

2013 - 2018 Ram 3500 4WD 4" & 6" Suspension Lift Installation Instructions

REQUIRED TOOL LIST:

- Safety Glasses
- Metric / Standard Wrenches & Sockets
- Drill / Assorted Drill Bits
- Hacksaw
- Floor Jack
- Jack Stands
- Measuring Tape
- 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. If any parts are found to be missing, contact SKYJACKER[®] Customer Service at 318-388-0816 to obtain the 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 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:

- If larger tires (10% more than the OEM diameter) are installed, speedometer recalibration will be necessary. Contact your local Ram 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 #: R45 (4" Lift)

Item #	Description	Qty	Item #	Description	Qty
R345S	RAM FRONT 4" COIL	2	WD1	WARNING DECAL	1

Component Box Breakdown:

Part #: R65 (6" Lift)

Item #	Description	Qty	Item #	Description	Qty
R365S	RAM FRONT 6" COIL	2	WD1	WARNING DECAL	1

Component Box Breakdown:

Part #: R461 (4" & 6" Lifts)

Item #	Description	Qty
R14BLB-L	BRAKE LINE BRACKET-LEFT	1
R14BLB-R	BRAKE LINE BRACKET-RIGHT	1
R14RAB46-L	RAD ARM DROP BRACKET-LEFT	1
R14RAB46-R	RAD ARM DROP BRKT-RIGHT	1
R14TB46-B	FRONT TRACK BAR BRACKET	1

Item #	Description	Qty
RA100	DROP PITMAN ARM	1
BP60S	BUMP STOP	2
HB-R14-RAB	HDWR BAG: RAD ARM BRKTS	1
HB-R14-TB	HDWR BAG: FRT TRK BAR BRKT	1

Hardware Bag Breakdown:

Part # HB-R14-RAB (4" & 6" Lifts)

Item #	Description	Qty	Item #	Description	Qty
CS3281	CRUSH SLEEVE / 3.281"	2	18MMN	18MM LOCK NUT	2
R14RAB46-FCS	RAD ARM BRKT CRUSH SLEEVE	2	58X512FTB	5/8 X 5 1/2 FINE THREAD BOLT	2
18X130MMB	18MM X 130MM METRIC BOLT	2	58SAEW	5/8 SAE WASHER	4
18MMFW	18MM FLAT WASHER	4	58FTN	5/8 FINE THREAD LOCK NUT	2

Hardware Bag Breakdown:

Part # HB-R14-TB (4" & 6" Lifts)

Item #	Description	Qty	Item #	Description	Qty
R14TB46-CS	FRT TRK BAR CRUSH SLEEVE	1	18MMFW	18MM FLAT WASHER	2
12X134FTB	1/2 X 1 3/4 FINE THREAD BOLT	1	18MMN	18MM LOCK NUT	1
12SAEW	1/2 SAE WASHER	2	716X114FTB	7/16 X 1 1/4 FINE THREAD BOLT	2
12FTN	1/2 FINE THREAD LOCK NUT	1	716SAEW	7/16 SAE WASHER	4
18MMX90MMB	18MM X 90MM METRIC BOLT	1	716FTN	7/16 FINE THREAD LOCK NUT	2

Part #: R134 (4" Lift)

Item #	Description	Qty	Item #	Description	Qty
R14SBB2-L	2" SWAY BAR LWR BRKT-LEFT	1	HB-916	HDWR BAG: 9/16 LOCK NUTS	1
R14SBB2-R	2" SWAY BAR LWR BRKT-RIGHT	1	HB-SBL	HDWR BAG: SWAY BAR LOW BK	1
RB37	3.25" REAR BLOCK	2	I-R1346	INST SHEET: 4" - 6" 13 RAM 3500	1
916X4X13U	9/16 X 4 X 13 U-BOLT	4			

Component Box Breakdown:

Part #: R136 (6" Lift)

Item #	Description	Qty	Item #	Description	Qty
R14DSS-S	REAR DRIVESHAFT SPACER	1	HB-916	HDWR BAG: 9/16 LOCK NUTS	1
R14SBB4-L	4" SWAY BAR LWR BRKT-LEFT	1	HB-DSS112	HDWR BAG: DRIVESHAFT SPCR	1
R14SBB4-R	4" SWAY BAR LWR BRKT-RIGHT	1	HB-R13-BL	HDWR BAG: REAR BRK LN BRKT	1
RBF50	5" REAR BLOCK	2	HB-SBL	HDWR BAG: SWAY BAR LOW BK	1
916X4X15U	9/16 X 4 X 15 U-BOLT	4	I-R1346	INST SHEET: 4" - 6" 13 RAM 3500	1

Hardware Bag Breakdown:

Part # HB-916 (4" & 6" Lifts)

Item #	Description	Qty
916FTN	9/16 FINE THREAD LOCK NUT	8

Hardware Bag Breakdown:

Part # HB-DSS112 (6" Lift)

Item #	Description	Qty	Item #	Description	Qty
12X65SHB	12MM X 65MM SOCKET HEAD BLT	4	LT100	NUTS N' BOLTS 427 1 ML TUBE	1

Hardware Bag Breakdown:

Part # HB-R13-BL (6" Lift)

Item #	Description	Qty	Item #	Description	Qty
DBLE70	REAR BRAKE LINE EXT BRKT	1	516SAEW	5/16 SAE WASHER	2
516X1FTB	5/16 X 1 FINE THREAD BOLT	1	516FTN	5/16 FINE THREAD LOCK NUT	1

Hardware Bag Breakdown:

Part # HB-SBL (4" & 6" Lifts)

Item #	Description	Qty	Item #	Description	Qty
716X112FTB	7/16 X 1 1/2 FINE THREAD BOLT	4	716SAEW	7/16 SAE WASHER	8
716FTN	7/16 FINE THREAD LOCK NUT	4			

Front Installation:

- 1. With the vehicle on a level concrete or asphalt surface, set the emergency brake & block the rear tires / wheels.
- 2. Lift the front of the vehicle & support the vehicle using jack stands.
- 3. Remove the front tires / wheels. (See Photo # 1)
- 4. Remove the OEM front shocks. (See Photo # 2)
- 5. Disconnect the OEM sway bar end links from the OEM sway bar. (See Photo # 3)
- Remove the OEM drag link from the OEM pitman arm. (See Photo # 4)
- 7. Remove the OEM pitman arm using a pitman arm puller. (See Photo # 5)
- Disconnect the OEM ABS / brake line brackets from the front axle. (See Photo # 6)
- Disconnect the OEM track bar from the upper frame mount. (See Photo # 7)















- 10. While checking for appropriate slack in ABS lines, brake lines, differential breather hose, & etc. Lower the front axle & remove the OEM coil springs & rubber isolators. (See Photo # 8)
- 11. Remove the OEM bump stops by working back & forth using adjustable pliers. (See Photo # 9)
- 12. Support the front axle securely & disconnect the rear of the OEM radius arms from the frame rails. (See Photo # 10)
- 13. Install the new Skyjacker upper radius arm bracket sleeves (2.938" Long) in the OEM hole of each frame rail. (See Photo # 11)
- Install the new Skyjacker radius arm brackets to the frame rails using the supplied 5/8" x 5 1/2" fine thread bolts, washers, & nuts for the upper mount & the supplied crush sleeves (3.281" Long), 18mm x 130mm bolts, washers, & nuts for the lower mount. (See Photo # 12)
- 15. Attach the rear of the OEM radius arms to the new Skyjacker radius arm brackets using the OEM hardware. (See Photo # 13)
- 16. Install the new Skyjacker track bar bracket over the OEM track bar mount & attach the new track bar bracket using the supplied crush sleeve (1.375" Long), 18mm x 90mm bolt, 7/16" x 1 1/4" fine thread bolt, washers, & nuts. (See Photo # 14) <u>Note:</u> Do not fully tighten these bolts & nuts at this time.









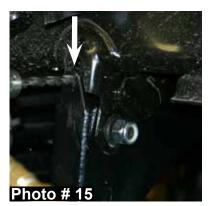






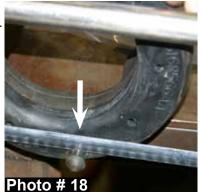
- 17. Drill the upper outside OEM mounting hole using a 7/16" drill bit & attach using the supplied 7/16" x 1 1/4" fine thread bolt, washers, & nut. (See Photo # 15) <u>Note:</u> Do not fully tighten this bolt & nut at this time.
- 18. Mark, center punch, & drill the upper inside mounting hole of the new Skyjacker track bar bracket using a 1/2" drill bit. (See Photo # 16) <u>Note:</u> While drilling, be very careful not to hit the oil pan or engine block of the vehicle. A block of wood can be placed between the engine block & frame to help prevent any damage while drilling.
- 19. Install the supplied 1/2" x 1 3/4" fine thread bolt, washers, & nut thru the newly drilled mounting hole & torque to 50 ft lbs. Fully tighten all of the new Skyjacker track bar bracket hardware.
- 20. Place the new Skyjacker poly bump stops in the OEM bump stop cups. Using leverage against the bottom of the new poly bump stops, force the new poly bump stops into place. (See Photo # 17)
- 21. <u>4" Lift:</u> Remove the alignment pin from the driver side OEM upper coil spring isolator using a hacksaw. (See Photo # 18) Rotate & install the new Skyjacker driver side coil spring with the Skyjacker / Driver labeling facing outward towards the driver side front tire / wheel. (See Photo # 19)
- 22. <u>4" Lift:</u> Install the passenger side OEM coil spring isolator in the OEM position & install the new Skyjacker passenger side coil spring with the Skyjacker / Passenger labeling facing outward towards the passenger side front tire / wheel. (See Photo # 19)
- 23. <u>6" Lift:</u> Remove the alignment pin from the passenger side OEM upper coil spring isolator using a hacksaw. (See Photo # 18) Rotate & install the new Skyjacker passenger side coil spring with the Skyjacker / Passenger labeling facing outward towards the passenger side front tire / wheel. (See Photo # 19)
- 24. <u>6" Lift:</u> Install the driver side OEM coil spring isolator in the OEM position & install the new Skyjacker driver side coil spring with the Skyjacker / Driver labeling facing outward towards the driver side front tire / wheel. (See Photo # 19)



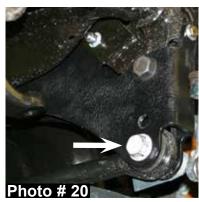








- 25. Raise the front axle in order to load the new Skyjacker coil springs & connect the OEM track bar to the new Skyjacker track bar bracket using the OEM hardware. (See Photo # 20) **Note:** Use the upper mounting hole for a 4" lift & the lower mounting hole for a 6" lift.
- 26. Install the new Skyjacker pitman arm using the OEM hardware. (See Photo # 21)
- 27. Mark the location of the OEM drag link jam nuts & loosen the jam nuts in order to remove the shorter OEM tie rod from the OEM drag link assembly. Once removed, mark & cut the anti-rotation tab from the shorter OEM drag link tie rod flush with the base of the shorter OEM drag link tie rod using a hacksaw. (See Photo # 22) **Note:** Be careful not to damage the threads of the shorter OEM tie rod.
- 28. Reassemble the OEM drag link assembly & connect the OEM drag link assembly to the new Skyjacker pitman arm using the OEM hardware. (See Photo # 23)
- 29. Disconnect the OEM sway bar from the frame & install the new Skyjacker sway bar brackets between the frame & the OEM sway bar mounts with the flat side of the new brackets facing towards the outside of the vehicle using the supplied 7/16" x 1 1/2" bolts, washers, & nuts. (See Photo # 24) <u>Note:</u> 4" Lift: Driver Side / Part # R14SBB2-L & Passenger Side / Part # R14SBB2-R 6" Lift: Driver Side / Part # R14SBB4-L & Passenger Side / Part # R14SBB4-R
- 30. Connect the OEM sway bar end links to the OEM sway bar using the OEM hardware. (See Photo # 25)













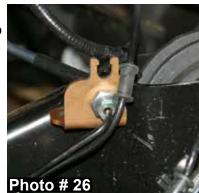
- 31. Install the New Skyjacker ABS / brake line brackets to the front axle using the OEM hardware & attach the OEM brake lines & ABS lines to the new ABS / brake line brackets using the OEM hardware. (See Photo # 26)
- 32. Install the new Skyjacker front shocks using the supplied shock hardware & OEM hardware. (See Photo # 27)
- 33. Install the front tires / wheels & lower the front of the vehicle to the ground.

Rear Installation:

- 34. Block the front tires / wheels, lift the rear of the vehicle, & support the vehicle using jack stands.
- 35. Remove the rear tires / wheels.
- 36. Disconnect the OEM E-brake cable from the OEM cable union & relocate the OEM E-brake cable below the OEM leaf spring frame bracket. (See Photo # 28 & # 29)
- 37. Disconnect the OEM rear brake line bracket from the rear axle. (See Photo # 30)
- 38. Support the rear axle & remove the OEM rear shocks & u-bolts. (See Photo # 31)
- 39. <u>4" Lift:</u> While checking for appropriate slack in ABS lines, brake lines, differential breather hose, & etc, lower the rear axle. Install the new Skyjacker rear lift blocks with the embossed "F" towards the front of the vehicle & the embossed "R" towards the rear of the vehicle.
- 40. <u>6" Lift:</u> While checking for appropriate slack in ABS lines, brake lines, differential breather hose, & etc. Lower the rear axle & install the new Skyjacker rear lift blocks.









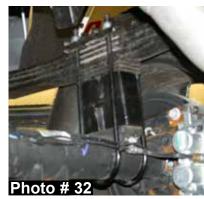




- 41. Raise the rear axle & install the new Skyjacker u-bolts using the supplied 9/16" nuts. (See Photo # 32)
- 42. <u>4" Lift:</u> Reconnect the OEM rear brake line bracket to the rear axle using the OEM hardware.
- 43. <u>6" Lift:</u> Install the new Skyjacker rear brake line bracket to the rear axle using the OEM hardware & attach the OEM rear brake line bracket to the new rear brake line bracket using the supplied 5/16" x 1" bolt, washers, & nut . (See Photo # 33) <u>Note:</u> It may be necessary to slightly loosen the OEM hard brake lines in order to connect the OEM rear brake line bracket to the new rear brake line bracket.
- 44. <u>6" Lift:</u> Disconnect the rear driveshaft from the rear differential & install the new Skyjacker rear driveshaft spacer using the supplied 12mm x 65 mm socket head bolts. <u>Note:</u> Apply the supplied thread locking compound to the threads of each socket head bolt before installation. (See Photo # 34)
- 45. Install the new Skyjacker rear shocks using the supplied shock hardware & OEM hardware.
- 46. Install the rear tires / wheels & lower the rear of the vehicle to the ground.

Final Notes:

- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart 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.
- After the first 100 miles, check all of the hardware for the proper torque & periodically thereafter.







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