

INSTALLATION INSTRUCTIONS

25013 04-18 Dodge Ram 1500 4WD

Important Note:

THIS KIT GIVES YOU THE OPTION OF A 0" TO 2" LIFT

THANKYOU!

For being selective enough to choose a BELLTECH PRODUCT. We have spent many hours developing our line of products so that you receive maximum performance with minimum difficulty during installation.

Note: Please confirm that all hardware listed in bill of materials is included with kit. **DO NOT** begin this

installation if any parts are missing. Read the instructions thoroughly before beginning this

installation.

Warning: **DO NOT** work under a vehicle supported by only a jack. Place support stands securely

under the vehicle in the manufacturer's specified locations unless otherwise instructed.

Warning: **DO NOT** drive the vehicle until all work has been completed and checked. Torque all hardware

to values specified.

Reminder: Proper use of safety equipment and eye/face/hand protection is absolutely necessary when

using these tools to perform procedures!

Note: It is very helpful to have an assistant available during the installation process.

Note: We DO NOT RECOMMEND using wheel ramps while performing this installation.

RECOMMENDED TOOLS:

Blocks and Wheel chocks
 Properly rated floor jacks and support stands

• Ratcheting Socket Wrench • Combination Wrench

Safety Glasses
 Torque wrench: 0-75 lb ft. range

•Floor jack and Jack Stands •Open Wrench

1 KIT INSTALLATION

- **1a.** Open the hardware kit and remove all the contents. Refer to the parts list (Page 6) to verify that all parts are present. Do not begin work if parts are missing.
- **1b.** Park the vehicle on a smooth, level concrete or seasoned asphalt surface and activate the parking brake. Block the REAR wheels of the vehicle with appropriate wheel chocks; making sure the vehicle's transmission is in 1st gear (manual) or "Park" (automatic).
- 1c. Using a properly rated floor jack, lift the FRONT wheels of the vehicle off the ground. Place support stands rated for the vehicle's weight and in the factory specified locations. Refer to the vehicle Owner's Manual. Prior to lowering the vehicle onto the stands, make sure the supports will securely contact the chassis.

1d. It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage. Make sure that the support stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

REMOVING THE O.E.M. FRONT STRUT

2a. completely remove the sway bar end links from both sides



2b. Remove brake calipers.





2c. Remove steering arm (tie rod) from spindle.



3a. Remove plastic clip holding the ABS sensor to the spindle.

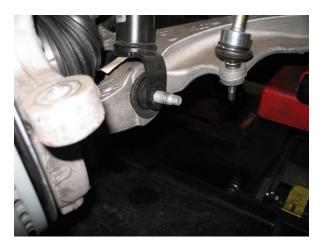


3b. To be able to install the Belltech Lift Strut, the lower control arm bolts to the frame must be removed. The lower control arm can then be lowered from those positions. Attached to the bolts are the **alignment cams**. Please take the time to **mark the position** so they can be re-installed in the same position. With a floor jack holding the bottom of the spindle, remove the bolts and lower the lower control arm.





3a. Now you can remove the lower strut bolt and the upper mounting nuts.



4a Now the strut can be removed.





Before disassembling the strut mark the position of the top mount in relationship to the lower bolt hole. Using a spring compressor, compress the spring to remove the pre-load of the spring from the strut. Using the correct tools remove the top mount from the strut. We do not recommend using power tools. Now disassemble the strut and release the spring tension, be sure to remember the order the components are removed.





5a Assemble the Belltech lift strut, be sure to include the black plastic vent cap below the bump stop.

SPACER QUANTTY NEEDED

Year model	2009-2018		
Spacer	OEM HEIGHT 0" 0MM	HEIGHT LIFTING 1" 25.4mm	HEIGHT LIFTING 2" 50.8mm
25003-008 8mm (0.315")	0	1	1
25003-016 16mm (0.63")	4	5	6

SPACER QUANTTY NEEDED

Year model	2004-2008		
Spacer	OEM HEIGHT 0" 0MM	HEIGHT LIFTING 1" 25.4mm	HEIGHT LIFTING 2" 50.8mm
25003-008 8mm (0.315")	0	0	2
25003-016 16mm (0.63")	5	7	7

6a After selecting the correct number spacers required. Again using a spring compressor, reassemble the necessary O.E. components onto the Belltech Lift Strut. Make sure to use the supplied 0.810" spacer on the piston rod below the top mount and a second spacer above the top mount as seen below. Make sure to tighten the supplied nut to 40 lbs./ft







With the use of a floor jack and supporting the lower control arm across its arms, raise the lower control arm back into position, when possible insert a screwdriver or similar device to help align the lower control arm back into the frame points. After this is achieved, you can adjust the floor jack to align each side.



Reattach the lower control into it original location using the o.e bolts and cams.
Adjust the cams and hold in place while tightening the bolts.
With the cams back in the position they were before the install, this will ensure that the vehicle could be driven a short distance to an alignment shop.





Your vehicle will need a front-end alignment after the installation.

Now proceed to install or tighten all items removed or loosened during the installation. In a reverse order of the installation, this can be accomplished.

The last item to be installed will be the swaybar end links.

You will have to guide both sides back into their OE location at the same time.

	PARTS LIST			
25013				
PART NUMBER	DESCRIPTION	QTY		
25013-001	Shock	1		
25003-016	Spacer	7		
25003-008	Spacer	2		
65210031	Vent Disk	1		
4927-001	Bump Stop	1		
25012-002	Spring Perch	1		
112402-95	Piston Rod Spacer	2		



INSTALLATION INSTRUCTIONS

5317 & 5318 4 INCH REAR LOWERING KIT 09&UP DODGE RAM 1500 2WD

Thank you for being selective enough to choose our high quality BELLTECH PRODUCT. We have spent many hours developing our line of products so that you will receive maximum performance with minimum difficulty during installation.

Note: Confirm that all of the hardware listed in the parts list is in the kit. Do not begin installation if

any part is missing. Read the instructions thoroughly before beginning this installation.

Warning: **DO NOT** work under a vehicle supported by only a jack. Place support stands securely under

the vehicle in the manufacturer's specified locations unless otherwise instructed.

Warning:

DO NOT drive vehicle until all work has been completed and checked. Torque all hardware to

values specified.

Reminder: Proper use of safety equipment and eye/face/hand protection is absolutely necessary when

using these tools to perform procedures!

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

RECOMMENDED TOOLS:

- Properly rated floor jack and four (4) support stands
- Wheel chocks
- Die grinder equipped with abrasive cut-off wheel
- ½" drive torque wrench
- Standard and Metric socket and wrench sets
- Safety glasses
- Power drill and drill bits
- Pry bar
- Grinder with abrasive disc
- Stiff wire
- Spray Paint

KIT INSTALLATION

As this is a relatively involved installation, **we recommend** that a qualified mechanic at a properly equipped facility perform it. **We also recommend** that the installation be performed on a firm, flat and level surface, such as seasoned asphalt or concrete. The use of safe and properly maintained equipment is very important! **We recommend** measuring and recording all stock driveline angles prior to installing this kit. This information may be helpful if vibration problems arise after installation.

1. JACKING, SUPPORTING AND PREPARING THE VEHICLE

1a) Block the front wheels of the vehicle with appropriate wheel chocks. Make sure the vehicle's transmission is in "Park" (automatic) or 1st gear (manual). Activate the parking brake.

- **1b)** Loosen, but **DO NOT REMOVE** the rear lug nuts.
- **1c**) Lift the rear of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so that the rear tires are approximately 4-6 inches off the ground surface.
- Support the vehicle using support stands rated for the vehicle's weight. The stands should be positioned on each of the frame rails. Additional support stands can be placed under the rear bumper for added stability. Prior to lowering the vehicle onto the stands, make sure the supports will securely contact the straight, flat portions of the frame area.

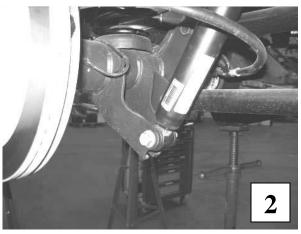
It is very important that the vehicle is properly supported during this installation to prevent frame damage and personal injury! Make sure that the support stands are properly placed prior to performing the following procedures.

- 1e) Slowly lower the vehicle onto the stands and, before placing the vehicle's weight on them, again check that they properly and securely contact the frame rails described above. Check for possible interference with any lines, wires or cables.
- **1f**) Remove the rear wheels.
- **1g**) Support the rear axle with a floor jack.

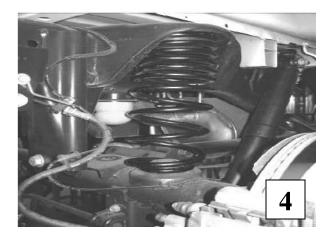
2.) REAR SPRING REMOVAL AND INSTALLATION

- 2a) If the vehicle comes with one, disconnect the anti-sway bar from the lower end-link on one side using an 18mm socket and wrench (**Photo 1**)
- **2b)** Remove the bottom nuts and bolts on the rear shock absorbers using a 21mm wrench or socket. Retain the factory hardware for reuse during reassembly. (**Photo 2**)
- **2c)** Lower the rear axle with the floor jack until the axle is hanging freely.
- 2d) Using a pry bar, pry the rear axle further down until the rear spring can be pulled out from the axle pad and the upper spring mount.
- 2e) Remove the stock rear bump stops by prying with a screwdriver. Install the Belltech progressive lowering bump stops. (**Photo 3 & 4**)
- 2f) Transfer the rubber isolator from the stock rear springs and install it onto the Belltech 4-inch rear lowering springs.
- 2g) Install the Belltech lowering spring top side first. Fit the bottom coil of the spring onto the axle spring pad. The axle may need to be jacked up to keep the spring in place.
- **2h**) Repeat this process on the other side.







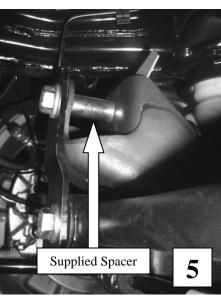


- **2i)** Jack up the rear axle high enough to allow the rear shocks to be installed. Support the axle with support stands.
- 2j) Install the rear shocks using the factory hardware and torque to 100 ft. lb. Belltech recommends the use of its Street Performance lowering shocks (2212FF)
- 2k) Unbolt the track bar from the axle.
- Install the supplied Belltech Track Bar Relocating Bracket using the OEM track bar mounting bolt in its original location with the supplied spacer (**Photo 5**) but do not tighten. Install the supplied 3/8" x 1½" bolt, washers and lock nut from the bottom of the bracket up through the support tab and OEM track bar bracket. Torque the 3/8" bolt to 30 ft./lbs. Torque the OEM track bar mounting bolt to OEM specifications.
- 2m) Install the track bar into the relocated position and install the supplied bolt, washers and lock nut. Torque the larger track bar bolt to 90 ft./lbs. (**Photo 6**)
- 2n) Remove floor jack
- 20) Install the BELLTECH sway bar end-link assemblies in the stock location. Feed the bolt with washer through the stock frame location in the inboard direction. Secure the bolts with the supplied washers and nylon lock nuts and tighten to 56 ft./lb.

3.) CROSSMEMBER NOTCH

THIS SECTION IS FOR 2013 MODELS WITH 140.5"
WHEELBASE ONLY. ALSO THIS SECTION ONLY APPLIES TO VEHICLES WITH SINGLE PIECE DRIVESHAFTS ONLY.

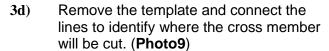
3a) Remove the 4 bolts that attach the driveshaft to the rear axle input shaft. Be careful when removing the bolts to not allow the driveshaft to fall as it may cause damage to the driveshaft. Also do not allow the front of the driveshaft to slip out of the transmission.





- **3b**) Set the driveshaft down in a position that will allow the most access to the Center Carrier Bearing (CCB) cross member while not causing damage to the driveshaft and not allowing the driveshaft to slip out of the transmission.
- 3c) Place template on the cross member aligned with the existing holes. (**Photo 8**) Proper placement of the template is critical to ensure no excess material is removed. Mark the edges next to the template to identify where the cut lines should be made. (**Photo 8**)





Due to the proximity to the fuel tank we do not recommend using an open flame or any type of torch to make cuts on the vehicle. Additional precautions should be taken to ensure that no sparks come in contact with the fuel tank or any lines or hoses that may contain flammable fluids of fumes.

- 3e) Cut along the marked lines and remove the center section from the vehicle.
- 3f) Test fit the notch to ensure that it sits flush against the cross member. Trim if necessary, only removing as little material as possible for proper fit.
- 3g) Paint the freshly cut surfaces to prevent rust.
- 3h) Install the cross member notch with the supplied bolts, washers and lock washers. Torque to 35 ft./lbs. (Photo 10)
- **3i)** Reinstall the driveshaft to the rear end. Torque the bolts to factory specifications.







4.) FINALIZING THE INSTALLATION

4a) Double check torque on all nuts, bolts and brackets that have been part of the install

- **4b**) Install the wheels and tighten lug nuts to specified torque.
- 4c) Lift vehicle and remove support stands.
- **4d**) Carefully lower the vehicle onto the ground.
- **4**e) Check brake hoses, cables and other components for any possible interference.
- 4f) Check for wheel/tire to chassis/body interference.
- **4g**) Immediately test-drive the vehicle in a remote location so that you can become accustomed to the revised driving characteristics and handling. Be aware that the vehicle will handle substantially different now that it has been lowered.
- **4h**) Have the vehicle aligned at a certified alignment shop.
- 4i) Check all of the hardware and re-torque at intervals for the first 10, 100, and 1000 miles.

PARTS LIST: 5317-5318 4" REAR LOWERING KIT

PART#	DESCRIPTION	QTY.
5317-100/5318-100	REAR COIL SPRINGS	2
4929-001	BUMP STOPS	2
5553-050	END LINK ASSEMBLY	2
112296	NYLON LOCK NUT 12MM	4
110645	FLAT WASHER 12MM	8
112053	HEX HEAD BOLT 12MM	4
110670	FLAT WASHER 9/16"	2
110001	HEX HEAD BOLT 9/16" X 3"	1
110454	NYLON LOCK NUT 9/16"	1
112094	HEX HEAD BOLT 3/8" X 11/4"	1
110255	NYLON LOCK NUT 3/8"	1
110625	FLAT WASHER 3/8"	2
7000-880	ZINC PLATED SPACER	1
4992-001	TRACK BAR RELOCATING BRACKET	1
5318-005	CROSSMEMBER NOTCH - WITH 5318 ONLY	1
112026	HEX HEAD BOLT 10MM X 35MM WITH 5318 ONLY	4
110625	FLAT WASHER WITH 5318 ONLY	4
112532	LOCK WASHER WITH 5318 ONLY	4
5318-887	TEMPLATE 5318 ONLY	1



INSTALLATION INSTRUCTIONS

STREET PERFORMANCE & NITRO DROP 2 SHOCKS

Congratulations! You were selective enough to choose a BELLTECH PRODUCT.

Belltech Shocks for truck suspensions are designed for easy installation. If not otherwise stipulated in these instructions, all suspension components are installed and removed in accordance with the manufacturer's specifications for installing and removing standard damper components.

Construction Lube

When you install your Belltech Street Performance or Nitro Drop 2 Shock you may notice a slight oil drip down the side. **The shock is not leaking**. This is oil lubrication used in the construction assembly of the shock. Simply wipe the oil off with a damp cloth.

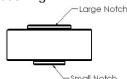
Nitro Drop 2 Shocks

Your Nitro Drop 2 Shock is a low pressure oil shock. If the shock is compressed the rod will not return to an extended position on its own. The shock's performance relies on the internal Belltech valving technology which is not affected by the relative pressure of the shock.

Pin Bushings

Your Belltech Street Performance or Nitro Drop 2 Shocks may be fitted with a Pin Bushing. If so it is necessary to properly fit the bushing to your vehicle by choosing the correct notch on the Pin Bushing.

- 1. Remove OE shock from vehicle.
- 2. Examine OE pin bushing and measure diameter of notch.
- 3. Compare to the 2 different notch sizes on the top and bottom of the supplied Belltech Pin Bushing and use the notch that most closely matches your OE pin bushing.



4. Install the shock with the selected notch sandwiching the shock mount of the vehicle.

Dust Cover

Your Belltech Street Performance Shocks may be fitted with a removable dust cover. Some vehicle applications may require you to remove the dust cover for more clearance.



- 1. Check vehicle to see if there is enough clearance for dust cover. If there is not enough clearance, remove the dust cover my removing the pin bushings and washers and then remove the dust cover.
- 2. Install included 10mm (0.39in), part number 112445, dust cover spacer.





3. Install washer and bottom pin bushing, with selected notch facing up (see Pin Bushing section, above), then install on vehicle with top pin bushing, with selected notch facing down (see Pin Bushing section, above) and washer.