

**4762 & 4763  
2-INCH FRONT  
2009- DODGE RAM 1500 STD. OR QUAD CAB RWD**



**Congratulations! You were selective enough to choose a BELLTECH PRODUCT. We have spent many hours developing our line of products so that you will receive maximum performance with minimum difficulty during installation. Please be sure to read these instructions thoroughly before beginning so that you can become familiar with the various steps required 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 4 support stands
- Wheel chocks
- Drill motor with ½ & 11/16-inch bit
- Standard and Metric socket and box wrench set
- Pry bar
- Die grinder equipped with abrasive cut-off wheel
- ½" drive torque wrench
- Grinder with abrasive disc
- Safety Glasses
- Black spray paint
- Stiff wire or bungee cords

## Parts List: 4762-63 2" LOWERING SPRINGS

Part #	Description	Quantity
4762 / 63 - 001	FRONT COIL SPRINGS	2
4923-001	FRONT BUMP STOP	2

### 1.) JACKING, SUPPORTING AND PREPARING THE VEHICLE

- A. Block the rear wheels of the vehicle with appropriate wheel chocks. Make sure the vehicle's transmission is in "Park" (automatic) or 1<sup>st</sup> gear (manual). Activate the parking brake.
- B. Remove the wheel hubcaps if applicable.
- C. Loosen, but **DO NOT REMOVE**, the wheel lug nuts.
- D. Using a properly rated floor jack, lift the front of the vehicle off the ground. Lift the vehicle so that the front tires are approximately 4-6 inches off the ground surface.
- E. Support the vehicle using support stands, rated for the vehicle's weight. The stands should be positioned, on the frame rails,
- F. 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 as described above. Check for possible interference with any lines, wires, or cables.
- G. Remove the front wheels from the vehicle.

**SAFETY REMINDER:** Check for safe vehicle stability before proceeding under the vehicle to begin the following procedures. Never work under a vehicle supported by only a jack. Always use properly rated support stands to support the vehicle.

### 3.) FRONT SPRING REMOVAL

- A. With the front wheels removed, begin by disconnecting the top side of the way bar end-link using a 16mm wrench and socket. Do this on both sides.
- B. Securely support one front lower control arm with a floor jack in a position that allows access to the lower shock bolts as well as the lower spindle ball joint.



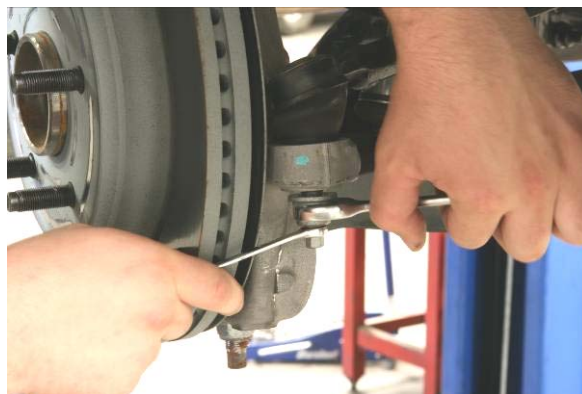
- C. Loosen the two lower shock bolts holding the shock bar pin to the lower control arm with a 13mm socket.



- D. Loosen the top nut securing the top of the shock to the frame using an 18mm socket.



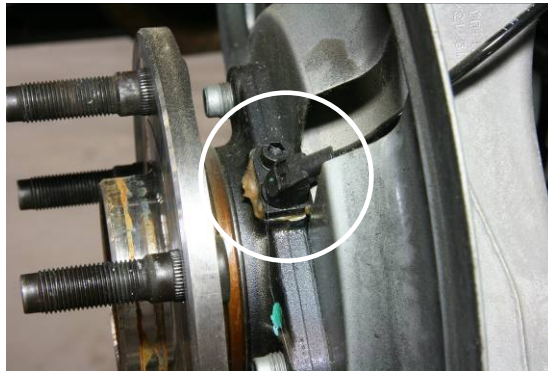
- E. Pull off the top washer and bushing.
- F. Lower the shock through the hole in the bottom control arm.
- G. Remove the nut securing the steering tie rod to the spindle. Use a 22mm wrench on the nut and a 10mm wrench to prevent the ball joint from rotating.



- H. Remove the brake caliper by loosening the two caliper bolts using a 22mm socket or wrench.
- I. Hang the caliper from the frame using a strap. Be sure that the brake hydraulic line and ABS line have plenty of slack.



- J. Remove the rotor from the spindle. It might be necessary to cut off the clip washer that secures the rotor to the wheel studs.
- K. Unbolt the front wheel speed sensor from the spindle using a 5mm Allen wrench. Pull the sensor and wire out from the brake backing plate.



- L. Loosen the 22mm nut that secures the upper ball joint to the spindle. Leave the nut still threaded onto the end of the ball joint to prevent the spindle from separating from the upper control arm.
- M. Carefully break the ball joint loose from the spindle using pickle fork (ball joint puller) or by tapping a hammer against the spindle.

**WARNING: The lower control arm is under spring pressure. Make sure the lower control arm is securely supported by the floor jack so that when the upper ball joint is removed from the spindle, the lower suspension does not spring apart.**



Remove the 22mm upper ball joint nut and disconnected the upper control arm from the spindle.



N. Slowly lowering floor jack and relieve the spring tension.

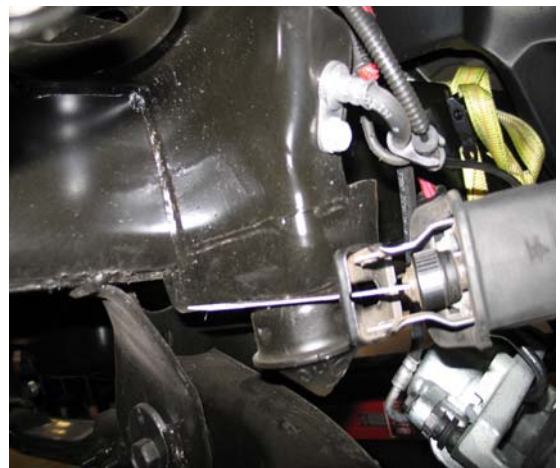
O. Use a pry bar and pry the lower control arm further down to allow the stock front suspension spring to be removed.

### 3.) REPLACING THE FRONT BUMPSTOP

A. At this stage, the factory chassis bump stop should be removed.

B. Using a grinder with a cut off disk, or a saws all cut off the stock bump stop cups from the frame.

C. Grind or file the bump stop pad on the frame of all remaining weld material.



D. Cover up the exposed bare metal with black spray paint.

E. Install the supplied Belltech progressive bump stop into the original bump stop location. Secure the bump stop with the supplied Nyloc nut using a 13mm socket.



#### 4.) INSTALLING THE FRONT SPRING

- A. Transfer the stock rubber upper spring isolator to the Belltech lowering spring.



- B. Install the lowering spring (top first) by prying down the lower control arm. Make sure the lower spring end fits within the recessed portion of the lower control arm.
- C. Compress the spring and lower control arm by pushing up with a floor jack. Be sure the floor jack is clear of the spindle and the hole on the lower control arm to allow the shocks to be installed. Ensure that the way bar end-link is guided through the sway bar tab hole when the lower control arm is jacked upwards.
- D. Assemble the upper ball joint and tighten the 22mm nut to 40 ft lb and then torque it an additional 200 degrees.
- E. Install the front shock, upper bushing and washer. Tighten the 13mm lower bolts to 19 ft lbs and the 18mm top nut to 40 ft lbs. Belltech offers a Street Performance lowering shock (PN: S10103) for this application.
- F. Install the anti-sway bar end-link top bushing, washer and nut. Tighten the 16mm nut to 20 ft lbs of torque. It may be necessary to also use a 16mm wrench to prevent the end-link from spinning.
- G. Install the front wheel speed sensor by routing the sensor and line through the brake rotor backing plate. Tighten the sensor bolt using a 5mm allen wrench.
- H. Install the brake rotor.

- I. Install the brake caliper and tighten the 22mm caliper bolts to 130 ft lbs.
- J. Install the steering tie rod ball joint into the spindle. Tighten the 22m nut to 45 ft lbs and an additional 90 degrees.
- K. Carefully lower and remove the floor jack.
- L. Repeat the process for the other side of the vehicle.

## 5.) **FINALIZING THE INSTALLATION**

- A. Double check torque on all nuts, bolts and brackets that have been part of the install.
- B. Install the wheels and tighten lug nuts to specified torque.
- C. Lift vehicle and remove support stands.
- D. Carefully lower the vehicle onto the ground to position the shackles in a loaded position.
- E. Check brake hoses, cables and other components for any possible interference.
- F. Check for wheel/tire to chassis/body interference.
- G. 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.
- H. Have the vehicle aligned at a certified alignment shop.
- M. Check all of the hardware and re-torque at intervals for the first 10, 100, and 1000 miles.