



2007- 2012 Jeep Wrangler JK 2.5"- 3.5" Value Flex Suspension Lift Installation Instructions

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



Before beginning the installation, read these instructions & the enclosed driver’s WARNING NOTICE thoroughly & completely. Also 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, but 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:

- The draglink 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.
- After installation, a qualified alignment facility is required to align the vehicle to the OEM specifications.

Component Box Breakdown:

Part #: JK2501-SVX

Item #	Description	Qty	Item #	Description	Qty
JKLL24FSX-ASY	JK 2-5" F LWR LK SGL FLX ASY	2	HB-JK2500	HDWR BAG: JK 2.5" LIFT	1
JKLL24RSX-ASY	JK 2.5" R LWR LK SGL FLX ASY	2	SBE126	DBL DISC END LINKS JEEP JK	1
RR114-14	ROD END BUSHING 14MM ID	8	SBE504	SWAY BAR LINK JEEP JK REAR	1
JK24RTB-B	JK 2-4" REAR TRK BAR BRKT	1	JKBRC15	JK RR TRK BAR BRACE DANA 44	1
JK25RBS-S	JK 2.5" REAR BUMP STOP BRKT	2	I-JK2501-SVX	INST SHEET: 2.5" JK VALUE FX	1

Part #: SBE126

Item #	Description	Qty	Item #	Description	Qty
SBE102-L	SWAY BAR END LINK,FRT-SGL	2	HB-SBE126	HARDWARE BAG FOR SBE126	1
SBE-E3	SWAY BAR END LK EYE	4	I-SBE120/124	INST SHEET - SBE120/124/320	1
14X112SPIN	1/4 X 1 1/2 SNAPPER PIN	4			

Part #: SBE504

Item #	Description	Qty	Item #	Description	Qty
SBE506-L	REAR,SWAY BAR END LK,SGL	2	HB-SBE504	HARDWARE BAG FOR SBE504	1

Part #: JKBRC15

Item #	Description	Qty	Item #	Description	Qty
JKBRC15-B	JK REAR TRK BAR BRACE D44	1	I-JKBRC15	INST SHEET:JK D44 TRK BRACE	1
HB-JKBRC15	HARDWARE BAG FOR JKBRC15	1			

Hardware Bag Breakdown:

Part # HB-JK2500

Item #	Description	Qty	Item #	Description	Qty
38X234BHB	3/8 X 2 3/4 BUTTON HEAD BLT	2	716X1FTB	7/16 X 1 FINE THRD BOLT	1
38SAEW	3/8 SAE WASHER	2	716SAEW	7/16 SAE WASHER	1
38CTN	3/8 COARSE N/I LOCK NUT	2	716FTN	7/16 FINE N/I LOCK NUT	1
516X1FTB	5/16 X 1 FINE THRD BOLT	4	916X3FTB	9/16 X 3 FINE THRD BOLT	1
516SAEW	5/16 SAE WASHER	8	916SAEW	9/16 SAE WASHER	3
516FTN	5/16 FINE N/I LOCK NUT	4	916FTN	9/16 FINE N/I LOCK NUT	2
12X114FTB	1/2 X 1 1/4 FINE THRD BOLT	1	CS1625	CRUSH SLEEVE JKRTB	1
12SAEW	1/2 SAE WASHER	1	BPS20-B	BUMP STOP SPACER BLK, 2"	2
12FTN	1/2 FINE N/I LOCK NUT	1	916X312FTB	9/16 X 3 1/2 FINE THRD BOLT	1

Part #: HB-SBE126

Item #	Description	Qty	Item #	Description	Qty
403712	ES22 SLEEVE/1.25" LONG	4	12USSW	1/2 USS WASHER	4
12X212BHCTB	1/2 X 2 1/2 BUTTON HEAD BLT	2	12CTN	1/2 COARSE N/I LOCK NUT	2

Part #: HB-SBE504

Item #	Description	Qty	Item #	Description	Qty
HG58125	HOURGLASS 5/8" X 1.25"	4	12SAEW	1/2 SAE WASHER	4
403712	ES22 SLEEVE/1.25" LONG	4	12USSW	1/2 USS WASHER	4
12X212BHCTB	1/2 X 2 1/2 BUTTON HEAD BLT	4	12CTN	1/2 COARSE N/I LOCK NUT	4

Part #: HB-JKBRC15

Item #	Description	Qty	Item #	Description	Qty
516X1CTB	5/16 X 1 COARSE THRD BOLT	3	516LW	5/16" LOCK WASHER	3
516XTFW	5/16" EXTRA THICK FLAT WASH	3			

Front Installation:

1. Park the vehicle on flat, level ground & set the emergency brake.
2. Raise the front of the vehicle & support the frame rails using jack stands.
3. Disconnect the OEM front sway bar end links using a 18mm socket. Disconnect the OEM front track bar using a 21mm socket. (See Photo # 1)
4. If installing a new Skyjacker steering stabilizer (Part # 7003), remove the OEM steering stabilizer using a 18mm socket. (See Photo # 2)
5. Disconnect the OEM front shocks & front drive shaft.
6. Remove the front tires / wheels & remove the OEM front coils. (See Photo # 3)
7. Remove the OEM front shocks.



8. Locate the new Skyjacker front bump stop spacer. Place the new bump stop spacer on the center of the OEM bump stop pad located on the front axle. Mark & drill using a 25/64" drill bit. (See Photo # 4)



Photo # 4

9. Place the new Skyjacker bump stop spacer inside the new Skyjacker front coil spring & install the new coil spring. Attach the new bump stop spacer to the axle using the supplied 3/8" X 2 3/4" button head bolts with one washer under the nut. (See Photo # 5)



Photo # 5

10. Assemble the new Skyjacker sway bar end links using the supplied steel sleeves. Attach the eyes using the supplied 1/4" snap pins. Attach the new sway bar end link to the axle using the OEM hardware. (See Photo # 6) Attach to the sway bar using the supplied 1/2" x 2 1/2" button head bolt. Use one large USS washer under the nut.

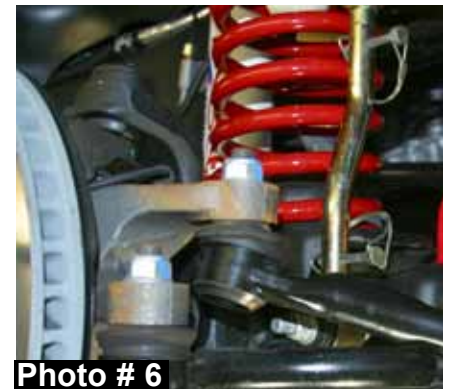


Photo # 6

11. Re-attach the OEM front track bar & front drive shaft.

12. If installing a Skyjacker steering stabilizer (Part # 7003), install at this time. (See Photo # 7)

13. Install the new Skyjacker front shocks using the supplied hardware. (See Photo # 8)

14. Measure the length of the new Skyjacker front lower control arms between the center of the rod end & bushing on each control arm. Rotate the rod end as needed, being sure to keep the ends square with each other until the new Skyjacker front lower control arms measure 22 13/16" center to center.

15. Install the new Skyjacker rod end step bushings into each side of the new rod ends.



Photo # 7



Photo # 8

16. One at a time, remove the OEM front lower control arms & install the new Skyjacker front lower control arms using the OEM hardware. (See Photo # 9) **Note:** Install the new front lower control arms with the offset bend toward the inside of the vehicle. Tighten each jam nut to seat against the base of the new lower control arms.

17. Install the front tires / wheels & lower the vehicle to the ground.

Rear Installation:

18. Raise the rear of the vehicle & properly support the frame rails using jack stands.

19. Remove the OEM rear shocks using a 16mm socket. (See Photo # 10)

20. Disconnect the OEM rear track bar bracket from the axle using a 21mm socket. (See Photo # 11)

21. Disconnect the OEM rear sway bar end links using a 18mm socket.

22. Disconnect the OEM ABS line & brake line from the frame. (See Photo # 12)

23. Lower the axle & remove the OEM rear coils.

24. Place the new Skyjacker rear track bar relocation bracket over the OEM bracket on the axle. With the bracket seated flush, clamp the bracket in place, mark using a center punch, & drill the new center mounting holes using a 15/32" drill bit. (See Photo # 13)



Photo # 9



Photo # 10



Photo # 11



Photo # 12



Photo # 13

25. Install the supplied 7/16" x 1" bolt & nut. Use one 7/16" washer under the nut. (See Photo # 14)
26. It will be necessary to drill through the driver side bottom of the OEM bracket & through the new Skyjacker bracket. Drill using a 17/32" drill bit. Once drilled, install the supplied 1/2" x 1 1/4" bolt & nut. Use one 1/2" washer under the bolt. Install the 9/16" x 3 1/2" bolt, washers, & nut at the bottom location being sure to use the supplied crush sleeve. (See Photo # 15)
27. Install the new Skyjacker track bar bracket brace at this time using it's supplied instructions. **Note:** It is recommended to put a re-enforce weld on the OEM track bar bracket at this time.
28. Install the new Skyjacker rear coils. **Note:** Be sure to re-use the upper OEM rubber isolator pad.
29. Attach the new Skyjacker rear bump stop spacer to the OEM location on the axle using the supplied 5/16" x 1" bolts, washers, & nuts. (See Photo # 16) **Note:** Be sure to install the new bump stop spacer with the angled end towards the rear of the vehicle.
30. Let the weight of the vehicle onto the new rear coil springs & install the new Skyjacker sway bar end links using the supplied 5/8" hourglass bushings & steel sleeves. Attach using the supplied 1/2" x 2 1/2" button head bolts & nuts. One large USS washer will be used under the head of each bolt with the smaller SAE washer under the nut. (See Photo # 16)
31. Attach the OEM rear track bar to the new track bar bracket using the supplied 9/16" x 3" bolt, washer, & nut. One washer will be used under the head of the bolt. **Note:** 2.5" Kits will use the lower mounting hole in the new track bar bracket. Be sure to install the bolt from the front side toward the rear.
32. Re-attach the OEM ABS line & brake line to the frame using the OEM hardware.
33. Measure the length of the new Skyjacker rear lower control arms between the center of the rod end & bushing on each control arm. Rotate the rod end as needed, being sure to keep the ends square with each other until the new Skyjacker rear lower control arms measure 19 7/8" center to center.
34. Install the new Skyjacker rod end step bushings into each side of the new rod ends.



Photo # 14



Photo # 15



Photo # 16

35. One at a time, remove the OEM front lower control arms & install the new Skyjacker front lower control arms using the OEM hardware. (See Photo # 17) Tighten each jam nut to seat against the base of the new lower control arms.



Photo # 17

36. Install the new Skyjacker rear shocks. (See Photo # 18)

37. Install the rear tires / wheels & lower the vehicle to the ground.

FINAL NOTES:

- The draglink 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.
- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart below for the proper torque specifications. (Do not retighten the nuts & bolts where thread lock compound was used.)
- With the vehicle placed on the ground, cycle the steering lock to lock & inspect the steering, suspension, brake lines, front & rear drivelines, fuel lines, & wiring harnesses for proper operation, tightness, & adequate clearance.
- Have the headlights readjusted to the proper settings.
- Have a qualified alignment center align the vehicle to the OEM specifications.
- Retorque all the bolts after the first 100 miles.



Photo # 18

<u>TORQUE SPECIFICATIONS</u>					
<u>INCH SYSTEM</u>			<u>METRIC SYSTEM</u>		
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9
5/16	15 FT LB	20 FT LB	6MM	5 FT LB	9 FT LB
3/8	30 FT LB	35 FT LB	8MM	18 FT LB	23 FT LB
7/16	45 FT LB	60 FT LB	10MM	32 FT LB	45 FT LB
1/2	65 FT LB	90 FT LB	12MM	55 FT LB	75 FT LB
9/16	95 FT LB	130 FTLB	14MM	85 FT LB	120 FT LB
5/8	135 FT LB	175 FT LB	16MM	130 FT LB	165 FT LB
3/4	185 FT LB	280 FT LB	18MM	170 FT LB	240 FT LB

• 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.