

# INSTALLATION INSTRUCTIONS

#### 6560

# LIFTING HANGER KIT – 1"-2" REAR LIFT 99-17 CHEVROLET SILVERADO / GMC SIERRA 1500

# 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**: <u>**DO NOT**</u> 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**: <u>**DO NOT**</u> 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 six (6) support stands Wheel chocks Die grinder equipped with abrasive cut-off wheel ½" drive torque wrench Standard socket wrench set Air powered ½" drive impact wrench Flat bladed screw driver Safety glasses Air powered chisel

#### 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. <u>The use of safe and properly maintained equipment is very important!</u> **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.

Part #	Description	Quantity
6519-010-99	Lifting Rear Leaf Hanger	2
110650	HH Cap screw 7/16" – 20 x 1-1/4"	6
110303	Stover Lock Nut 7/16"-20	6
110645	Flat Washer A325 7/16"	12

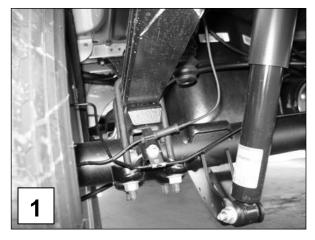
## Parts List: 6560 Lift Hanger Kit

#### 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 6-8 inches off the ground surface.
- 1d) Support the vehicle using four (4) support stands, rated for the vehicle's weight. The stands should be positioned, two on each of the frame rails, just forward of the front leaf spring hangers and just below the rear leaf spring shackle hangers. 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
- **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.) LEAF SPRING REMOVAL

- 2a) Remove the lower mounting bolt connecting rear shocks to axel mounts (Photo 1).
- **2b)** Support the axle with jack stands to keep it leaf springs in place.
- CAUTION: Be careful not to damage the brake hoses/and or driveline when re-locating the rear axle assembly.
  LEAF SPRINGS may be under tension. SPRINGS under tension store a great amount of energy. Use caution during the following steps to avoid personal injury and/or damage to the vehicle.
  - **2c)** Loosen, but do not remove the rear leaf spring mounting bolts as well as the shackle mounting bolts.





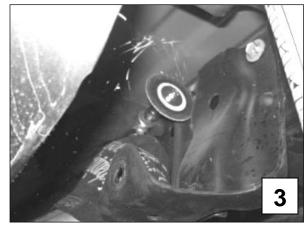
2d) Remove the bolts securing the rear shackle to the hanger (**Photo 2**). Carefully lower the leaf spring.

#### 3.) REAR SHACKLE HANGER REMOVAL (STOCK)

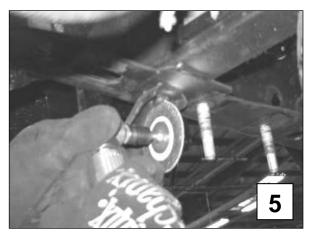
- 3a) Use a cut-off wheel or a type of abrasive cutting tool to make slots thru the heads of the rivets on each REAR SHACKLE HANGER. (Photo 3) There are three (3) rivets on each side that need to be removed. The slots should be straight thru the rivet heads and flush with the surface they are mounted to
- **3b)** Remove the rivet heads with a pneumatic hammer and chisel attachment. (**Photo 4**). It should take no more than a few seconds to chisel each head off. Once all rivet heads have been removed, it is helpful to use a punch and hammer or a punch with the air hammer to push out the remaining portion of the rivets.
- **NOTE:** If the rivets heads are not easily chiseled off, the cut thru the center is probably not deep enough. Increasing the depth of the slot thru the center will decrease the time it takes to remove the rivets. **DO NOT** cut all the way through the hanger bracket.
  - **3c)** Remove the single bolt that mounts each **REAR SHACKLE HANGER**.
  - **3d)** Remove the entire **REAR SHACKLE HANGER** completely off the chassis.
  - 3e) Remove the REAR SHACKLE HANGER SUPPORT BRACKET. Use a cut-off wheel or type of abrasive cutting tool to make a slot straight (Photo 5) through the rivet head and flush with surface they are mount to. Use a pneumatic hammer to remove the rivet head. The bracket is also held on by a small weld. Use a hammer and pliers to pull and push the SUPPORT BRACKET back and forth until it breaks free. (Photo 6) NOTE: Newer models do not have a rivet to cut, only the small welds.

## 4.) LEAF SPRING INSTALLATION

- **4a) Pre-assemble** the **REAR SHACKLE HANGER** and the appropriate **SPRING SHACKLE**. Install, but do not completely tighten the mounting bolt.
- 4b) Using the kit supplied hardware, bolt up the new
  BELLTECH REAR SHACKLE HANGER to the existing holes in the chassis. (Photo 7)









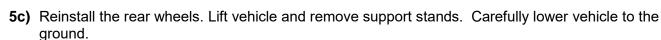
#### **IMPORTANT NOTE**:

Located on your new **BELLTECH REAR SHACKLE HANGER**, are four (4) sets of holes, four (4) on each side of the **HANGER**. Using the top hole and the third hole from the top, as shown in **Photo 7**, **lifts the vehicle 2**". For **lifting the vehicle 1**", use the second and fourth holes from the top. It might be necessary to bend the flange on the underside of the bed to allow for additional clearance when installing the hanger in the top position.

- **4c)** Raise the rear axle up far enough to attach the rear leaf spring mount. Swing the **LEAF SPRING** upward.
- 4d) Align the LEAF SPRING eye with the SPRING SHACKLE mount holes. Insert the hardware and but do not tighten completely (Photo 8).

#### 5.) COMPLETING INSTALLATION

- 5a) All hardware being fastened to the vehicle's original fastening points should be torqued to the proper specifications. To prevent chassis damage, never over-torque the hardware. The SPRING SHACKLE MOUNTS should remain installed but not tightened fully until step 5d.
- **5b)** Check that all components have been properly installed, tightened and torqued.



- **5d)** Tighten all 4 **SPRING SHACKLE** bolts to 90 ft./lbs and all 8 **REAR SHACKLE HANGER** bolts to 110 ft./lbs.
- **5e)** Verify adequate clearance of all hoses, lines, and exhaust pipes. 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 modified
- **5f)** Installation is complete. Check <u>all</u> of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.



