belltech

INSTALLATION GUIDE

PART NUMBER: 27004
FRONT LIFTING STRUT
GM 1500 2WD / 4WD | 2007-2018

3” TO 4” ADJUSTABLE RIDE HEIGHT

300 W. PONTIAC WAY. CLOVIS, CA 93612
PHONE: 800-445-3767 | EMAIL: INFO@BELLTECH.COM

THANK YOU

Thank you for choosing our high quality Belltech product. We have spent a great deal of time developing our line of products so that you will receive maximum performance with minimal difficulty during installation. Soon your vehicle will be on the road looking and feeling much improved.

Please take a moment to read all instructions and warnings prior to installation of your new Belltech product and before operating your vehicle. If you have any questions or concerns regarding any step in the installation process, please do not hesitate to call or email our customer support specialists who are trained to help you through any portion of this process.

Before You Begin:

It is of the utmost importance that you confirm all of the components listed on the parts list is in the kit. You can find this list located on the last page(s) of your instructions. Do not begin installation if any part is missing. Instead, please call our Belltech customer service specialists.

Belltech Customer Support:

Phone: 1-800-445-3767

Email: info@belltech.com

Safety Information:

Warning: Do not work under a vehicle supported only by a jack. Place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

Proper use of safety equipment and eye/face/hand protection is absolutely necessary when performing any of the following instructions.

We strive for an exceptional experience for all our valued customers. If for any reason you need assistance with your Belltech products, please do not return the product to the store you purchased from, but rather call our dedicated customer service experts, from 7am to 5pm PST.

We recommend that a qualified mechanic, at a properly equipped facility, perform this installation.

It is very helpful to have an assistant available during installation.

Before Driving Your Vehicle:

It is important to double check all brake hoses, cables, and other components to be sure there is no interference. You must also check for wheel/tire to chassis/body interference. If any issues are found, review your installation instructions to be sure no steps were missed and any problems are corrected.

Make sure your vehicle is aligned immediately following installation.

Check all hardware and re-torque at intervals for the first 10, 100, and 1000 miles.

Some of Belltech's products are designed to improve your vehicle's off-road performance. Leveling/lifting your vehicle may result in an altered center of gravity. It is crucial to use extreme care when operating your vehicle to prevent rollover and/or loss of control.

Any changes in your vehicle's suspension may result in transformed handleability. Please test-drive your vehicle in a remote location so you can become accustomed to the revised driving characteristics.

Perform headlight check and adjustment.

Failure to drive any modified vehicle in a safe manner may result in harm or death.

Never operate your modified vehicle under the influence of drugs, alcohol, or lack of adequate sleep.

Always wear your seatbelt.

DIFFICULTY:

INSTALLATION TIME: 2-4 Hours + Alignment

RECOMMENDED TOOLS:

- Properly rated floor jack
- Support stands
- Wheel chocks
- 1/2” or 3/8” drive wrench
- Metric socket wrench set
- Metric wrench set
- Tape measure
- Marking Pen

SPECIALTY TOOLS:

- High quality spring compressor
- Torque wrench up to 200 ft lbs

INSTALLATION PREPARATION:

Before beginning the installation process, measure the hub to fender heights for your vehicle and record them in the “Before” section. After your vehicle has been modified, record the new measurements in the, “After” section. This way, you can compare the resulting height to the original. When taking the measurements, measure vertically from the center of the wheel to the inner edge of the fender.

Before:

LF:_____

RF:_____

LR:_____

RR:_____

After:

LF:_____

RF:_____

LR:_____

RR:_____

JACKING, SUPPORTING, AND PREPARING THE VEHICLE

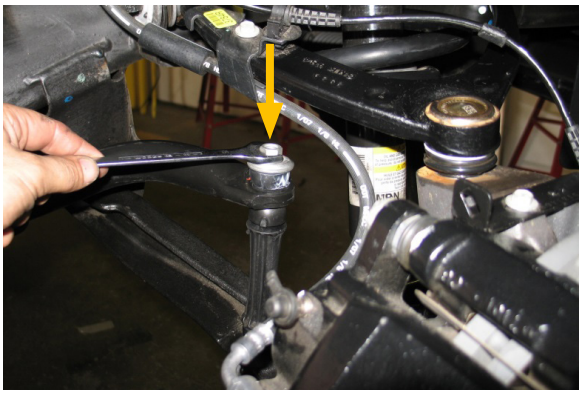
1. Park your vehicle on a smooth, level, concrete or seasoned asphalt surface.
2. Block the rear wheels of the vehicle using wheel chocks. Make sure the vehicle's transmission is in "PARK" (automatic) or 1st gear (manual).
3. Activate the parking brake.
4. Loosen, but do not remove, the front wheel lug nuts.
5. Lift the front of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so the front tires are approximately 6-8 inches off the ground.
6. Place support stands rated for the vehicles weight. The stands should be positioned in the factory specified locations. (Refer to the owners manual). Prior to lowering the vehicle onto stands, make sure the support stands will contact the chassis. It is very important that the vehicle is properly supported to prevent any harm to ones self or to the vehicle.
7. Lower the vehicle slowly onto the support stands.
8. Remove the front wheels.

Technician reminder:

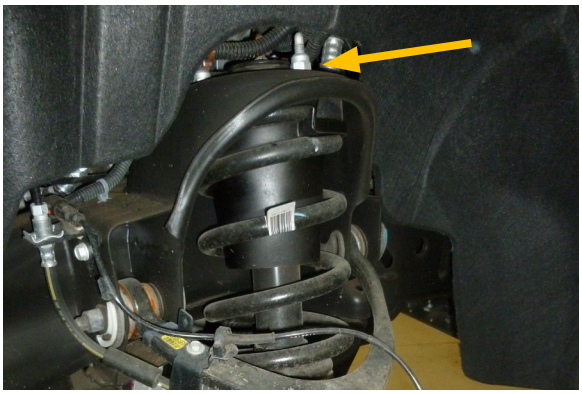
Never work under a vehicle supported only by a jack. It is necessary to place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

OEM STRUT REMOVAL

9. Remove the 15mm end link nut and bolt to detach the end link assembly. Doing so allows the lower control arms to droop further and ease the strut removal.



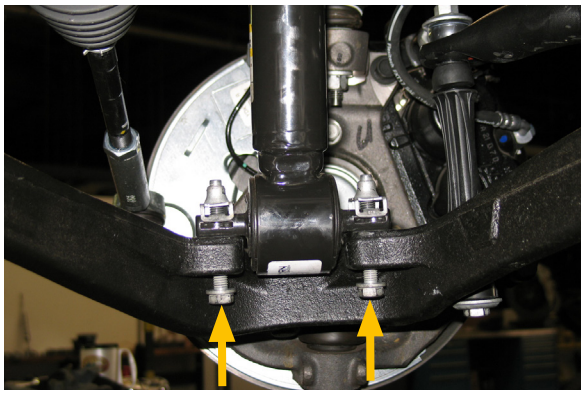
10. Locate the three top studs on the front strut assembly and remove all three mounting 18mm nuts.



11. Remove the two lower strut mount 15mm bolts.

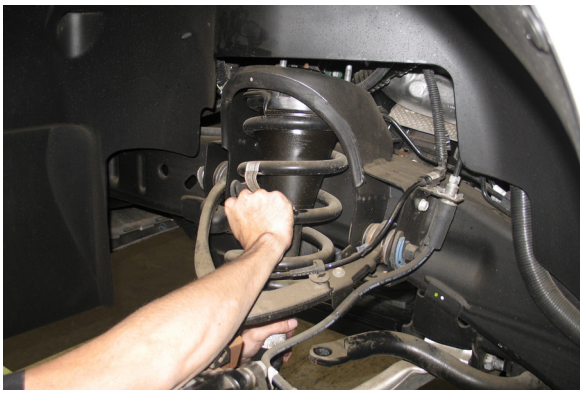
Technician reminder:

Support the suspension assembly from the lower control arm. This will prevent damage from the arm drooping out too far. This also allows height control for easier assembly later on.



OEM STRUT REMOVAL CONTINUED

12. After all the fasteners have been unbolted, push and hold the spindle assembly down to dislodge the bottom strut assembly from the lower control arm then dislodge the strut assembly from the chassis of the vehicle.



OEM STRUT DISASSEMBLY

13. Mount the strut assembly in a spring compressor fixture. To ease the installation of the new strut, mark the position of the top mount in relationship to the upper spring isolator and strut body.

Technician note:

The installation photograph shown was taken at a professional installation shop. It is important to use a spring compressor to compress the spring before removing the top mount bolt. Failure to do so may result in serious injury.

14. Compress the spring until tension is relieved from the strut.
15. Hold the strut shaft from spinning and remove the top center nut from the strut. Support the shock as the nut is removed as it will fall if not supported.
16. Remove the top mount and upper spring seat to use with your new Belltech strut later.
17. Remove the OEM strut from the compressed spring fixture.
18. Remove the OEM spacer ring (if applicable) and OEM bump stop from the strut.

BELLTECH STRUT ASSEMBLY

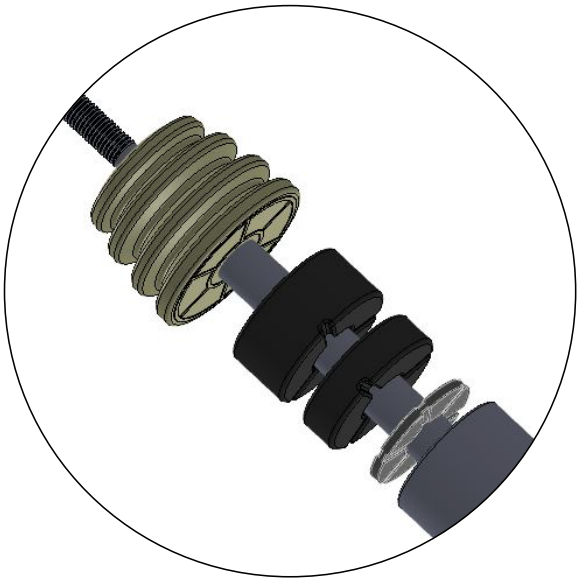
19. The strut is delivered as shown below. Remove the Nyloc nut from the top of the Belltech strut to proceed.

Technician note:

When raising your vehicle more than 1”, OE camber may not be achievable. After installation a final shop alignment procedure is recommended to minimize tire wear.

20. Using the tables below as reference, add the needed lift rings to reach the desired height.

2007-2018 GM 1500 2WD / 4WD		
Lift (Inches)	8mm Ring Spacer	15mm Packer
4”	4	1
3.5”	3	1
3”	2	0



Technician note:

The table above is for use with Belltech kits 150200 / 150206 / 150207. If you are utilizing this strut with an alternate or competitor brand lift kit, use this table as a reference only.

For half inch lift increments lift please add one 25003-008 ring to the shock from the next lowest increment from the table below.

Technician note:

Belltech uses packers to maintain the correct bump stop engagement at various height ranges. Using the appropriate packer will prevent excessive body roll. If a packer is needed, according to the above charts, please place the packer on top of the vent disc, channel side down, as shown by the image to the right of this text box.

21. Install the spring perch onto the strut. Do not install the spring perch upside down.
22. Slide the vent disk first then the required packers onto the strut rod.
23. With the OEM spring still compressed, slide the new Belltech strut into the OEM spring and install Belltech bump stop on the strut rod.
24. Complete the assembly using the OEM spring isolator, top mount, and supplied Nyloc nut.
25. Align the top mount with the spring using the original marking made in step 13. Torque the strut rod nut to 37 ft lbs.

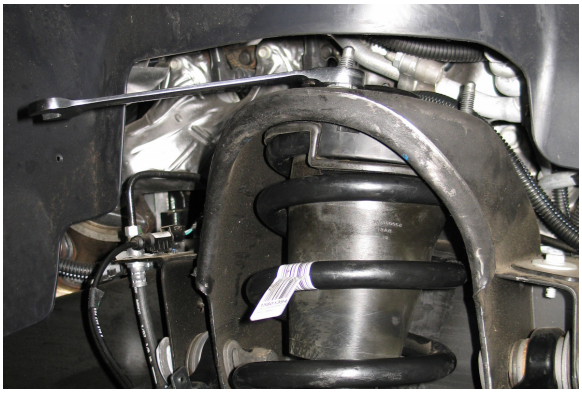
BELLTECH STRUT INSTALLATION

26. Install the new assembly in reverse order of disassembly. Use the OEM nuts and bolts if none where included. Torque to factory specs with the weight of the vehicle on the suspension.

Technician note:

To help with the installation of your new strut, view and reference the photographs from steps 9 through 12. Remember to torque all components with the weight of the vehicle on the suspension.

27. Place the strut assembly into the chassis and secure it using the three OEM nuts. Torque to 37 ft lbs.



28. Attach the lower strut mount to the lower control arm with the two OEM bolts and torque to 37 ft lbs.

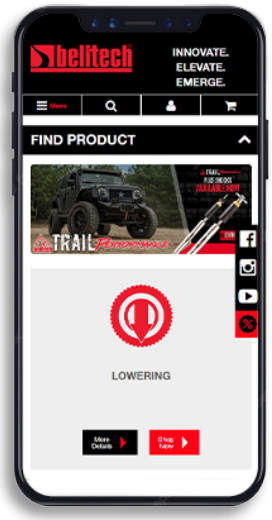
29. Place the end link on the lower control arm and sway bar. Torque the sway bar end link nut to 17 ft lbs. when the vehicle is back on the ground or the suspension is loaded.

FINALIZING THE INSTALLATION

30. Re-install the wheels and tighten the lug nuts.
31. Lift the vehicle and remove the support stands.
32. Carefully lower the vehicle onto the flat ground.
33. Torque the lug nuts to 140 ft lbs.
34. Check that all components and fasteners have been properly installed and torqued.
35. Re-read and perform all tasks in the “Before Driving Your Vehicle” section of page 1 of your instructions.

THANK YOU FOR CHOOSING BELLTECH.

You are now a part of the Belltech family and we are eager to catch a glimpse of your newly modified vehicle. Give us a shout out and let us know how much you love our product. Don’t forget, we offer other Belltech related merchandise for you and your vehicle on our website www.belltech.com



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Belltech Suspension

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If you have any questions, concerns, or warranty related issues regarding your Belltech product, please call or email our experienced customer service specialists.

Belltech Customer Support:

Phone: 1-800-445-3767

Email: info@belltech.com

KIT CONTENTS

27004		
Part number	Description	Qty
27004-200	BELLTECH LIFTING STRUT	1
25003-008	8MM LIFT RING	4
4935-001	15MM PACKER	1
NUT	M12 x 1.25MM FLANGED NYLOC NUT	1
4926-001	BUMP STOP	1
65210031	VENT DISC	1
25003-002	SPRING PERCH	1