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02-07 Jeep Liberty 2WD/4WD 2.5" Suspension lift Installation Instructions Part # LIB250K

REQUIRED TOOL LIST:

- * Metric and Standard wrenches and sockets
- * Allen Wrenches
- * Assorted Drill Bits
- * Floor Jack
- * Jack Stands
- * Measuring Tape
- * Coil Spring Compressor
- * Torque Wrench



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.

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

Driver Side Front: _____ Passenger Side Front: _____

Driver Side Rear: _____ Passenger Side Rear: _____

IMPORTANT NOTES:

- Skyjacker recommends the use of 245/75R16 tires, 30 1/2" tall, which can be mounted on the factory wheels. 255/75R16 tires may also be used, but some inner fender wheel well trimming may be necessary.
- Please refer to Parts List to insure that all parts and hardware are received prior to disassembly of vehicle. If any parts are found to be missing, contact your dealer as soon as possible.
- If larger tires (10% more than stock diameter) are installed, speedometer recalibration is necessary (see Jeep dealer or Tire Store).
- This lift is determined from the front while only lifting the rear to a position level with the front.
- After installation occurs, a qualified alignment facility is required to align the vehicle.

Kit Box Breakdown:

LIB250:

<u>ITEM#</u>	<u>DESCRIPTION</u>	<u>Qty</u>
LIB25FS	LIBERTY FRONT COIL 2.5"	2
9050S	FRONT STRUT - LIBERTY	2
LSM279	LIBERTY ALUMINUM COIL MOUNT,LIB250	2
38FTN	3/8-24 FINE N/I LOCK NUT	2
BPS20-B	BUMP STOP SPACER BLACK, 2"	2
10MMX70MMB	10 X 70 METRIC BOLT/10.9	2
10MMN	10 MM N/I LOCKNUT	2
LBS3383	LIBERTY KJ BUMP STOP, FRONT	2

Front Installation:

1. Block the rear tires. Raise the front of the vehicle using a floor jack, support the frame rails using jack stands. Remove the tires and wheels.
2. Remove the brake caliper using a 21mm wrench. Once caliper is removed, remove rotor. (See Photo #1) Wire caliper out of the way until reinstallation. It will not be necessary to disconnect the brake line from the caliper.
3. Remove outer axle nut using 1 7/16" socket. (See Photo #2)
4. Remove ABS line from steering knuckle using a 5mm allen wrench. (See Arrow in Photo #3)
5. Disconnect the sway bar link from the Lower A-Arm using a 18mm wrench.
6. Remove the tie rod end nut from knuckle using 21mm socket. Remove the tie rod end from the knuckle by striking the knuckle to dislodge the tie rod end. Be careful not to damage the tie rod end. (See Photo #4)
7. Remove upper and lower A - Arm ball joints from knuckle using 21mm socket. Once again it may be necessary to strike the knuckle to allow the tie rod end to dislodge. Remove knuckle from vehicle. (See Photo #5) Be sure not to remove the C.V. shaft from the differential.
8. Disconnect the lower bolt on clevis bracket from the Lower A-Arm using a 21mm socket. (See Photo #6)
9. Remove the battery from the vehicle. Unbolt the battery tray and move aside. Remove the upper 4 retaining nuts from the upper strut bracket using an 18mm socket.

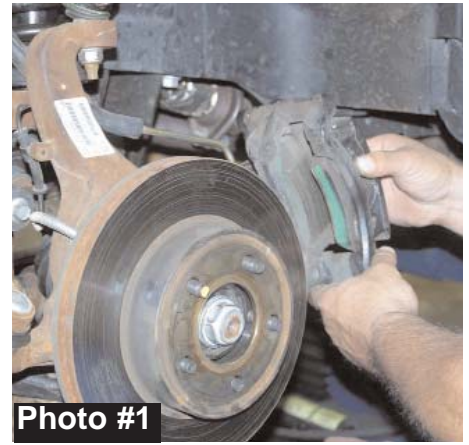


Photo #1



Photo #2

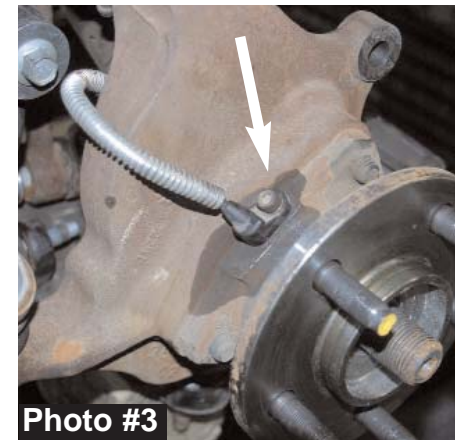


Photo #3



Photo #4

I-LIB250



Photo #5



Photo #6

10. Remove the upper bolt on the clevis bracket using a 21mm socket. (See Photo #7) Remove the clevis bracket and remove the strut from vehicle. (See Photo #8)
11. Using a coil spring compressor, disassemble the factory strut assembly. The upper mounting bracket and retaining washer will be reused.
12. Slide the new coil spring over the new strut assembly. Be sure that the coil spring sits flush against the new aluminum seat on the shock. Attach the factory upper bracket to the new coil/shock assembly using a coil spring compressor. **Important Note!** Using a wrench or ratchet, install the 3/8" nylon-insert lock nut on shock stem first and torque to 15-17 Ft. Lbs, then double nut by tightening the 3/8" standard hex nut against the nylon lock nut and torque to 14-16 Ft. Lbs. **NOTE: Do NOT use an air impact to install nuts as this will strip the threads. Be sure coil is seated properly in upper and lower seat.** (See Photo #9 and #10)

Upon Installation of the Coil Assembly, use caution, Be Sure not to damage the factory Inner C.V. Boot!

13. Install the new coil assembly. First attach the upper mount using the factory hardware removed earlier. Do not tighten these bolts at this time. Attach the lower clevis bracket onto the bottom of the new coil assembly using factory hardware. Torque to 65 Ft. Lbs. (See Arrow in Photo #11) Attach to the Lower A-Arm using factory hardware. It may be necessary to loosen the lower A-Arm to allow it to slide outward and bolt up to the clevis bracket. Be sure to mark Cam Washers so they can be set back in the same position. (See Photo #12) With all bolts started, tighten all bolts at this time. Once the upper bracket has been tightened, reattach battery tray and reinstall battery.
14. Using a floor jack raise the lower A-Arm so that the steering knuckle can be reinstalled. Slide C.V. shaft through factory steering knuckle. Attach steering knuckle to upper and lower A-Arm using factory hardware. Torque to factory Specs. Be sure to reinstall outer tie rod and ABS line to the steering knuckle.
15. Remove the factory rubber bump stop off of the frame. They can be easily removed with the use of a pair of pliers. Install the new polyurethane bump stop in the factory position by tapping in with a hammer. The bump stop may be easier to install if it is first sprayed with WD-40. (See Arrow in Photo #13)

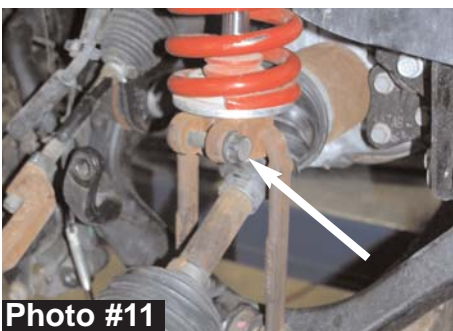
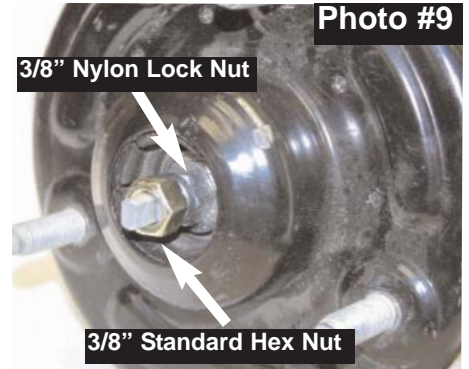


Photo #11
I-LIB250

Photo #12

Photo #10

Photo #13

Rear Installation:

16. With vehicle on flat level ground, set the emergency brake and block the front tires. Raise the rear of the vehicle using floor jack. Support the frame rails using jack stands. Remove the rear tires and wheels. Remove the rear shocks using 15mm and 18mm wrench. (See Photo #14)
17. Lower the rear axle far enough to allow for removal of the rear coil spring. (See Photo #15)
18. Locate the bump stop contact pad on the rear axle. Locate center of the pad and make a mark. (See Photo #16)
19. Once mark is made, drill this point using a 13/32" drill bit. Be sure not to drill into the axle tube. (See Photo #17)
20. Install new coil spring first, once coil is installed, install the new bump stop extension using the 10mm x 70mm bolt and nut supplied. (See Photo #18)
21. With the coil spring and bump stop installed, raise the rear end back up, install new shocks. (See Photo #19). Reinstall tires/wheels and let the weight of the vehicle on to the ground.



Photo #14



Photo #15



Photo #16



Photo #17



Photo #18



Photo #19

FINAL NOTES:

- After installation is complete, double check that all nuts and bolts are tight.
- If new tires are installed that are more than 10% taller than original tires, the speedometer must be recalibrated. Contact an authorized Jeep dealer for details on recalibration.
- With the vehicle on the floor, cycle steering lock to lock and inspect steering, suspension and driveline systems for proper operation, tightness and adequate clearance. Recheck brake hose/fittings for leaks.
- Have headlights readjusted to proper settings.
- Have a qualified alignment center realign front end. Be sure vehicle is at desired ride height prior to realignment.
- Retorque all bolts after the first 100 miles.

Seat Belts Save Lives, Please Wear Your Seat Belt.