



## 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.

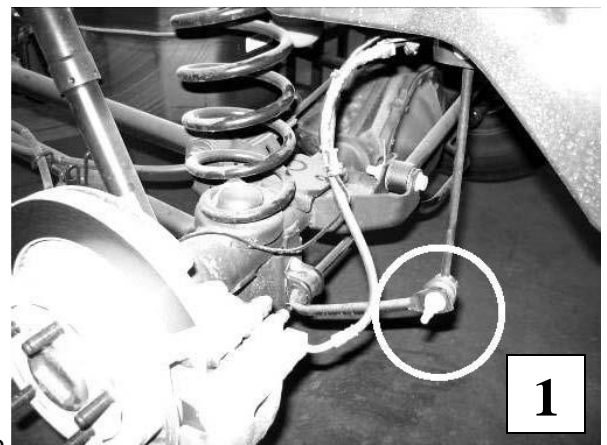
- 1b) Loosen, but **DO NOT REMOVE** the rear lug nuts.
- 1c) Lift the rear of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so that the rear tires are approximately 4-6 inches off the ground surface.
- 1d) Support the vehicle using support stands rated for the vehicle's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

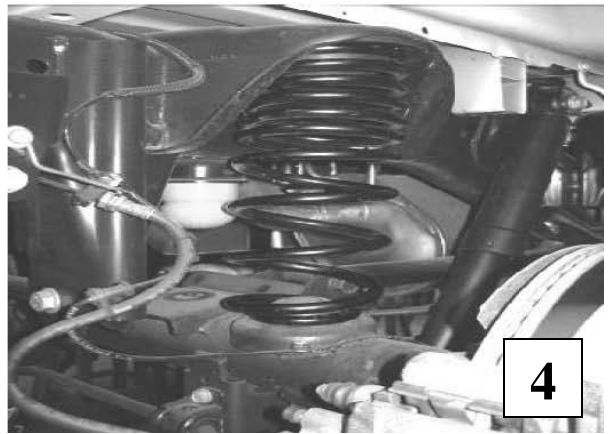
**It is very important that the vehicle is properly supported during this installation to prevent frame damage and personal injury! Make sure that the support stands are properly placed prior to performing the following procedures.**

- 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.

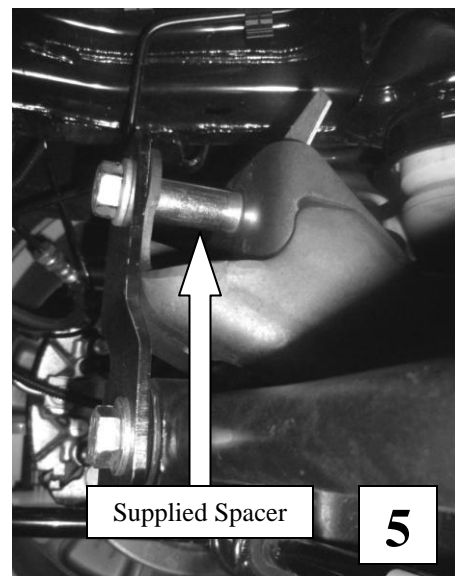
## **2.) REAR SPRING REMOVAL AND INSTALLATION**

- 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.) 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.**

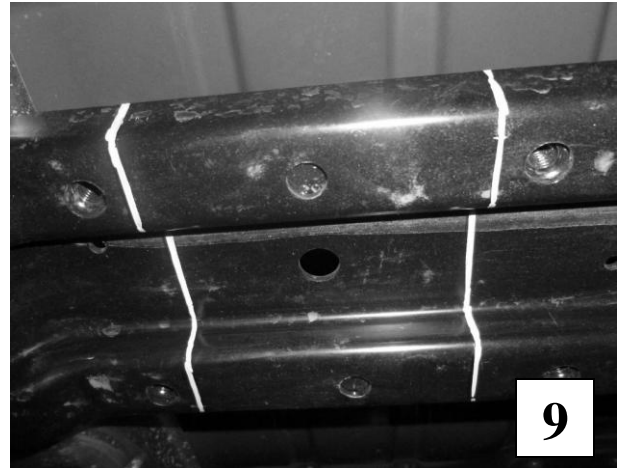
- 3a) Remove the 4 bolts that attach the driveshaft to the rear axle input shaft. Be careful when removing the bolts to not allow the driveshaft to fall as it may cause damage to the driveshaft. Also do not allow the front of the driveshaft to slip out of the transmission.

- 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)**

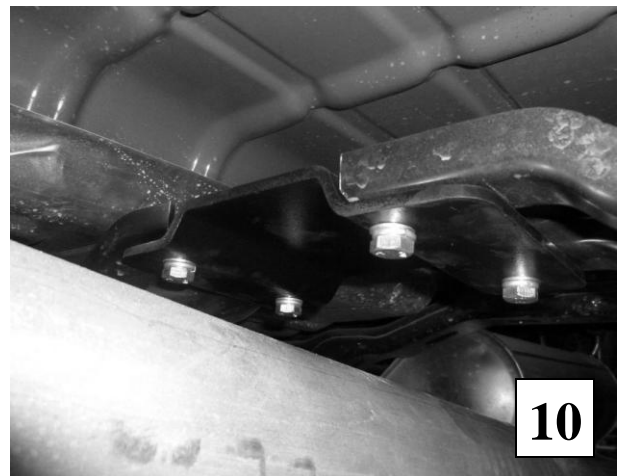


- 3d) Remove the template and connect the lines to identify where the cross member will be cut. **(Photo9)**

**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 or 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.
  
- 4e) 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**

<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 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