

Truck and Jeep Accessories

# KJ09172 2017 to Current (2017 "All-New" ONLY) Jeep Compass 1.5" Lift Kit (Trailhawk Only)



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Instruction Sheet: INS09172 ©Daystar Products International Inc.

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#### Introduction



is your number one source for Made In The USA quality vehicle accessories.

Now backed with our exclusive Go Everywhere <sup>©</sup> Lifetime Limited 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<sup>®</sup> product. If you have technical questions after reading these instructions, we are here to help. You can 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 may also 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 <u>www.sema.org</u>.

Bill of Materials		
Qty	Part #	Description
2	M21637	Front Strut Spacer
6	M21638	Rear Strut Spacer
2	M21639	Carrier Bearing Spacer
4	M02201	Carrier Bearing Skid Plate Spacer
2	M21640	Exhaust Hanger Spacer
2	M21641	Break Brake Line Spacer
4	M21642	Rear Crossmember Spacer
4	M00433	Sway Bar Link Bushing, Hour Glass
1	S21643	Bracket, Upper Fuel Evap Canister
1	S21644	Bracket, Lower Fuel Evap Canister
2	S21645	Bracket, Rear Lower Frontward Control Arm
1	S09172-01	Sway Bar End Link Bracket, Passenger
1	S09172-02	Sway Bar End Link Bracket, Drive
12	S11094	Stud Extender, M10 X 1.25, 0.875" Threaded L, 2.5" Overall L
4	S20186	Bolt, M14 X 2 X 160 mm (Crossmember)
4	S20363	Washer, 9/16" (Crossmember)
6	S10640	Bolt, M8 X 1.25 X 45 mm (Muffler/Brake)
4	S10829	Washer, M8
2	S10522	Bolt, M10 X 1.25 X 50 mm (Carrier Bearing)
2	S11051	Washer, M10 X 30 mm OD X 2.5 mm t (Carrier Bearing)
3	S10505	Nut, 1/4"-20 (Evap Canister)
3	S10584	Washer, 1/4" (Evap Canister)
1	BU09172	Sway Bar End Link Hardware
2	P11153	Thread Lock
1	INS09172	Instructions
1	P10474	Decal, Warning/Disclaimer

## Tools Needed

Floor Jack		
Jack Stands		
Flat Tip Screwdriver		
Phillips Screwdriver		
Panel Removal Tool		
Needle Nose Pliers		
Hammer		
Vise or Press		
Grinder or Cutoff Tool		
Ratchet		
Breaker Bar		
Drive Extension Set		
Metric Socket Set		
Metric Wrench Set		
Torx Drive Set		
Reverse Torx Socket Set		

#### **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 and hardware for damage, then compare components and hardware to the bill of materials for completeness. If anything is missing or damaged, do not proceed with the installation. Please call Daystar Products (800-595-7659) and we will send you replacements for the missing or damaged components free of charge.

- 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 the 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.
- 5. Mark the wiper arms so they can be returned to the correct side (Figure 1)



6. Remove the cowl cover. This is done by using a flat tip screwdriver 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 to the body with a push pin. With the panel removal tool, pop out the pins. Once the foam filler is removed from each side, remove the cowl cover (Figure 4)



- 8. Ensure the parking brake is engaged, then place wheel chocks in front of and behind the rear tires. Now 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/wheels. A 17mm socket will be needed to remove the factory wheel studs.
- 11. Starting with the Driver's side, disconnect the upper portion of the sway bar link from the strut. Now remove it from the Jeep by disconnecting it from the sway bar. A T-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. Loosen the retaining nut (do not remove yet) and then strike the steering knuckle with the hammer until the tie rod end pops loose (Figure 6). Now remove the nut.



13. 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 their retainers on the strut body.
- 15. Remove the bolts that attach the strut to the steering knuckle. This will require the 16mm open end wrench and the E-18 reverse Torx (Figure 8).



- 16. Separate the lower portion of the strut from the steering knuckle. Be sure to support the steering knuckle assembly so the CV joints are not overextended and 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 using a 16mm wrench (Figure 10).



20. Once the stud extenders are installed and tightened, place the M21637 polyurethane spacer on top of the strut assembly (Figure 11).



21. Reinstall the strut assembly. Install the upper factory bolts, leaving them loose at this time. Next, 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).

**NOTE:** If necessary, loosen but do not remove the 6 bolts that hold the front subframe to the vehicle, as shown below, in order to provide clearance when installing the strut assembly.



- 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 provided sway bar end link bracket onto the strut using the provided M12 bolt, washers, and nut; then install the factory sway bar end link onto the bracket using the factory hardware. (Figure 12)



! WARNING: After installing end links, you must check for adequate clearance. There are various configurations on the different vehicle models, and while not likely, you may need to make small adjustments.

Fully rotate the steering to the left and to the right to verify that there is sufficient clearance between the links and the unibody, brake lines and brackets, and wiring harnesses. Brake lines can be carefully bent to clear if necessary, and brake line brackets can be repositioned by drilling a new hole for the bracket mount. Wiring can be tied back with a zip tie if necessary. Repeat on both sides.

- 24. Reinstall the tie rod and tighten.
- 25. Make sure all the bolts that were removed have been retightened, and that the brake and ABS lines have been reinstalled correctly.
- 26. Repeat steps 11 thru 25 on the front passenger side of the vehicle.
- 27. Reinstall the tires and torque the wheels studs to 90 ft lbs. Next, jack up the vehicle, remove the jack stands, and set the vehicle back on the ground.

#### STEPS 28 - 33 ARE FOR 4WD MODELS ONLY. FOR 2WD MODELS SKIP TO STEP 33.

- 28. Locate the two M21639 round spacers.
- 29. In the next step the driveshaft carrier bearing will be lowered. The carrier bearing is located in the center of the vehicle on the rear driveshaft.
- 30. Use a 13mm socket to first remove the four nuts securing the carrier bearing skid plate in place.



31. Loosen the carrier bearing bolts. This will require an E-12 reverse Torx socket (Figure 15).



32. Loosen both bolts, then remove one of the bolts at a time and replace it with a 10mm bolt and flat washer, placing the M21639 spacers between the body and carrier bearing bracket (Figure 16).



33. Reinstall the carrier bearing skid plate, placing M02201 spacers between the body and the skid plate at each of the four mounting locations.



- 34. Place the wheel chocks in front of and behind the front tires.
- 35. Jack up the rear of the vehicle. Place the jack stands under the rear section of the unibody frame just in front of the rear tires and set the vehicle on the stands. Now remove the rear tires/wheels.
- 36. Locate the two M21640 spacers and two of the 8mm bolts and washers.

37. Remove two bolts that attach the muffler hangers to the unibody using a 13mm socket (Figure 18).



38. Install the M21640 spacers between the muffler hangers and heat shields, then install the new bolts and tighten (Figure 19).



- 39. Starting with the Driver's side, remove the rear inner fender liner. A Phillips screw driver and 10mm socket are required.
- 40. There is one Phillips screw in the front bottom portion of the inner fender and four are in the rear section of the inner fender. One is located on the bottom of the flare (Figure 20).



- 41. There are four plastic nuts that are also holding the inner fender in place. Two are located on either side of the strut. One is on the front side, and the last one is in the bottom rear corner.
- 42. There is one last retainer located on the front side of the fender liner just on the inside of the wheel opening (Figure 21).



- 43. Remove the inner fender from the Passenger's side of the Jeep.
- 44. Place the floor jack under the rear differential and provide some slight pressure. Do not lift the vehicle. Lift just enough to hold the cross member in place.
- 45. Loosen the four cross member bolts. The E-20 reverse Torx will be needed (Figure 22).



46. On the Driver's side remove the two factory bolts, then lower the cross member enough to install the M21642 spacers. Next, install the replacement 14mm bolts and washers. Leave the bolts loose until all four spacers have been installed. Once all four spacers are installed torque the bolts to 120 ft lbs (Figure 23).



47. Starting with the Driver's side remove the factory bolt holding the brake/ABS/E-Brake line bracket to the unibody. A 13mm socket will be needed (Figure 24).



48. Install spacer M21641 between the subframe and brake line bracket. Use the supplied 8mm bolt and washer to retain the new assembly and tighten. Repeat the process on the Passenger side (Figure 25).



49. Starting with the Driver's side remove the bolt holding the trailing arm to the unibody-mounted bracket. The E-20 socket and 23mm open end wrench will be needed (Figure 26).



50. Remove the trailing arm bracket from the unibody. The E-14 socket will be needed (Figure 27). **Note:** you may need to first remove the fuel tank skid plate(s).



51. The rear/fuel tank skid plate may need to be ground down in order to provide clearance for inserting the bolt when reinstalling the trailing arm.





52. Install the new trailing arm bracket. Torque the bolts to 75 ft lbs. Then reattach the trailing arm and torque the bolt to 110 ft lbs (Figure 31).





- 53. Repeat steps 49 through 52 on the Passenger side of the vehicle.
- 54. Starting with the Driver's side, remove the brake line, ABS line and E-brake 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 33).



55. 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 34).



56. Disconnect the sway bar end link from the body of the strut. A T-40 Torx and 18mm open end will be needed (Figure 35).



- 57. Do not remove the sway bar end link, just rotate it out of the way.
- 58. Starting with the Driver's side of the Jeep, remove the two bolts holding the strut to the knuckle. Separate the strut from the knuckle.
- 59. Remove the three bolts attaching the upper portion of the strut assembly to the unibody (Figure 36).



- 60. Remove the strut from the vehicle.
- 61. Apply red Loctite to the three stud extenders and screw them into the threaded holes (Figure 37).



62. Tighten the stud extenders, then install the M20507 spacers over the stud extenders. Some light taps from a hammer may be required to set the spacers (Figure 38).



- 63. Reinstall the strut assembly. Torque the upper bolts to 75ft lbs, and the lower bolts to 90ft lbs.
- 64. Reattach the sway bar end links.
- 65. Reattach the brake line, ABS, and E-brake wires to the strut assembly. Plug the E-brake wire back into the caliper.
- 66. Double check your work to ensure the Driver's side rear strut assembly has been installed correctly.
- 67. Repeat rear strut steps 54 through 66 on the Passenger side.
- 68. Once the Passenger strut assembly is removed and the stud extenders and spacers have been installed, unbolt the charcoal canister. A 10mm socket will be needed.
- Attach the upper charcoal canister bracket S21643 to the stud using factory hardware (Figure 32). NOTE: Vehicle charcoal canister mounts have varied between models and years, and may look different than the photos, but you will be able to make the new brackets in your kit work.



70. Install lower charcoal canister relocation bracket S21644 using factory hardware (Figure 40).



- 71. Reinstall the charcoal canister using the kit 1/4" nuts and washers.
- 72. Remove the frontward facing locating tab on the passenger side strut assembly to provide clearance for the fuel filler hose upon reinstallation.





- 73. Double check your work to ensure all the hardware has been tightened, all lines are routed correctly, and that the E-brake has been plugged back in.
- 74. Reinstall the Driver and Passenger side inner fender liners.
- 75. Reinstall the rear tires and wheels, and then set the vehicle back on the ground.
- 76. Torque the rear wheel studs to 90 ft lbs.
- 77. This completes the lift kit installation, so stand back and admire your work!
- NOTICE Be sure to get a full four wheel alignment on your vehicle upon completion. It will align to factory specifications. During this first alignment, the shop will be required to loosen the bolts in the rear on each side that attach the trailing arm brackets to the unibody (Figure 25). After loosening the bolts, align the vehicle, and then retighten the bolts. Future alignments will likely not need this step.
- 78. At 25 miles retorque the wheel studs to 90 ft lbs.
- 79. At 500 miles look over the suspension installation and make sure all the hardware is tight and all lines are routed correctly.



# **Daystar® Lifetime Go Everywhere Limited Warranty**

Your Daystar® Comfort Ride<sup>™</sup> or Budget Boost<sup>™</sup> leveling kit is covered by the following **Go Everywhere Lifetime Limited Warranty** provided exclusively by Daystar Products International, Inc.

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What is Covered? Real Life Use, Off Road & On: Subject to the terms, exclusions and limitations herein, Daystar® warrants to the initial retail purchaser that your Comfort Ride™ or Budget Boost™ leveling kit shall be free of defects in material and workmanship for so long as it is properly installed on a single vehicle owned by the initial retail Daystar® purchaser.

#### What is Not Covered? Your Vehicle & Parts That Are Not Daystar's

**Go Everywhere:** Your Daystar Limited Warranty does not cover: (a) damage to your vehicle, vehicle systems (ex. electronic stability control), other products, components or property not manufactured by Daystar to our exclusive *Go Everywhere* standards, (b) customer choice of vehicle configuration/tire and wheel combinations contrary to Daystar® recommendations, warnings or applicable laws, (c) Acts of God, weather, corrosion, accidents, theft, vandalism, negligent misuse or intentional damage, other exclusions under your OEM Limited Warranty.

**Remedy Limited to Repair/Replacement. Get back on your favorite trail fast.** The exclusive remedy provided hereunder shall, upon Daystar's inspection and option, be either repair or replacement of the Comfort Ride™ or Budget Boost™ leveling kit or parts covered under this **Limited Warranty**. Call us, and we will get you back wheelin' (623-907-0081). All labor, removal, shipping and installation costs are the customer's responsibility.

**Other Exclusions –Limitation of Damages - Your Rights Under State Law. (Stuff Lawyers Say):** At Daystar®, we aren't big fans of lawyers, even ours. Still, he says our **Limited Warranty** has to include this stuff. In consideration of the purchase price paid, neither Daystar® nor any independent Daystar® distributor or repair person are responsible for any time loss, loss of vehicle use, rental costs, transportation, labor or for any incidental, consequential, punitive or other damages you may have or incur in connection with any part or product purchased. No Daystar® employee or independent distributor is authorized to make any statement or representation altering the terms of Daystar's *Go Everywhere Lifetime Limited Warranty*. Your exclusive remedy hereunder for covered parts is repair/ replacement as described above. This Limited Warranty gives you specific rights. You may also have other rights that vary from state to state. For example, some states do not allow limitations of how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you.

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