



## INSTALLATION INSTRUCTIONS

6580

### REAR LOWERING KIT 94-99 DODGE RAM 1500

**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.**

**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, support stands, and wheel chocks
- Combination wrench set
- Torque wrench: *0-75 lb ft. range*
- Ratcheting socket wrench and socket sets
- Air Chisel / Die grinder W/ cut off wheel
- Safety Glasses

#### **KIT INSTALLATION**

1. Open the hardware kit and remove all of the contents. Refer to the part list (Page 3) to verify that all parts are present.
2. Place the vehicle on a solid, level surface. We recommend concrete or asphalt. Installation may be eased by removal of the bed. If the bed is to be removed, be sure to plug any open fuel lines and or vents. As there may be some grinding and drilling during hanger installation, this will reduce the possibility of sparks or chips entering the fuel system. Be sure to disconnect all wiring harnesses and ground straps.
3. Block the front wheels and raise the rear of the vehicle using a hydraulic floor jack rated for this load under the center of the axle. (PHOTO 1)
4. Install jack stands rated for this load on both sides of the vehicle so that they support the chassis just forward of the rear spring forward hanger. (PHOTO 2)
5. Remove the rear wheels

6. Remove the extended non-threaded section of the forward spring hanger bolt with a hacksaw or cutting wheel. (PHOTO 3 & 4) This will enable removal of the bolt in an inward direction without removing the fuel tank.
7. Raise the floor jack until it is just touching the rear axle. Raise the jack another 1/8" – 1/4" to remove as much tension as possible from the leaf spring. Supporting the spring end, remove the leaf spring eye bolt and allow the spring to come clear of the hanger. **CAUTION: Spring may still be under tension. Use caution when removing spring.** (PHOTO 5)
8. Remove the rear lower shackle bolt (PHOTO 6) and jack up the rear end to lift the spring out of the rear shackle mount. (PHOTO 7)
9. Lower the floor jack to allow more access to hanger. **NOTE:** Use caution when lowering rear axle so that brake lines and cables are not subjected to damaging tension.
10. Remove upper shackle bolt, remove stock shackle (PHOTO 8), and re-install Belltech shackle using original hardware. (PHOTO 9) Do not tighten shackle hardware at this point; leave hardware loose enough so that the shackle can easily rotate to its final position without binding when the weight of truck is applied during final step. **NOTE: It is not necessary to remove leaf springs from vehicle. Leaf springs have been removed for photo purposes only.**
11. Remove OEM spring hanger by center drilling through the factory rivets with a 3/8-inch diameter drill bit. **NOTE:** This procedure will be easier if the drilling operation is taken in several steps, starting with smaller drill bits and working up to the final size. After drilling, it will aid in rivet removal if a slot is cut through the center of the rivet head. (PHOTO 10) After drilling and grinding rivets, remove the rivet heads with a chisel or air hammer. (PHOTO 11) **CAUTION: Always wear eye protection when using power tools.**
12. Remove factory spring hanger from chassis, grind remaining rivet shafts flush with frame, and punch them through the frame. (PHOTO 12) **CAUTION: Always wear eye protection when using power tools.**
13. Install Belltech hanger as shown using supplied hardware and existing rivet holes. (PHOTO 13) It may be necessary to temporarily loosen the straps holding the fuel tank to facilitate mounting of the driver side hanger. Torque 1/2" hanger mounting hardware to 123-128 Ft. Lbs. Re-tighten fuel tank straps to return fuel tank to its original position
14. To provide sufficient clearance for the Belltech rear shackle, notch the bed support rail directly above the shackle location. (PHOTO 14) A notch of approximately 4" will be adequate. **CAUTION: Always wear eye protection when using power tools.**
15. Raise rear axle with the floor jack and re-install leaf spring into the Belltech hanger using the stock leaf spring eyebolt and nut. (PHOTO 15) Make sure the leaf spring eyebolt is secure, but do not tighten completely at this time.
16. Install the Belltech shackle into the rear hanger. (PHOTO 16) Once again, make sure the hardware is secure, but do not tighten completely at this time.
17. Repeat steps 5-14 for the other side of the truck.
18. Re-install wheels; remove the jack stands and floor jack.
19. After the vehicle is back on pavement, torque both front leaf spring pivot bolts and all rear shackle bolts to factory specifications.

20. Be sure to recheck all hardware for proper torque after 100 miles.

## PART LIST FOR 6580 DODGE RAM 1500

### REAR LOWERING KIT

PART No.	DESCRIPTION	QTY.
6400-100	Shackles	2
6580-001	Hangers	2
110408	1/2"-20 x 1-1/4" HHCS	8
110402	1/2" Lock Nuts	8
110660	1/2" Flat Washers	16





