



**2002 - 2012 Jeep Liberty  
2WD / 4WD  
2.5"- 3" Suspension Lift  
Installation Instructions**

**REQUIRED TOOL LIST:**

- \* Metric & Standard Wrenches & Sockets
- \* Allen Wrenches
- \* Assorted Drill Bits
- \* Floor Jack
- \* Jack Stands
- \* Measuring Tape
- \* Coil Spring Compressor
- \* 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.

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 the OEM specifications.

## Component Box Breakdown:

### Part #: LIB250

| Item #  | Description             | Qty |
|---------|-------------------------|-----|
| LIB25FS | LIBERTY FRONT COIL      | 2   |
| 9050S   | PERFORMANCE SHK / STRUT | 2   |
| LSM279  | LIBERTY SCOIL MOUNT     | 2   |

| Item #    | Description              | Qty |
|-----------|--------------------------|-----|
| HB-LIB250 | HDWR BAG: LIBERTY LIB250 | 1   |
| PSD       | PLATINUM SHOCK DECAL     | 2   |
| I-LIB250  | INST SHEET: LIBERTY      | 1   |

### Part # HB-LIB250

| Item #     | Description          | Qty |
|------------|----------------------|-----|
| BPS20-B    | BUMP STOP SPACER BLK | 2   |
| 10MMX70MMB | 10 X 70 METRIC BOLT  | 2   |
| 10MMN      | 10 MM N/I LOCKNUT    | 2   |

| Item #  | Description                | Qty |
|---------|----------------------------|-----|
| LBS3383 | LIBERTY BUMP STOP, FRONT   | 2   |
| 38FTN   | 3/8-24 FINE N/I LOCK NUT   | 2   |
| 38FTSN  | 3/8" FINE STANDARD HEX NUT | 2   |

### Part # LIB25R (2002 - 2007 Models)

| Item #  | Description       | Qty |
|---------|-------------------|-----|
| LIB25RS | LIBERTY REAR COIL | 2   |

| Item # | Description | Qty |
|--------|-------------|-----|
|--------|-------------|-----|

### Part # LIB208R (2008 - 20012 Models)

| Item #   | Description       | Qty |
|----------|-------------------|-----|
| LIB208RS | LIBERTY REAR COIL | 2   |

| Item # | Description | Qty |
|--------|-------------|-----|
|--------|-------------|-----|

## Front Installation:

1. Secure & properly block the rear tires / wheels of the vehicle on a level concrete or asphalt surface. Raise the front of the vehicle using a floor jack & support the frame rails using jack stands. Remove the front tires / wheels.
2. Remove the brake caliper using a 21mm wrench. Once the brake caliper is removed, remove the brake rotor. (See Photo # 1) Wire the brake caliper out of the way until reinstallation. It will not be necessary to disconnect the brake line from the brake caliper.
3. Remove the outer cv axle nut using a 1 7/16" socket. (See Photo # 2)
4. Remove the ABS line from the steering knuckle using a 5mm allen wrench. (See Arrow in Photo # 3)
5. Disconnect the sway bar end link from the lower A-arm using a 18mm wrench.



Photo # 1

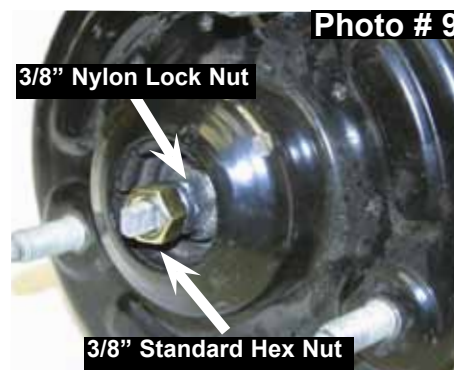
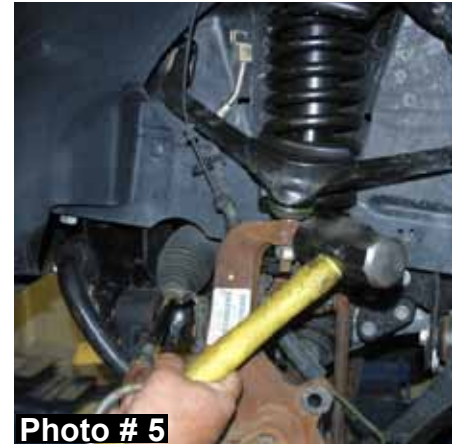


Photo # 2



Photo # 3

6. Remove the tie rod end nut from the steering knuckle using a 21mm socket. Remove the tie rod end from the steering 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 the upper & lower A-arm ball joints from the steering knuckle using a 21mm socket. Once again it may be necessary to strike the steering knuckle to allow the tie rod end to dislodge. Remove the steering knuckle from the vehicle. (See Photo # 5) Be sure not to remove the cv axle from the differential.
8. Disconnect the lower bolt on the 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 & move aside. Remove the four upper retaining nuts from the upper strut bracket using a 18mm socket.
10. Remove the upper bolt on the clevis bracket using a 21mm socket. (See Photo # 7) Remove the clevis bracket & remove the strut from the vehicle. (See Photo # 8)
11. Using a coil spring compressor, disassemble the OEM strut assembly. The upper mounting bracket & retaining washer will be reused.
12. Slide the new Skyjacker coil spring over the new Skyjacker strut assembly. Be sure that the new coil spring sits flush against the new aluminum seat on the shock. Attach the OEM upper bracket to the new coil / strut assembly using a coil spring compressor.  
**Important Note!** Using a wrench or ratchet, install the 3/8" nylon-insert lock nut on the shock stem first & torque to 15-17 Ft. Lbs, then double nut by tightening the 3/8" standard hex nut against the nylon lock nut & torque to 14-16 Ft. Lbs.  
**NOTE:** Do not use an air impact to install the nuts as this will damage the threads. Be sure the new coil is seated properly in upper & lower seat. (See Photo # 9 & # 10)





**Upon the installation of the coil assembly, use caution, be sure not to damage the OEM inner cv boot!**

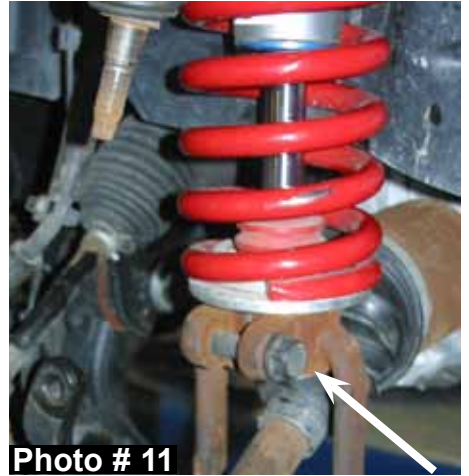
13. Install the new coil assembly. First attach the upper mount using the OEM hardware. **Do not tighten these bolts at this time.** Attach the lower clevis bracket onto the bottom of the new coil assembly using the OEM hardware. Torque to 65 Ft. Lbs. (See Arrow in Photo # 11) Attach to the lower A-arm using the OEM hardware. It may be necessary to loosen the lower A-arm to allow it to slide outward & bolt up to the clevis bracket. **Note:** Be sure to mark the 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 the battery tray & reinstall the battery.
14. Using a floor jack raise the lower A-arm so the steering knuckle can be reinstalled. Slide the cv axle through the OEM steering knuckle. Attach the steering knuckle to the upper & lower A-arm using the OEM hardware. Torque to OEM specs. **Note:** Be sure to reinstall the outer tie rod & ABS line to the steering knuckle.
15. Remove the OEM rubber bump stop off of the frame. They can be easily removed with the use of a pair of pliers. Install the new Skyjacker polyurethane bump stop in the OEM position by tapping in with a hammer. The new bump stop may be easier to install if it is first sprayed with a lubricant. (See Arrow in Photo # 13)

## **Rear Installation:**

16. Secure & properly block the front tires / wheels of the vehicle on a level concrete or asphalt surface. Raise the rear of the vehicle using a floor jack & support the frame rails using jack stands. Remove the rear tires / wheels. Remove the rear shocks using a 15mm & 18mm wrench. (See Photo # 14)



**Photo # 10**



**Photo # 11**



**Photo # 12**



**Photo # 13**



**Photo # 14**

17. Lower the rear axle enough to allow for the removal of the rear coil spring. (See Photo # 15)
18. Locate the bump stop contact pad on the rear axle. Locate the center of the pad & make a mark. (See Photo # 16)
19. Once marked, drill using a 13/32" drill bit. **Note:** Be sure not to drill into the axle tube. (See Photo # 17)
20. Install the new Skyjacker coil spring & install the new Skyjacker bump stop extension using the supplied 10mm x 70mm bolt & nut. (See Photo # 18)
21. With the new coil spring & bump stop installed, raise the rear of the vehicle & install the new Skyjacker rear shocks. (See Photo # 19). Reinstall the tires/wheels & lower the vehicle to the ground.

#### **FINAL NOTES:**

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

**Seat Belts Save Lives, Please Wear Your Seat Belt.**



**Photo # 15**



**Photo # 16**



**Photo # 17**



**Photo # 18**



**Photo # 19**