



# KJ09168BK Renegade 1.5 Lift Kit



Instruction Sheet: P21677 2015 Daystar Products International Inc.

### **Introduction**



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Warranty (see terms at Daystarweb.com). To ensure your safety and proper installation of this product, take a moment to read all instructions and product safety information before trying to install your Daystar® product. If you have technical questions after reading these instructions, we are here to help: contact us at 800-595-7659.

### **Product Safety Information**

Throughout these instructions, important safety information is generally preceded by one of three signal words indicating the relative risk of injury. The signal words are as follows:

**! WARNING** A hazardous situation which, if not avoided, could result in death or serious injury. You can be seriously injured or killed if you don't follow instructions.

**! CAUTION** A hazardous situation which, if not avoided, could result in minor or moderate injury. You can be moderately injured and also may suffer property damage if you don't follow instructions.

**NOTICE** Careful attention is required to this instruction or operation, but this does not generally relate to personal injury. Damage to your product or other property may result if you don't follow instructions.

#### **WARNING**

Familiarize yourself with all vehicle manufacturer and Daystar warnings, instructions, and limited warranties before driving your modified suspension vehicle. Also, be aware many states / countries have laws governing on-road vehicle heights and modifications. You are responsible for ensuring the safety and legality of your vehicle. A summary of current state vehicle laws is available at www.sema.org.

## **Tools Needed**

Quantity	Description	
1	Flat tip screw driver	
1	Philips screwdriver	
1	Panel removal tool	
1	3/8" Drive	
1	12" 3/8" Extension	
1	Needle nose pliers	
1	Hammer	
1	17mm socket	
1	18mm socket	
1	23mm socket	
1	E-14 Reverse Torx socket	
1	E-16 Reverse Torx socket	
1	E-18 Reverse Torx socket	
1	E-20 Reverse Torx socket	
1	5/8" Open end wrench	
1	5/8" Open end stubby wrench	
1	16mm open end wrench	
1	18mm open end wrench	
1	T-40 Torx	
1	1/2" Drive	
1	Floor Jack	
2	Jack Stands	

## **Bill of Materials**

Quantity	Part Number	Description
2	M21637	Front Spacer
6	M21638	Rear Spacer
12	S11094	Stud Extender
4	M21642	Rear Cross Member Spacer
2	M21641	Brake Line Spacer
2	M21640	Muffler Spacer
2	M21639	Carrier Bearing Spacer
2		Sway Bar Link
1	S21643	Charcoal Canister Bracket Upper
1	S21644	Charcoal Canister Bracket Lower
2	S21645	Rear Lower Control Arm Bracket
4	S20186	Cross Member Bolt 14mm
4	S11089	14mm Flat Washer
4	S10640	Muffler/Brake Bolt 8mm
4	S10829	8mm Flat Washer
2	S10522	Carrier Bearing Bolt 10mm
2	S11051	10mm Flat Washer
3	S10505	1/4-20 Nut
3	S10584	1/4" Flat Washer
1	P11183	Locitie 242

## **Installation Instructions**

# Warning: Always work with appropriate personal safety gear including safety glasses, gloves and hearing protection if using air powered tools.

Begin by inspecting the components & hardware for damage, then compare components & hardware to the bill of materials for completeness. If anything is missing/ damaged, do not proceed with the installation.

- 1. Park the vehicle on a hard level surface. Engage the parking brake.
- 2. Open the hood
- 3. Proceed to remove the windshield wipers. Remove cap covering the nuts retaining the wipers. With a 17mm socket remove the wiper retaining nuts and washers.
- 4. Before removing the wipers make note of their position. Remove the wipers by pulling up and wiggling them a bit. It should not take too much force.
- Mark the wiper arms, so they can be returned to where they belong (Figure 1).



6. Remove cowl cover. This is done by using a flat tip screw driver to pry up the center pins (Figure: 2), then use a panel removal tool to pry up the body of the retainer (Figure:3).



7. On each side of the cowl cover there is a foam filler panel that is attached t o the body with a push pin. With the panel removal tool pop out the pins. Once the foam filler is removed from the each side, remove the cowl cover (Figure: 4)



- 8. Ensure the e-brake is engaged, place the wheel chocks behind the rear tires, then lift the front end of the Jeep until the front tires are off the ground.
- 9. Position the jack stands beneath the frame of the Jeep and rest the vehicle on them.
- 10. Remove the front tires. A 17mm socket will be needed to remove the factory wheel studs.
- Starting with the Driver's side, disconnect the upper portion of the swaybar link from the strut. Then remove it from the Jeep by disconnecting it from the sway bar. AT-40 Torx bit and 18mm box end wrench are required for this step (Figure: 5).



12. Disconnect the tie rod from the steering knuckle. The 17mm socket will need to be used along with the hammer. Once the retaining nut is loosened strike the steering knuckle with the hammer until the tie rod end pops loose (Figure:6).



 Remove the spring clip that is holding the brake line to the strut body. Needle nose pliers are required for this step (Figure: 7).



- 14. Remove the brake line and ABS line from there retainers on the strut body.
- 15. Remove the bolts that attach the strut to the steering knuckle. This will require the 16mm open end and E-16 reverse Torx (Figure: 8).



- 16. Separate the lower portion of the strut from the steering knuckle. Then support the steering knuckle assembly so the CV joints are not damaged.
- 17. Remove the upper strut bolts. You will need the E-14 reverse Torx socket and an extension (Figure:9).



- 18. Remove the strut assembly from the Jeep.
- 19. Apply red Loctite to the threads of the stud extenders and install them into the top of the strut assembly (Figure: 10).



20. Once the stud extenders are installed and tightened, place the polyurethane spacer on top of the strut assembly (Figure: 11).



- 21. Reinstall the strut assembly. Install the upper factory bolts, leave loose at this time, them reattach the steering knuckle to the strut assembly. Once the strut is installed tighten the upper bolts (70 ft lbs.) and steering knuckle bolts (90 ft lbs).
- 22. Reattach the brake and ABS lines to the strut assembly. Do not forget to install the spring clip that retains the brake line,
- 23. Install the supplied sway bar end links. You will need 2 18mm open end wrenches for this step (Figure: 12).



- 24. Reinstall Tie rod end, and tighten.
- 25. Make sure all of the bolts that were removed have been tightened, and the brake and ABS lines have been reinstalled correctly.
- 26. Repeat steps 11 thru 25 on the Front Passenger side of the Renegade.
- 27. Reinstall the tires, torque the wheels studs to 90 ft lbs, then remove the jack stands and set the Renegade on the ground.
- 28. Locate 2 of the M21639 round spacers.
- 29. In the next step the drive shaft carrier bearing will be lowered. The carrier bearing is located in the center of the vehicle on the rear driveshaft.

30. Loosen the carrier bearing bolts. This will require a E-12 reverse Torx socket (Figure: 13).



31. Remove one of the bolts at a time and replace it with a 10mm bolt and flat washer. Place the spacer between the body and carrier bearing (Figure: 14).



- 32. Once the both spacers have been placed, tighten both of the bolts.
- 33. Place the wheel chocks on the front side of the front tires.
- 34. Jack up the rear of the vehicle, place the jack stands on the rear section of the uni-body frame, and remove the rear tires.

- 35. Locate 2 x part # M21640, and 2 of the 8mm bolts and washers.
- Remove the 2 bolts that attach the muffler hangers to the uni-body. A 13mm socket will be needed (Figure: 15).



37. Install the M2164 spacer between the muffler hanger and heat shield, then install the new bolt and tighten (Figure: 16).



- 38. Starting with the Driver's side, remove the inner fender liner. A Phillips screw driver and 10mm socket are required.
- 39. There is one Phillips screw in the front bottom portion of the inner fender, and 4 in the rear section of the inner fender. One of them is located on the bottom of the flare. (Figure: 17).



- 40. There are 4 plastic nuts that are also holding the inner fender in place. 2 are located on either side of the strut, 1 is on the front side, and the last one is in the bottom rear corner.
- 41. There is one last retainer located on the front side of the fender liner just on the inside of the wheel opening (Figure: 18).



- 41. Remove the inner fender from the Passenger's side of the Jeep.
- 42. Place the floor jack under the rear differential, and provide some slight pressure. Do not lift the vehicle, just enough to hold the cross member in place.
- 43. Loosen the 4 cross member bolts. The E-20 reverse Torx will be needed (Figure: 19).



44. On the Driver's side remove the two factory bolts, then lower the cross member enough to install the M21642 spacers. Then install the replacement 14mm bolts and washers. Leave the bolts loose until all 4 spacers have been installed (Figure: 20). Once all 4 spacers are installed torque the bolts to 120 ft lbs.



45. Starting with the Driver's side remove the factory bolt holding the brake/ ABS/E-Brake line bracket to the uni-body. A 13mm socket will be needed (Figure:21).



46. Install spacer M21641 between the sub-frame and brake line bracket. Use the supplied 8mm bolt and washer to retain the new assembly, and tighten (Figure:22). Repeat the process on the Passenger's side.



47. Starting with the Driver's side remove the bolt holding the lower control arm to the uni-body mounted bracket (Figure: 23). The E-20 socket and 23mm open end wrench will be needed.



48. Remove the lower control arm from the uni-body (Figure: 24). The E-14 socket will be needed.



49. Install the new lower control arm bracket. Torque the bolts to 75 ft lbs. Then reattach the lower control arm, and torque the bolt to 110 ft lbs. (Figure: 25).



- 50. Repeat step 49 on the Passenger's side of the vehicle.
- 51. Starting with the Driver's side, remove the brake line, ABS line and Ebrake wire from the brackets attached to the body of the strut. The process is the same as the front struts. You will need a pair of needle nose pliers (Figure: 26).



52. Remove the E-brake plug from the brake caliper. This is done by inserting a flat tip screw driver and gently twisting it until the clip "pops" and the plug can be pulled up (Figure: 27).



53. Disconnect the sway bar end link from the body of the strut. A T-40 Torx and 18mm open end will be needed (Figure 28).



- 54. Do not remove the sway bar end link, just rotate it out of the way.
- 55. Starting with the Driver's side of the Jeep, remove the 2 bolts holding the strut to the knuckle. Separate the strut from the knuckle.

56. Remove the 3 bolts attaching the upper portion of the strut assembly to the Jeep body (Figure 29).



- 57. Remove the strut assembly from the vehicle.
- 58. Apply red Loctite to three stud extenders and place them into the 3 threaded holes (Figure: 30).



59. Tighten the stud extenders, then slide the M20507 spacers over the stud extenders. Some light taps from a hammer may be required to set the spacers (Figure: 31).



- 60. Re install the strut assembly. Torque the upper bolts to 75 ft lbs., and the lower bolts to 90 ft lbs.
- 61. Reattach the sway bar end link.
- 62. Reattach the Brake line, ABS line and E-brake wires to the strut assembly. Then plug the e-brake wire back into the caliper.
- 63. Double check your work to ensure the Driver's side rear strut assembly has been installed correctly.
- 64. Repeat the rear strut steps 51 thru 59 on the Passenger's side.
- 65. Once the strut assembly is removed and the stud extenders/spacers have been installed, unbolt the charcoal canister. A 10 mm socket will be needed.
- 66. Attach the upper charcoal canister bracket (part #S21643) to the stud using factory hardware (Figure: 32).



67. Install the lower charcoal canister relocation bracket (part # S21644). Attach it to the studs using factory hardware (Figure: 33).



- 68. Reinstall the charcoal canister. Use the 1/4" nuts and washer.
- 69. Once the charcoal canister has been relocated, complete the installation of the Passenger side strut assembly.
- 70. Double check your work to ensure all of the hardware has been tightened, all lines are routed correctly and that the e-brake has been plugged back in.
- 71. Reinstall the Driver and Passenger side inner fender liners.
- 72. Reinstall the rear tires and wheels, then set the vehicle back on the ground.
- 73. Torque the rear wheel studs to 90 ft lbs.
- 74. This completed the lift kit installation, stand back and admire your work.
- 75. At 25 miles re-torque the wheel studs to 90 ft lbs.
- 76. At 500 miles look over the suspension installation and make sure all of the hardware is tight and all lines are routed correctly.



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