



## INSTALLATION INSTRUCTIONS

### 5553 REAR ANTI-SWAY BAR KIT 2009-2012 DODGE RAM 1500 RWD

**For stock height applications stock end links will be required with this kit.  
For lowered applications shortened end links will be required which are supplied with Belltech lowering springs.**

**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
- Standard and Metric socket and box wrench set

#### **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 1<sup>st</sup> gear (manual). Activate the parking brake. Remove any loose items located in the cargo box.
- 1b)** 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
- 1c)** Support the vehicle using support stands rated for the vehicle's weight. Prior to lowering the vehicle onto stands, make sure the supports will securely contact the straight, flat portions of the frame rails. **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. Never work under a vehicle supported by only a floor jack.**
- 1d)** 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

**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

## 2. STOCK ANTI-SWAR BAR REMOVAL

- 2a) If the vehicle comes with one, remove the nuts that secure the anti-sway bar (**ASB**) from the lower end-link to the bar on both sides. Do not disconnect the ASB from the lower end-link at this. (**Photo 1**)
- 2b) Loosen the stock ASB bushing brackets bolts.
- 2c) Remove the stock ASB from the vehicle by sliding each end-link out of the bar tabs.
- 2d) Remove the ASB end links if this kit is being installed along with Belltech lowering springs. (**Photo 2**) If this kit will be used on a stock height application, the end links will be reused and do not need to be removed.



## 3. ANTI-SWAY BAR INSTALLATION

- 3a) Install the Belltech dog bone style end-links to the frame (**lowered applications only**). Feed the bolt and washer through the stock frame location in the inboard direction. The end-link should be on the inboard side of the ASB frame bracket. Secure bolt with the supplied washers and Nyloc nuts and tighten to 56 ft lb. using a wrench and socket.
- 3b) Spread and clip the Belltech Teflon lined ASB bushing on to the Belltech ASB near the stock bushing locations. If you do not have a factory ASB, use the bracket mounting points on the frame as a reference
- 3c) Clip the Belltech ASB bushing brackets onto the bushings and install the bar assembly onto the frame. Use the supplied Belltech bolts and washers and tighten by.
- 3d) Install the ASB with the arms pointing upwards when the center of the bar is flat. (**Photo 3**)
- 3e) **For lowered applications**, Connect the



lower end-link to the ASB using the supplied bolts, washers and lock nut hardware. The ASB should be on the inside of the end link assembly and the bolt should be fed from the inside. Tighten the hardware to 74 ft lb using a socket and wrench.

**For stock height applications**, connect the stock end-links to the Belltech ASB on the inside of the ASB and tighten to 79 ft lb.

3f) Tighten the ASB brackets to 37 ft lb.

#### 4. **FINALIZING THE INSTALLATION**

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

4b) Lift vehicle and remove support stands.

4c) Carefully lower the vehicle onto the ground to position the shackles in a loaded position.

4d) Check brake hoses, cables and other components for any possible interference.

4e) Check all of the hardware and re-torque at intervals for the first 10, 100, and 1000 miles.

<b>Part #</b>	<b>Description</b>	<b>Quantity</b>
5553-300	Belltech rear anti-sway bar	1
113200	Teflon lined anti-sway bar bushing	2
114020	Anti-sway bar bushing bracket	2
112022	Bushing bracket bolts 10mm x 1.5 x 30mm	4
112518	Bushing bracket washers – 3/8"	4



## INSTALLATION INSTRUCTIONS

**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.



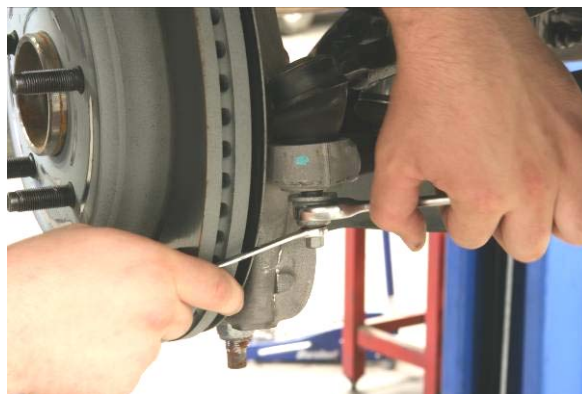
- C. Loosen the two lower shock bolts holding the shock bar pin to the lower control arm with a 13mm socket.



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



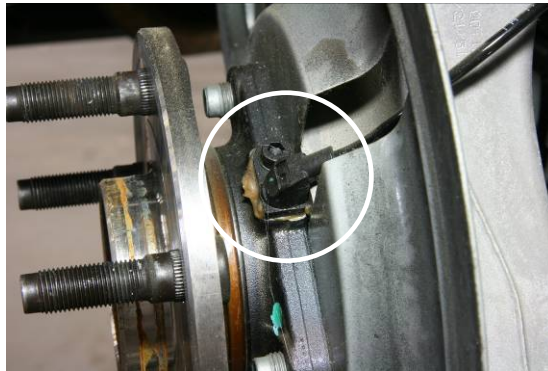
- E. Pull off the top washer and bushing.
- F. Lower the shock through the hole in the bottom control arm.
- G. Remove the nut securing the steering tie rod to the spindle. Use a 22mm wrench on the nut and a 10mm wrench to prevent the ball joint from rotating.



- 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.



## 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 1<sup>st</sup> gear (manual). Activate the parking brake.

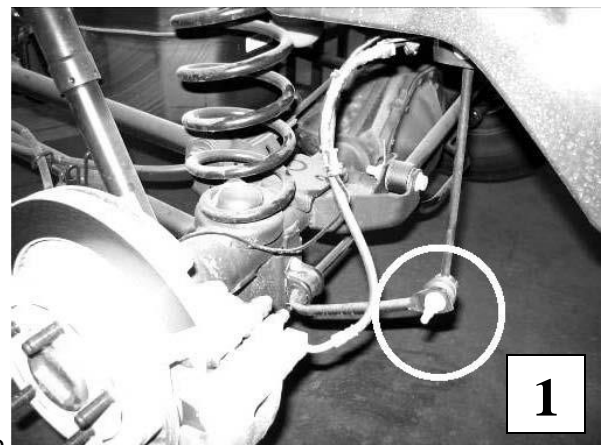
- 1b) Loosen, but **DO NOT REMOVE** the rear lug nuts.
- 1c) Lift the rear of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so that the rear tires are approximately 4-6 inches off the ground surface.
- 1d) Support the vehicle using support stands rated for the vehicle's 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.

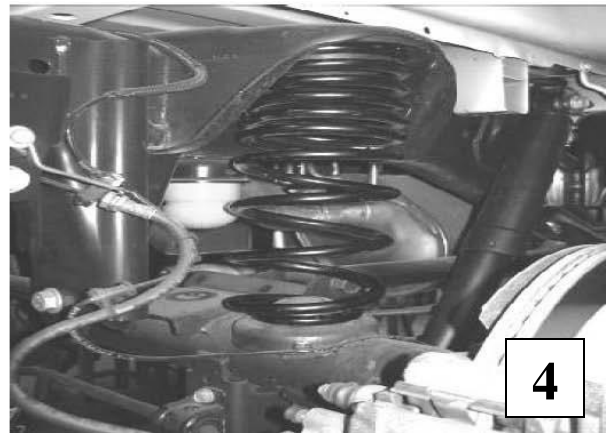
**It is very important that the vehicle is properly supported during this installation to prevent frame damage and personal injury! Make sure that the support stands are properly placed prior to performing the following procedures.**

- 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.

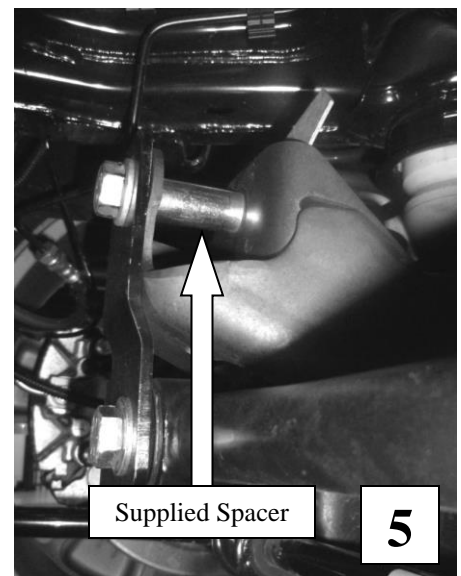
## **2.) REAR SPRING REMOVAL AND INSTALLATION**

- 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.
- 2l) 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 1/4" 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
- 2o) 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.) FINALIZING THE INSTALLATION

- 3a) Double check torque on all nuts, bolts and brackets that have been part of the install
- 3b) Install the wheels and tighten lug nuts to specified torque.
- 3c) Lift vehicle and remove support stands.
- 3d) Carefully lower the vehicle onto the ground.

- 3e) Check brake hoses, cables and other components for any possible interference.
- 3f) Check for wheel/tire to chassis/body interference.
- 3g) 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.
- 3h) Have the vehicle aligned at a certified alignment shop.
- 3i) 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**

<b>PART#</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
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 1 1/4"	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	1