



INSTALLATION GUIDE

PART NUMBER: 28015
FRONT LIFTING STRUT
TOYOTA TACOMA 4WD | 2016-2023

4" TO 6" 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 the installation of your new Belltech product and before operating your vehicle. For any questions or concerns regarding the steps in the installation process, please do not hesitate to call or email our customer support team 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.

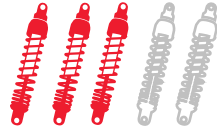
Failure to drive any modified vehicle in a safe manner may result in harm or death.

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.

FITMENT NOTE:

This strut kit was designed to be used with Belltech lift kit number 154301. It cannot be used alone to achieve a 4" to 6" lift. It may be used on a vehicle that has been lifted 4" to 6" using competitor brands. Belltech has not tested cross-compatibility with any other brands and cannot guarantee results when used with another brands' products.

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. Break loose, but do not spin the wheel lug nuts to ease in removal when the wheels are in the air.
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.

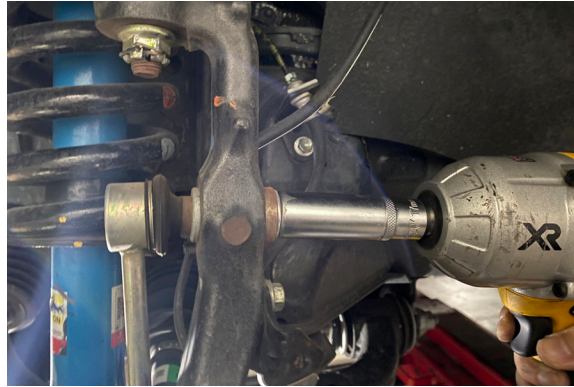


Technician reminder:

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 17mm nut from the sway bar end link and disconnect the end link assembly from the spindle. It helps to have both sides of the vehicle disconnected simultaneously to avoid binding of parts. Optionally, the end link can be removed from the sway bar.



10. Disconnect the tie rod by removing the cotter pin and 19mm castle nut. Strike the designated area on the spindle to dislodge the tie rod.



11. Remove the 24mm lower ball joint nut, the two 19mm lower bracket bolts, and detach the lower bracket from the spindle. This will allow the spindle assembly to be moved to the side for clearance. Use a strap or rope to tie the spindle assembly to the chassis.



OEM STRUT REMOVAL CONTINUED

12. Remove the 19mm bolt and nut securing the lower shock mount to the lower control arm.



13. Mark the alignment of the camber and caster adjustment bolts securing the lower control arm to the frame. This will help keep the alignment close to the original settings when installing the control arms.



14. Break loose but do not remove the 22mm bolts securing the lower control arm to the frame. Loosen in small increments until the lower control arm is able to swing downward. Support the lower control arm to prevent it from swinging down too quickly.

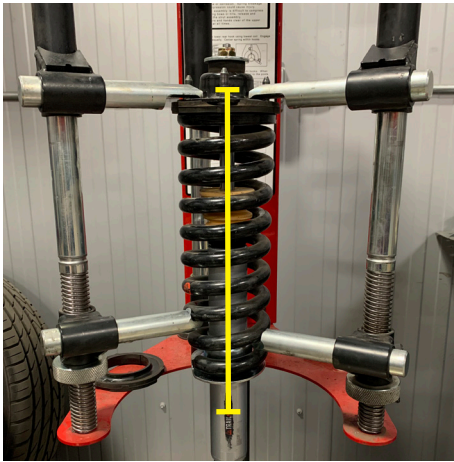


15. Remove the three top mount 14mm nuts and remove the strut from the vehicle. Hold the strut to avoid dropping it. Additional adjustment of the spindles' position may be necessary to pull the strut down. Do not to separate the joints of the axle by pulling on the spindle too much.



OEM STRUT DISASSEMBLY

- Using a proper spring compressor, mount the strut assembly and ensure it is secured before proceeding. To ease the installation of the new Belltech 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.

- Compress the spring until tension is relieved from the strut. Remove top nut and mount. You will use the mount with your new Belltech strut.



- Remove the original strut from the fixture.

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.

2016-2023 TOYOTA TACOMA		
Lift (Inches)	7mm Ring	15mm Packer
6"	6	2
5"	4	1
4"	2	0

21. Install the spring perch onto the strut. Do not install the spring perch upside down.



BELLTECH STRUT ASSEMBLY CONTINUED



Ventilation Disk Installation Warning:

When assembling the Belltech shock/strut, make note of the orientation of the supplied Belltech ventilation disk. It has two sides: a flat side and an air-channeled side. The air-channeled side **MUST** be facing downward toward the shock/strut and the flat side toward the bump stop (See figures 1A and 1B).

Failure to do this, will result in shock/strut damage.

- Slide the vent disk on the strut rod. Ensure the air-channeled side facing down as shown in the images below.

Air-channels face down toward strut

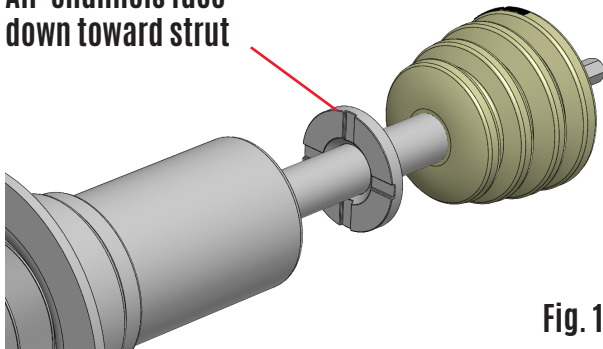


Fig. 1A

Flat surface faces up toward bump stop

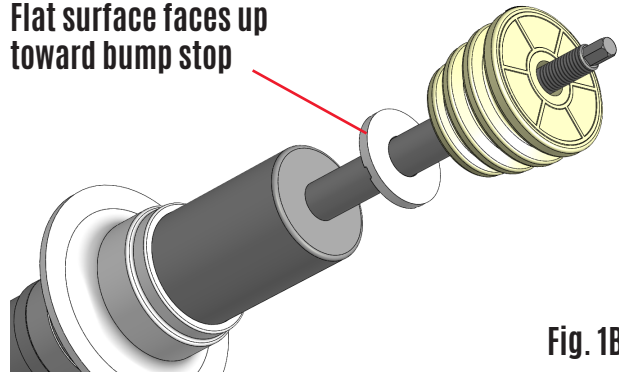


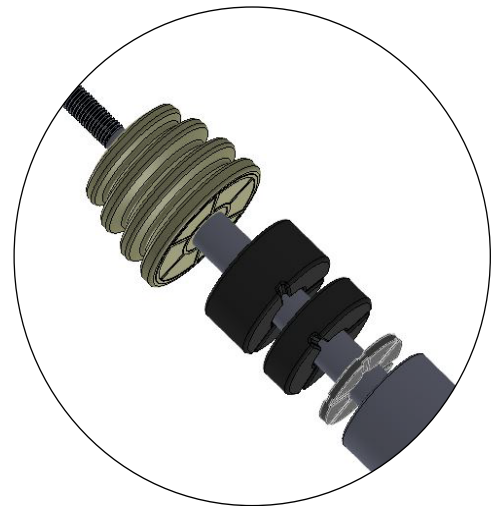
Fig. 1B

- Slide the required packers onto the strut rod.



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 chart on the previous page, 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.



- With the OEM spring still compressed, slide the new Belltech strut into the OEM spring and install Belltech bump stop on the strut rod.
- Complete the assembly using the OEM spring isolator, top mount, and supplied Nyloc nut.
- Align the top mount with the spring using the original marking made in step 16. Torque the strut rod nut to 20 ft lbs.

BELLTECH STRUT INSTALLATION



Technician note:

After installing the new Belltech struts, it is required to stabilize the suspension. DO NOT torque until the vehicle is lowered to the ground or a jack is used to load the suspension. After the suspension is loaded and stabilized, proceed with the suggested torque specs.

27. Install the strut assembly into the chassis strut tower and secure it using the original nuts. Stay clear of any brake or ABS lines. Once the suspension is stabilized, torque to 47 ft lbs.



28. Attach the lower strut mount to the lower control arm using the original nut and bolt. Once the suspension is stabilized, to 61 ft lbs.



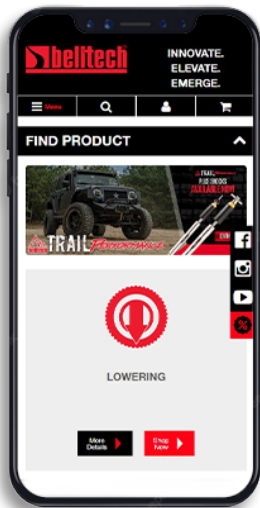
32. Attach the lower bracket to the spindle and lower ball joint. Torque the lower ball joint nut to 103 ft lbs. and the lower bracket bolts to 118 ft lbs.
33. Attach the end link to the spindle. Once the suspension is stabilized, torque to 53 ft lbs.
34. Attach the tie-rod end to the spindle, torque to 67 ft lbs.
35. Set the alignment settings to the markings made before installation. Tighten the lower control arm bolts and cams. Ensure the suspension is stabilized, torque the front side to 135 ft lbs. and the rear side to 139 ft lbs.

FINALIZING THE INSTALLATION

36. Mount the wheels and tighten the lug nuts.
37. Lift the vehicle and remove the support stands.
38. Carefully lower the vehicle onto the flat ground.
39. Torque the lug nuts to 83 ft lbs.
40. Check that all components and fasteners have been properly installed and torqued.
41. 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



belltechsuspension



Belltech Suspension



@belltechsuspension

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



28015		
Part number	Description	Qty
28015-200	BELLTECH LEVELING STRUT	1
25003-007	7MM LIFT RING	6
4935-001	15MM PACKER	2
NUT	M12 x 1.25MM FLANGED NYLOC NUT	1
4923-001	BUMP STOP	1
65210031	VENT DISC	1
26015-002	SPRING PERCH	1