RIDE SHOCKS™

INST-1000-015 REVC

2005-2023 Toyota Tacoma | Shock Installation Guide

Front 2.5 Coilover Shocks

P/N: 525412389

P/N: 525412589

Rear 2.5 Smooth Body Shocks

P/N: 525412789

P/N: 525412889

P/N: 525412989

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Get the latest updated install guide here:

REV 6.11..25

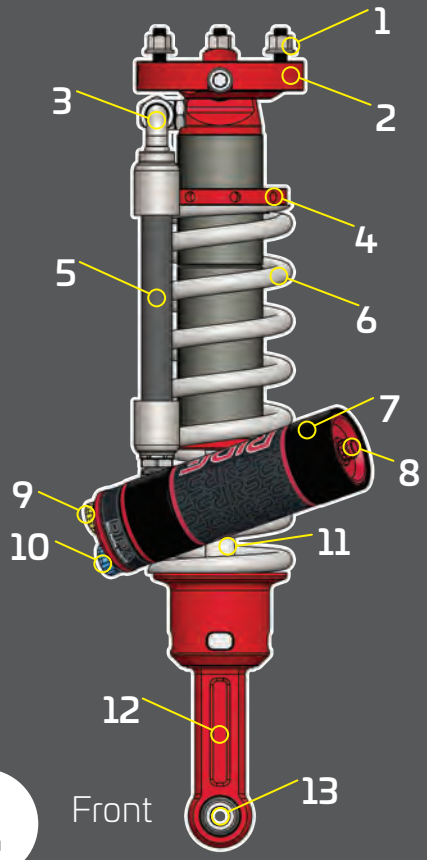
INTRODUCTION:

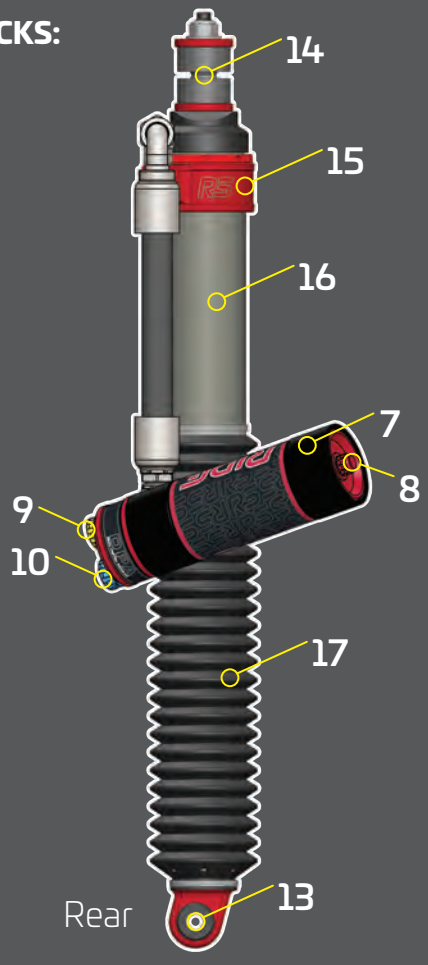
Thank you for purchasing Ride Shocks direct replacement shocks. We spent many years perfecting the designs for what we believe are the highest quality and best performing aftermarket shocks for your vehicle. Our unique approach boosts the industry standard for shock technology by offering vehicle and weight range specific shocks. This was ultimately done to provide customers the best ride quality they deserve.

RIDE confidently for years to come knowing your purchase is backed by industry leading expertise and US based sales and service.

Please visit our website at www.rideshocks.com for more information as we are constantly working on new projects. And don't forget to tag us on social media with pictures of your project @RIDESHOCKS on Instagram.

GET TO KNOW YOUR RIDE SHOCKS:

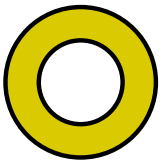




1	TOP HAT BOLTS
2	TOP HAT
3	HOSE FITTING
4	PRELOAD RING
5	HOSE
6	SPRING
7	RESERVOIR
8	SCHRADER VALVE
9	LOW SPEED ADJUSTER
10	HIGH SPEED ADJUSTER
11	SHOCK SHAFT
12	ROD END
13	EYELET
14	TOP STEM
15	RESERVOIR BRIDGE
16	SHOCK BODY
17	SHOCK BOOT

FRONT COILOVERS (included items):

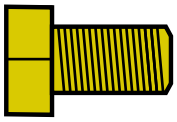
8PCS



3/8" Washers
(Install under all bolts, Gold Zinc Coated)

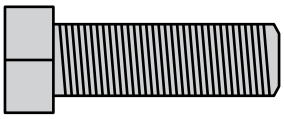
FRONT RESERVOIR
MOUNTING KIT

4PCS



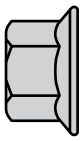
3/8"-16 x .63" Bolts
(For attaching front sway bar,
Gold Zinc Coated, 9/16 Head)

4PCS



M10-1.25mm x 30mm Bolts
(For attaching front reservoir brackets,
Silver Zinc Coated, 14mm Head)

6PCS



M10-1.50 Flanged Nuts
(For coilover top hats,
Silver Zinc Coated, 15mm Head)

REAR SHOCKS (included items):

REAR RESERVOIR
MOUNTING KIT

4PCS

Self Tapping Screws
(3/8" Head,
For attaching rear reservoir brackets)

TOOLS NEEDED:

Tape Measure

Hammer

Screw Driver

Safety Glasses

Lug Nut
Wrench

3/8", 9/16", 10, 12,
14, 15, 17, 18, 19mm
Sockets

Torque Wrench
(30-90 ft-lbs)

A FEW WORDS ON PRODUCT SAFETY AND MESSAGING:
Motor vehicles and off road motor sports/use involve high levels of risks and variables including speed, terrain, overall suspension component choice, driver behavior and other variables outside Ride Shocks knowledge or influence. It follows that Ride Shocks is unable to foresee every combination of variables and these installation instructions do not reflect all product safety information which may be required to reduce risk of accident or injury related to your vehicle and selected modifications.

Before installation, please review the following safety information and installation instructions. Within these Instructions important safety information is generally preceded by one of three signal words indicating the relative risk of injury.

The signal words mean:

⚠WARNING **A hazardous situation which, if not avoided, could result in death or serious injury. You CAN be Killed or Seriously Hurt 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 HURT and also may suffer property damage if you don't follow instructions.**

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

⚠WARNING **Suspension Modified with Tuned Shock Components/Higher Risk of Roll-over or Other Accident**

⚠WARNING: HIGHER ROLLOVER RISK		
	Avoid Excessive Speeds, Abrupt Maneuvers, Surfaces/Obstacles Which May Induce a Tripping Moment. All Occupants Buckle UP & USE Supplemental Restraints.	

The suspension of this vehicle has been optimized for off-road utility through installation of Ride Shocks products, which may increase ride height, modify damping/rebound and other suspension parameters. The suspension feel and handling may be different than an unmodified vehicle.

To reduce risk of roll-over or other accident always:

- **Routinely inspect suspension components. IF DAMAGED, DO NOT USE UNTIL REPAIRED OR REPLACED.**
- **Do Not modify or substitute components of the Ride Shocks suspension products.**
- **Use of oversize tire/wheel combinations may increase stopping distances, ride height and/or compromise performance of vehicle stability control and other systems.**
- **Many states have restrictions on height and suspension modifications for highway use vehicles. Owners & drivers are exclusively responsible for construction and compliance of their vehicles.**
- **For additional safety messaging consult your OEM owners manual and off road supplements.**

⚠WARNING **(CA residents) Cancer and Reproductive Harm - www.P65Warnings.ca.gov. Handling passenger or off-highway motor vehicle parts can expose you to chemicals such as phthalates and lead, which can cause cancer and reproductive harm. To minimize exposure, service the vehicle in a well-ventilated area, wear gloves, and wash your hands. For more information see: https://www.p65warnings.ca.gov/fact-sheets/motor-vehicle-parts.**

Read and follow all instructions and understand all safety messaging before beginning Installation. This installation requires intermediate mechanical skills and should be performed by a professional mechanic with access to a lift and means of securing the vehicle.

WARRANTY:

3 YEAR / 50,000 MILES WORRY-FREE LIMITED WARRANTY
For warranty details please see: www.rideshocks.com/terms-conditions

PRODUCT REGISTRATION:

To register your product, visit: www.rideshocks.com/product-registration
Benefits include:

(scan to register products)

- **Information about product updates/valuable safety notices.**
- **Access to product installation videos/updated installation guides.**
- **Fast-tracked customer support.**
- **Option to opt-in to special customer incentives/discounts.**

ALIGNMENT:

Arrange for a professional alignment to be done on this vehicle once installation has been completed.

Read all instructions from start to finish before beginning the installation process. Confirm you have all tools necessary to complete the job.

SERVICE:

More information can be found at www.rideshocks.com/service or by calling (619) 810-9740 and speaking to one of our service technicians.

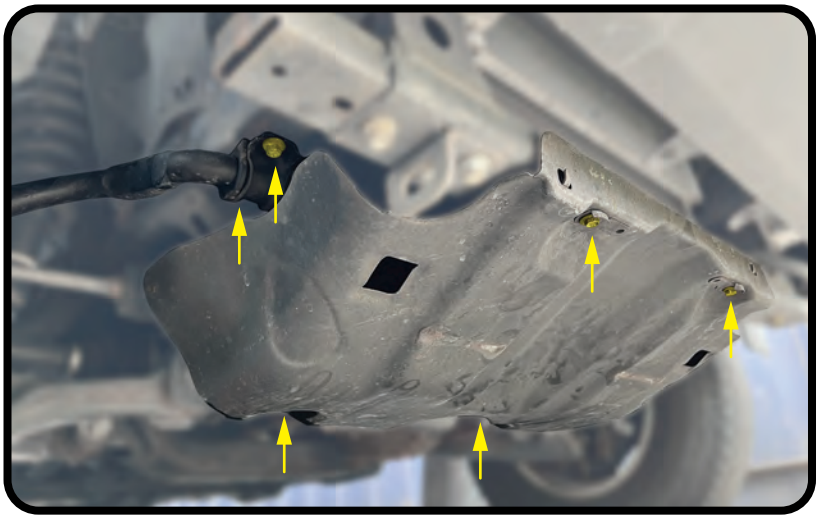
Basic service should be done every 50,000 miles of street use or less in combination with occasional off-road use.

If you have any questions or concerns, please contact us directly.

FRONT SHOCK REMOVAL:

⚠WARNING **1.** Always use a chassis lift for the installation of shocks, and make certain the raised vehicle is securely attached to the lift to prevent the vehicle from slipping, falling, or moving during the installation process.

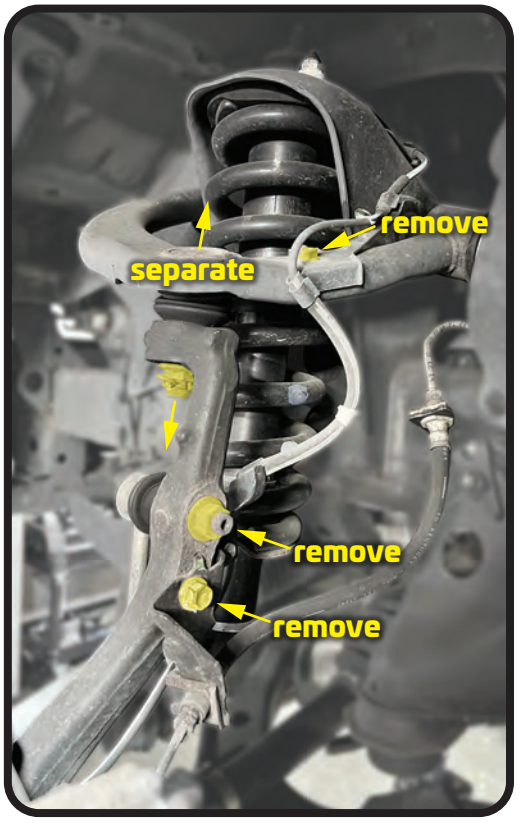
2. Remove the front wheels.



3. Remove the 4 bolts holding the front skid plate in place. Carefully set the skid plate and bolts aside for re-assembly later.

4. Remove the bolts holding the front sway bar mounts to the chassis. Do this on both sides to allow for the reservoir brackets to be installed here later and to allow clearance for the rest of the installation.

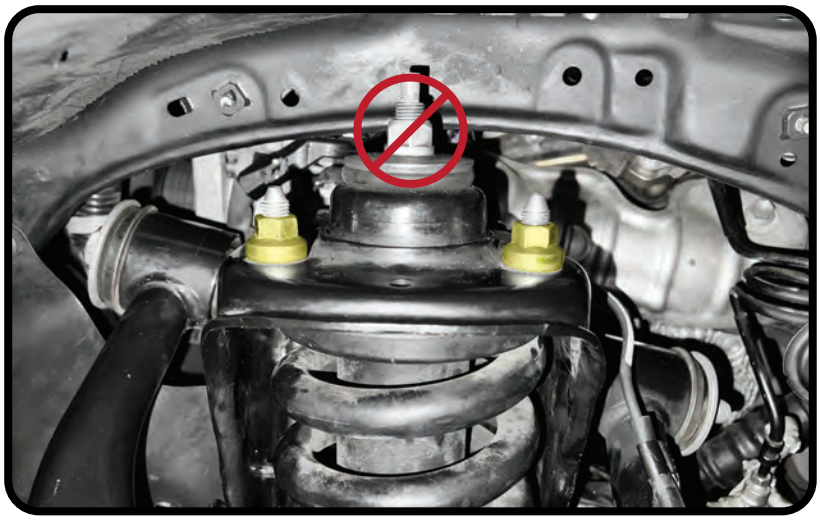
NOW BEGIN WORKING FROM THE DRIVERS SIDE



5. Remove the nut connecting the sway bar to the spindle. Disconnect the sway bar from the spindle and swing it out of the way for clearance. Loosely place the nut back onto the threads to avoid losing it.

Remove the bolts holding the ABS wire to the spindle and upper control arm. Remove the cotter pin from the ball joint and loosen the castle nut (do not fully remove). Use a hammer to tap on the spindle to break the tapered ball joint union free. Now fully remove the nut and separate the OEM upper control arm from the spindle.

6. Remove the 3 top hat nuts that secure the shock to the frame.



⚠WARNING **DO NOT** remove the center nut on top. Doing so will result in serious injury or death.

7. Remove the bolt holding the shock to the lower control arm. Set the bolt and nut aside. This will be used later during the installation of the new shocks.

8. Now remove the shock assembly from the vehicle. You may need to use a bar to pry the shock free from the vehicle. Use caution when removing the shocks so that you do not damage any electrical wires or brake lines.

If you do not already have aftermarket upper control arms installed, now would be a good time to install those.

FRONT SHOCK INSTALLATION:

1. To prevent damage to the finish of your reservoirs when mounting them, add the provided heat shrink tubing onto each of the 4 hose clamps. Apply heat to shrink the tubing onto the clamps.

2. Install new shock. The shocks are side specific, so be sure the hose orientation points towards the front of the vehicle.

Use caution when setting it into place so that you do not damage any electrical wires or brake lines.

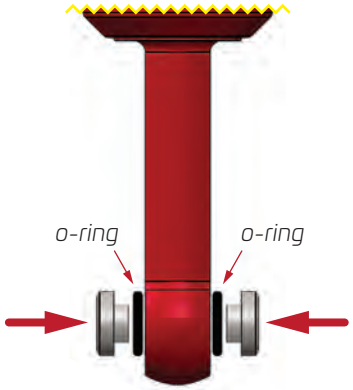
Use the 3pcs (M10-1.50) flanged nuts (included) to secure the top hat to the mounting area.

Torque to 47 ft-lbs using a 15mm socket.

3. Connect the shock to the lower control arm re-using the stock hardware. You may need to use a pry bar to help push the lower control arm down for clearance.

Torque to 61 ft-lbs.

FRONT SHOCK ROD END BUSHING DIAGRAM



push metal spacers in, to properly insert shock into lower control arm.

4. Install the reservoir mounting bracket in the same place where the sway bar mounts were installed. Add the sway bar relocation spacer, and attach both using the 2pcs (14mm head) silver bolts & (3/8") washers (included).

Torque to 30 ft-lbs using a 14mm socket.

5. Now install the sway bar mounts. Use 4pcs (3/8 x .63") gold zinc bolts & (3/8") washers (included). Using a 9/16 socket insert them into the tapped openings on the sway bar riser plate. Torque to 30 ft-lbs.

6. Attach the reservoir to the mounting bracket using the hose clamps from step 8. Run the clamps behind the mounting ears on the upper portion of the mount. Tighten clamps down so that the reservoir is secure and will not move during use.

FINISHING STEPS:

- Reconnect UCA to Spindle, torque to 81 ft-lbs, continue to rotate torque wrench until castle nut holes line up. Install cotter pin.
- Reconnect ABS Wire to spindle and UCA. Torque to 17 ft-lbs.
- Reconnect Sway Bar to Spindle. Torque to 52 ft-lbs.

REPEAT PRECEDING STEPS ON THE OPPOSITE SIDE

- Reinstall Skid Plate. Torque to 21 ft-lbs.
- Reinstall Tires & Lug Nuts (OEM spec torque to 83 ft-lbs)

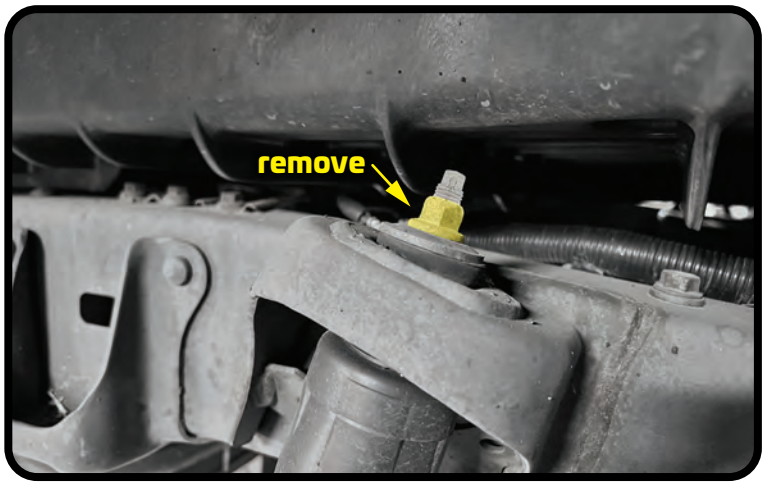
REAR SHOCK REMOVAL:

⚠WARNING **1.** Always use a chassis lift for the installation of shocks, and make certain the raised vehicle is securely attached to the lift to prevent the vehicle from slipping, falling, or moving during the installation process.

2. Remove the rear wheels.

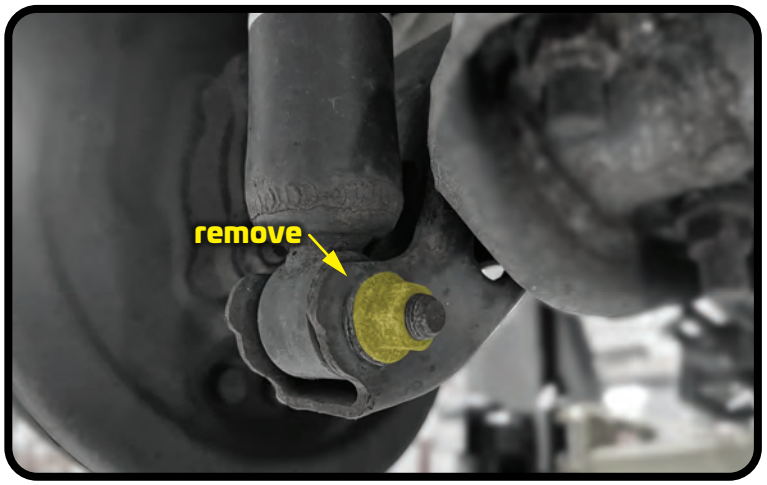
3. Remove the top nut holding the rear shock in place with a 17mm socket. Since top nuts are provided, you can discard these.

4. Remove the lower shock bolt with a 17mm socket. Remove the shock from the vehicle. Save this hardware for installation.



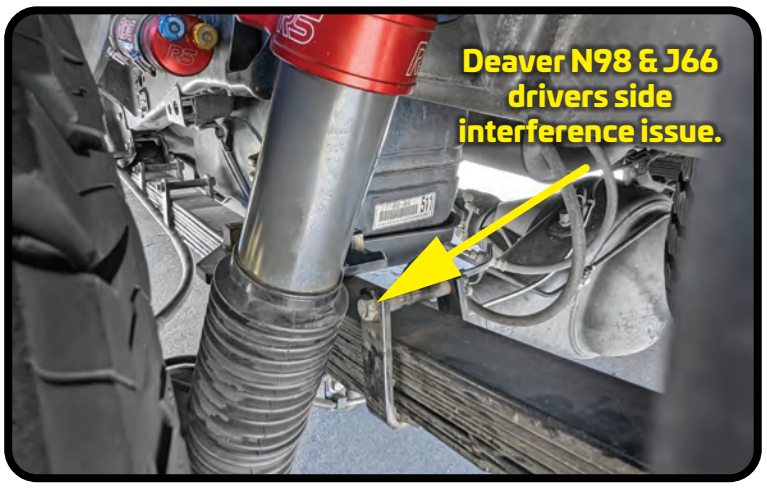
REAR SHOCK INSTALLATION:

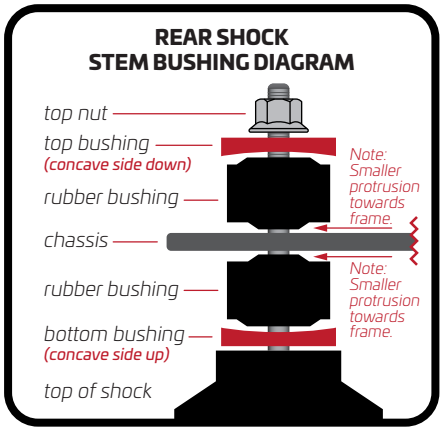
Be sure to use an appropriate length bump stop to optimize up travel and not to bottom out the rear shocks.



1. Install new shock. Tighten upper stem mount nut with 19mm wrench until bushing is flared out to match the outer diameter of the washer. There should be approx 3/8" stud showing above the nut.

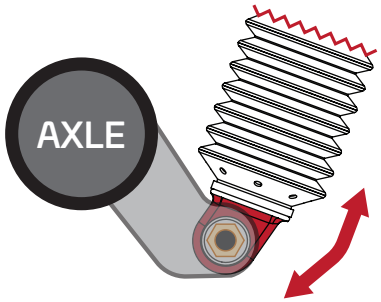
TECH TIP: Deaver N98 & J66 springs require modification on the drivers side, to avoid interference. Refer to the Deaver product page below for more info.
https://accutuneoffroad.com/product/deaver-j66-leaf-springs-05-up-tacoma/





2. Now attach the shock to the rear axle mount, re-using the OEM hardware from the disassembly. Torque to 43 ft-lbs.

REAR SHOCK ROD END ORIENTATION



The angled rod end should be positioned to move the shock away from the axle.

3. Position the reservoir and bracket to the frame and mark where the bracket should be mounted. Using a 3/8" socket, attach the mount to the frame with the self tapping screws. You may need to pre-drill the holes to make attaching the reservoir mount to the frame easier.

4. Now attach the reservoir to the mount using the hose clamps prepared earlier. Rotate the reservoir away from the frame so the hose fitting is not resting against the frame. Do not over-tighten hose clamps.

REPEAT PRECEDING STEPS ON THE PASSENGER SIDE

FINISHING STEPS:

- Reinstall Tires & Lug Nuts (OEM spec torque to 83 ft-lbs)
- Check Ride Height (see page 11)
- Check All Torque Settings
- Get an Alignment
- Retorque after 500 miles of driving.

DUAL PISTON ADJUSTERS (DPA):

Low Speed Adjuster:

What is Low Speed Compression? Low Speed Compression on a shock refers to the speed at which the shaft compresses into the shock body. A smoother, more gradual shock movement. Low speed compression occurs when a vehicle is cornering, braking/accelerating and driving over large rolling bumps.

When would I need to adjust Low Speed Compression? If you find the vehicle is having too much brake dive, feeling too bouncy or bottoming out on big rolling bumps, you should increase the Low Speed Compression on your DPA. Low speed adjustments on the reservoir are less noticeable than high speed adjustments.

High Speed Adjuster:

What is High Speed Compression? High Speed Compression happens when the shock compresses very quickly. High speed compression occurs when hitting things like curbs, speed bumps, larger rocks, or washboard roads at higher speeds (although this is not exclusive to driving speeds). Even at 75 mph approaching a gradual hill is low speed compression, but if you hit a speed bump at just 15 mph, your shock must react very quickly. This is high speed compression.

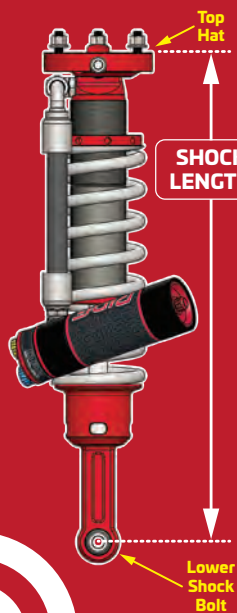
When would I need to adjust High Speed Compression? If the suspension and tires are slamming through and bottoming out on hard hits you need to increase high speed compression. You should also increase it when adding weight to the vehicle or doing more aggressive offroad driving. High speed compression adjustments are more noticeable and can be the most useful adjustment on the shock.

12-CLICKS OF ADJUSTMENT

Ride Shocks come from the factory with both adjusters all the way decreased (open). This means they are at their softest setting. This allows you to have a full adjustment to increase the firmness of the ride. ***Only make adjustments by hand. Using a tool may damage adjusters.***

SETUP INFORMATION:

TACOMA - RIDE HEIGHT



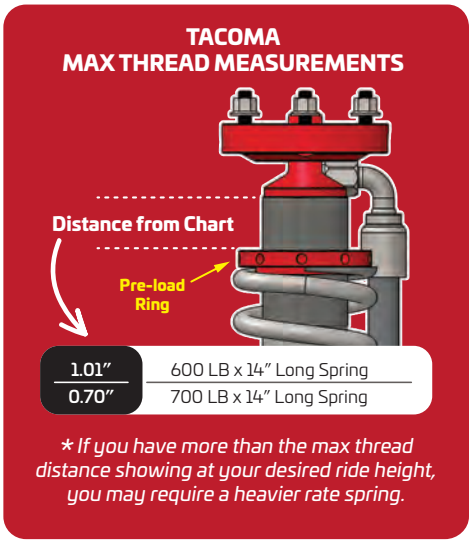
Measuring Your Ride Height

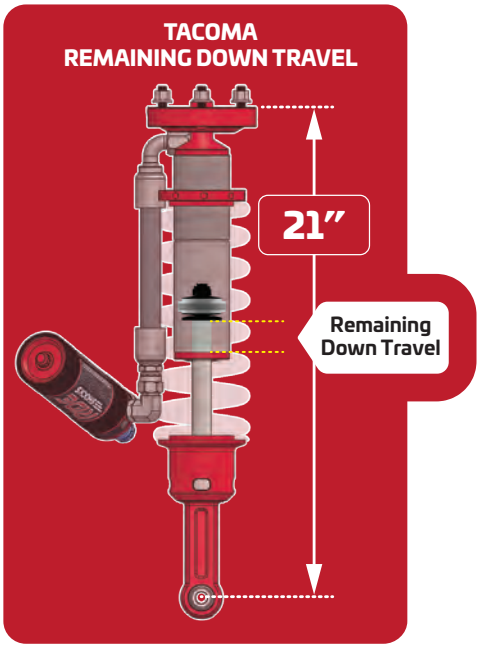
Getting the correct ride height is the first step in setting up your suspension. Pre-load is the initial (pre) tension (load) on your springs before carrying the weight of the vehicle. Each .25" of adjustment you make on the pre-load ring translates to approximately .50" of ride height change.

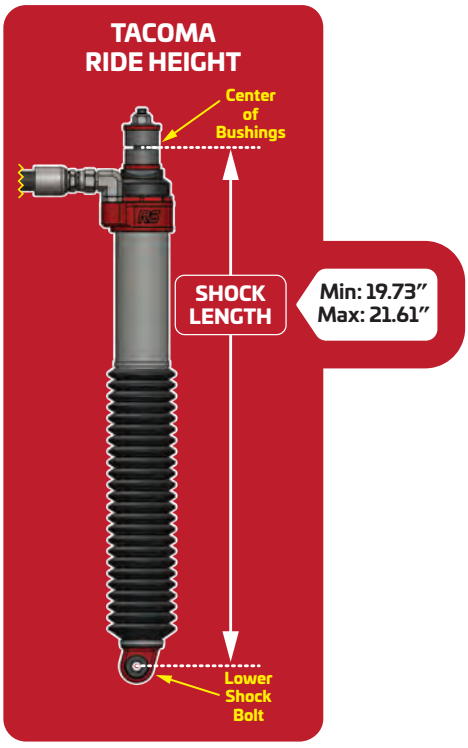
1. Install shocks. With the vehicle on level ground, ballpark toe setting if necessary, settle suspension (drive back and forth 10 feet).
2. Record height measurement.
3. Adjust pre-load with shocks removed from vehicle.
4. Repeat step 1 and re-check height when complete.
5. Repeat steps above as necessary until ride height is achieved.

⚠WARNING

- **Do not adjust preload with shocks installed on vehicle.**
- **If you exceed the maximum shock length at ride height, you can damage your shocks.**







Max Thread Length Above Pre-load Ring

Refer to the chart to correctly find the maximum.

- **Never adjust pre-load with shocks on the vehicle.**
- **Use provided pre-load adjuster tool.**
- **DO NOT ADD additional pre-load past the max listed for your spring.**
- **Too much thread showing can cause coil bind, which will damage the spring and shock.**

Too Much of a Good Thing. Don't Over Do It!

Of course the main objective in adding pre-load is to increase the lift of the vehicle, but there can be a point where you added too much, even if you are still in range of the max exposed threads measurement.

The key is to make sure you still have sufficient down travel remaining when at ride height. Too little and you will run into handling issues and potentially damage suspension components.

Springs work in both extension and compression, so too much pre-load makes the shocks too harsh on compression and can lead to a bumpy ride. We look at suspension as a complete package and every piece of it has a purpose, as every component needs to work together in harmony.

Having too much pre-load could actually be a sign that you need to move up to the next available spring rate.

So after everything is accounted for, it is best to find that happy medium between ride height and ride quality.

Rear Ride Height

Setting rear ride height is something you have very little control over. You're mostly going to be left with the card you're dealt with when it comes to the rear end. Just make sure you're in the Min/Max window and you should be good.

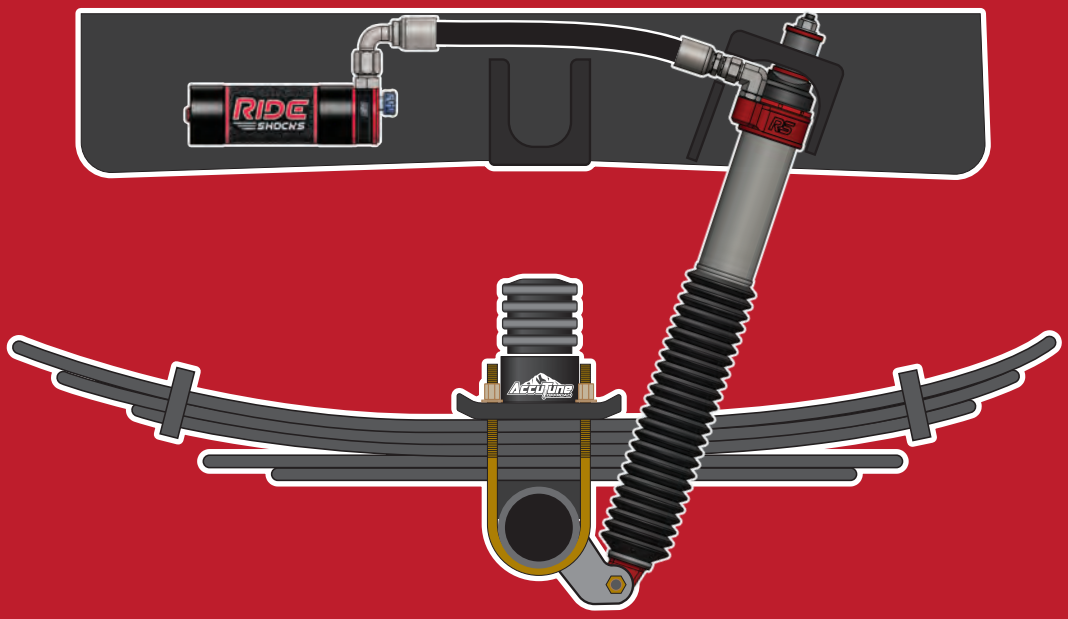
If you do find yourself below the Min measurement, then we suggest looking into alternative leaf springs for the rear of your Tacoma.

Another thing to note is that Ride Shocks for the rear of the Tacoma has a life height range of 1-2.5″ of lift. Do not attempt to run more or less lift than this or you could damage your shocks.

- *The measurements point for the rear shocks is between the shock bushings. This is the point on the rear shock where it mounts to the vehicle frame. Take your measurements from the frame down to the lower shock bolt.*

- *Not all shock manufacturers measure from the same locations, so be sure to double check this when applying this knowledge to any other brands shock.*

TACOMA BUMP STOPS



Bump Stops – Money Well Spent

For the rear suspension on your Tacoma, it's important to have the correct length bump stops with your aftermarket shocks and leaf springs or you will risk damaging your shocks.

We recommend using the AccuTune Offroad U-Bolt Flip kit to ensure your rear suspension is providing the maximum suspension travel possible. Not only does this solve the issue with bump stop height requirements, but you will also gain ground clearance with a u-bolt flip and improve ride quality with a well designed bump stop.