Sockets \ Wrenches (13mm, 15mm, 17mm, & 18mm)
- Star-Shaped T55 Torx Head Bit
- Sawzall, Dremel Tool or Similar Cutting Tool
- Pitman Arm Puller Tool
- Channel Lock Pliers
- Power Drill Drill Bit (1/2")
- Hammer Center Punch
- Safety Glasses Wheel Chock
- Floor JackPaint MarkerMeasuring 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:	/
	BEFORE / AFTER	_	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 <u>Before</u> 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.

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Component Box Breakdown:

Part # TJ2030X

Item #	Description	Qty
A2016 (FRONT)	ADX 2.0 REMOTE RESERVOIR	2
A2018 (REAR)	ADX 2.0 REMOTE RESERVOIR	2

Part # TJ25BLT

Item #	Description	Qty
TJ25FS-DR	DUAL RATE COIL, FRONT	2
TJ25RS-DR	DUAL RATE COIL, REAR	2
TJ250	COMP BOX: 1997-2006 TJ 2.5	1

Part # TJ25BPBLT

Item #	Description	Qty
TJ25FS-DR	DUAL RATE COIL, FRONT	2
TJ25RS-DR	DUAL RATE COIL, REAR	2
TJ250	COMP BOX: 1997-2006 TJ 2.5	1
B8516 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8518 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

Part # TJ25BPHLT

Item #	Description	Qty
TJ25FS-DR	DUAL RATE COIL, FRONT	2
TJ25RS-DR	DUAL RATE COIL, REAR	2
TJ250	COMP BOX: 1997-2006 TJ 2.5	1
H7016 (FRONT)	HYDRO SHOCK W/RED BOOT	2
H7018 (REAR)	HYDRO SHOCK W/RED BOOT	2

Part # TJ25BPMLT

Item #	Description	Qty
TJ25FS-DR	DUAL RATE COIL, FRONT	2
TJ25RS-DR	DUAL RATE COIL, REAR	2
TJ250	COMP BOX: 1997-2006 TJ 2.5	1
M9516 (FRONT)	M95 MONOTUBE SHOCK	2
M9518 (REAR)	M95 MONOTUBE SHOCK	2

Part # TJ25BPNLT

Item #	Description	Qty
TJ25FS-DR	DUAL RATE COIL, FRONT	2
TJ25RS-DR	DUAL RATE COIL, REAR	2
TJ250	COMP BOX: 1997-2006 TJ 2.5	1
N8016 (FRONT)	NITRO SHOCK W/RED BOOT	2
N8018 (REAR)	NITRO SHOCK W/RED BOOT	2

Part # TJ250

Item #	Description	Qty
CAM500	CAM BOLTS, UPPER REAR	1
TJRTB-B	TRACK BAR BRACKET, REAR	1
HB-TJ25	HDWR BAG: 1997-2006 TJ 2.5	1
I-TJ2530	INST SHEET: TJ2530	1

Component Box Breakdown:

Part # TJ30B

Item #	Description	Qty
TJ30FS	SOFTRIDE COIL, FRONT	2
TJ30RS	SOFTRIDE COIL, REAR	2
TJ250	COMP BOX: 1997-2006 TJ 2.5	1

Part # TJ30BPB

Item #	Description	Qty
TJ30FS	SOFTRIDE COIL, FRONT	2
TJ30RS	SOFTRIDE COIL, REAR	2
TJ250	COMP BOX: 1997-2006 TJ 2.5	1
B8516 (FRONT)	BLACK MAX SHOCK W/BLK BOOT	2
B8518 (REAR)	BLACK MAX SHOCK W/BLK BOOT	2

Part # TJ30BPH

Item #	Description	Qty
TJ30FS	SOFTRIDE COIL, FRONT	2
TJ30RS	SOFTRIDE COIL, REAR	2
TJ250	COMP BOX: 1997-2006 TJ 2.5	1
H7016 (FRONT)	HYDRO SHOCK W/RED BOOT	2
H7018 (REAR)	HYDRO SHOCK W/RED BOOT	2

Hardware Bag Breakdown:

Part # HB-TJ25

Item #	Description	Qty
10MMX70MMB	10MM X 70MM METRIC BOLT	4
12X70MMB	12MM X 70MM METRIC BOLT	1
12MMN	12MM METRIC NUT	1
12X112FTB	1/2 X 1-1/2 FINE THREAD BOLT	1
12FTN	1/2 FINE THREAD LOCK NUT	1
12SAEW	1/2 SAE WASHER	3
BPS20-B	BUMP STOP SPACER	4
SSTJRTB	CRUSH SLEEVE	1

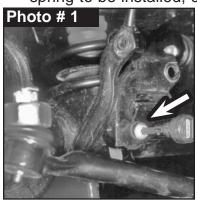
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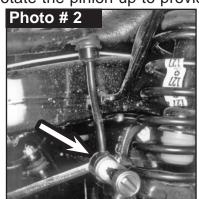
Front Installation: Note: Save all factory components & hardware for reuse, unless noted.

- 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.
- 9. Disconnect OEM sway bar end links from axle brackets using a 18mm socket\wrench & a T55 Torx head bit. (See Photo # 2)
- 10. 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 # 3)

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.

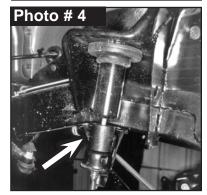




- 11. Remove OEM upper bump stop. <u>Tech Note</u>: Use channel lock pliers working OEM bump stop back & forth to remove.
- 12. Remove the OEM 10mm bolt from inside the OEM bump stop cup using a 15mm socket\wrench.

Install Skyjacker # BPS20-B Bump Stop Spacer into OEM bump stop cup with supplied 10mm x 70mm Bolt using a 17mm socket. Re-install OEM bump stop into OEM bump stop cup. (See Photo # 4) **Tech Note**: A silicon spray or lubricant will help installation.





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13. 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 14.

Kit With ADX 2.0 Remote Reservoir: Proceed to Step 15.

Photo # 5

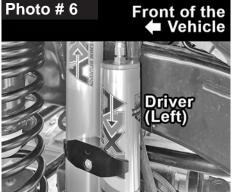
14. Install Skyjacker front shock at upper shock tower mount with supplied stud bushings, cup washers & nut using a 15mm socket\ wrench. (See Photo # 5)

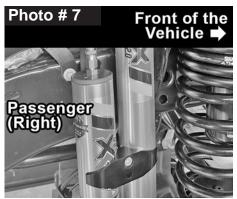
Connect Skyjacker shock at lower axle mount with OEM hardware using a 13mm socket\wrench. Secure, but **Do Not Completely Tighten**. To set bushings properly for ride height, these will be tightened once vehicle is on ground with full vehicle weight on tires\wheels.

15. 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 # 6 & # 7)

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.

- 16. Connect OEM drag link to OEM pitman arm using OEM hardware. Torque 60 ft.-lbs. **Note**: Always tighten, never loosen castellated nut to align cotter pin hole.
- 17. Connect OEM sway bar end links to axle brackets with OEM hardware using a 18mm socket \ wrench & a T55 Torx head bit.
- 18. If installing replacement Skyjacker Steering Stabilizer, install now per separate instructions.
- 19. Install the front tires\wheels using a 3/4" or 18mm socket & lower the vehicle to the ground.
- 20. Connect OEM front track bar to lower passenger side axle mount using a using a 15mm socket \mathbb{wrench or a T55 Torx head bit. (See Photo # 1) **Tech Note**: It may be necessary to raise \mathbb{lower axle to align track bar bolt.

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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 front coil springs become loose. Remove OEM coil spring.

 Photo # 8
- 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 # BPS20-B Bump Stop Spacer to OEM bump stop cup with supplied 10mm x 70mm Bolt using a 17mm socket \ wrench. Install OEM bump stop into OEM bump stop cup. (See Photo # 8)



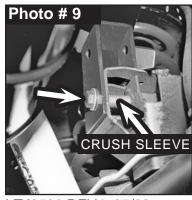
With Skyjacker bracket seated flush, insert supplied 12mm x 70mm Bolt with 1/2" SAE Washer from rear-to-front through bottom hole of bracket\axle mount. Place # SSTJRTB Crush Sleeve inside OEM mount & insert bolt through bracket\axle mount. Attach with 12mm Nylon Insert Lock Nut using a 18mm socket\wrench. (See Photo # 9) Tighten.

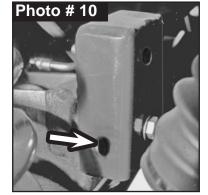
With bracket\axle mount tightly in place, use the Skyjacker bracket hole as a guide & mark / center punch the OEM bracket. (See Photo # 10)

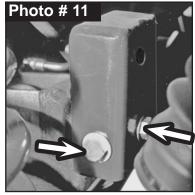
Remove Skyjacker bracket & supplied hardware. Drill axle mount using a 1/2" drill bit.

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 # 11) 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.







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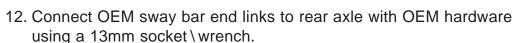
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10. Install Skyjacker rear coil spring. Be sure coil spring is seated properly at lower axle mount by rotating the coil until the pigtail hits the spring stop. **Note:** Be sure OEM upper coil spring isolator is properly aligned with coil & upper coil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

Photo # 12

Raise rear axle to load Skyjacker rear coil springs.

11. 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 # 12) 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.



NOTE: Kit With HYDRO, NITRO, Black MAX, or M95 Monotube: Proceed to Step 13. Kit With ADX 2.0 Remote Reservoir: Proceed to Step 14.

13. 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 # 13)

14. 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.

15. Install the rear tires\wheels using a 3/4" or 18mm socket & lower the vehicle to the ground.

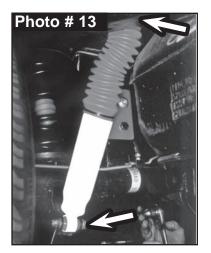


<u>Notes</u>: Check Front Center Axle Disconnect (CAD) connection & on **RUBICON** Models: Check Front & Rear locker connections.

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.





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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 nut using a 15mm socket\wrench. Torque 45 ft-lbs.
 Sway bar end link lower bolt using a 18mm socket\wrench & T55 Torx bit. Torque 75 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.

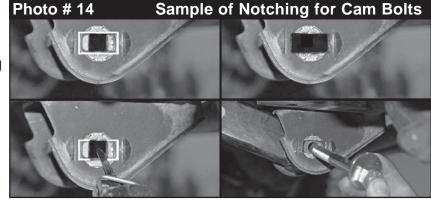
Rear Upper Cam Bolt Installation:

1. Use Skyjacker # CAM500 Eccentric Cam Bolts for Rear Upper Control Arms at OEM axle 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 and 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 # 14)

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 # 15)

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.



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Final Notes:

- After installation is complete, double check that all nuts & bolts are tight. Refer to the following chart for proper torque specifications. (<u>Note</u>: 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.
- Have headlights readjusted to proper settings.
- Have a qualified alignment center align vehicle to OEM specifications.
- After first 100 miles, check all hardware for proper torque & periodically thereafter.

TORQUE SPECIFICATIONS					
INCH SYSTEM			METRIC SYSTEM		
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9
5/16	180 in-lbs	240 in-lbs	6MM	102 in-lbs	108 in-lbs
3/8	30 ft-lbs	35 ft-lbs	8MM	16 ft-lbs	23 ft-lbs
7/16	45 ft-lbs	60 ft-lbs	10MM	32 ft-lbs	45 ft-lbs
1/2	65 ft-lbs	90 ft-lbs	12MM	55 ft-lbs	75 ft-lbs
9/16	95 ft-lbs	130 ft-lbs	14MM	85 ft-lbs	120 ft-lbs
5/8	135 ft-lbs	175 ft-lbs	16MM	130 ft-lbs	165 ft-lbs
3/4	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.					

Seat Belts Save Lives, Please Wear Your Seat Belt.

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