



INSTALLATION INSTRUCTIONS

6907

REAR LOWERING KIT 97-00 CHEVY 1-TON C-3500

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
- Heavy Duty Drill
- Safety Glasses

This is a relatively complex installation and as such **we recommend** that a qualified mechanic perform it. We also recommend that to retain the stability of the leaf spring pack and axle assembly, **only one side of the vehicle should be modified at a time.** **NOTE:** As it may be necessary to temporarily loosen fuel tank mounting straps to install driver side hanger, **we recommend** that the fuel level be as close to empty as possible to reduce fuel tank weight.

KIT INSTALLATION

1. For access to the rear suspension and to simplify the installation procedure, remove the bed from the truck. There are eight large bolts that hold the bed to the frame, which must be removed. Unbolt the gas filler neck, unplug tail light harness and disconnect the two ground straps in the front and back of the truck. Be sure to check all of these prior to removal.
2. Block the front wheels and raise the rear of the truck using a hydraulic floor jack under the center axle. Place the frame on jack stands just ahead of the front spring hangers and remove the wheels from the truck. (PHOTO 1)

3. Remove the lower shock mounting hardware so the shocks are free from the rear end. Lower the floor jack so that all the pressure is off the leaf spring assemblies. **CAUTION: Leaf springs are under tension use caution when disconnecting.** (PHOTO 2)
4. Remove the bolts and nuts from the spring hangers and lower the jack so the front spring eyes free themselves from the hangers. **CAUTION: Do not let the rear axle drop to the point where the brake lines and/or drive shaft are strained.** You may want to use a jack stand to support the rear end housing at this point. (PHOTOS 3 & 4)
5. Unbolt the stock emergency brake bracket from the spring hanger. The other cable feed through a hole in the hanger. A section of the material must be cut away in order to free the cable from the hanger. **CAUTION: Always wear eye protection when using power tools.** (PHOTOS 5 & 6)
6. The rivets must be removed from the stock hangers. This can be done several ways. Shown here is the use of an air chisel. Cutting a slot in the head of the rivet aids in the removal of the rivet head. Grinding the heads of the rivets is an alternative method. **CAUTION: Always wear eye protection when using power tools.** (PHOTOS 7 & 8)
7. Remove the stock hangers from the frame. Drive the remainder of the rivet from the frame using an air chisel or similar tool. (PHOTO 9)
8. There is a bed bracket welded to the chassis that must be notched for clearance, where the new spring hanger will make contact. On the passenger side there is a bolt extending out of the chassis. This also will have to be ground off. **CAUTION: Always wear eye protection when using power tools.** (PHOTO 10)
9. **NOTE:** There is an additional hole in each hanger in this kit. This hole should be on the front side of the spring eye bolt (toward the front of the vehicle).
10. Install the new hangers on the frame using the ½" hardware supplied and torque to 110-120 ft. lbs. (PHOTO 11)
11. Once the hanger is secured, drill and install the fifth (extra) bolt and nut into the hanger. Torque bolt to 110-120 ft. lbs. **IMPORTANT: This is a mandatory step in the installation procedure.** (PHOTO 12)
12. Position the rear axle so there is no pressure on the leaf springs at the rear shackles. Remove the shackle bolts and stock shackles from the spring. **CAUTION: Leaf springs are under tension use caution when disconnecting.** (PHOTO 13)
13. The one-ton springs are equipped with an upper overload. This must be removed before completion of the installation. Support the axle with jack stands. Remove the U-bolts from the axle. Lift the spring from its position on the axle. Place the spring in a stable position in which it can be worked on. Be sure to mark the front of the springs to be sure you replace them correctly.
14. The spring center bolt must be removed in order to remove the upper overload spring and spacer. **NOTE:** You may want to clamp the spring pack together (all except the upper overload) to maintain leaf alignment. (PHOTO 14)
15. Once the spring center bolt is removed, the upper overload and steel spacer can be discarded. Push the new center bolt down through the spring pack from the top to bottom (the threads and the long nut will be on the bottom of the spring).
16. Thread the long nut on the center bolt and torque to 45-50 ft. lbs. Cut off the remaining excess length of the bolt.

17. Remove the rivets securing the stock bump stop assembly by the frame rail. This can be accomplished by the same method used to remove the front hanger rivets. (PHOTOS 15 & 16)
18. Drill a 3/8" hole in the frame rail directly above the axle tube and install the kit supplied bump stop.
19. Re-install the front spring eye into the new front spring hanger. Put the new emergency brake adapter bracket into position and slide the spring eyebolt completely through the bracket, spring and hanger. Attach the washer and nut, but do not tighten at this time. (PHOTO 17)
20. Lift the rear of the spring up and place the new shackle on the spring. Re-install the spring eyebolt so that the head of the bolt is on the frame side of the shackle. (PHOTO 18)
21. Lower the shackle into the stock hanger on the frame and re-install the stock bolt. Attach the washers and nuts, but do not tighten yet. (PHOTO 19)
22. Remove the four overload pads from the chassis by removing the four bolts and nuts from each pad. (PHOTO 20)
23. Jack up the rear end so that the long nuts start to enter their position on the spring perches on the axle. Slide the 4-degree shims into place between the axle and the spring. The thick portion of the shim should be toward the front of the truck. Make sure that the shoulder of the shim is completely against the long nut. (PHOTO 21)
24. Place the stock U-bolts, axle plates and mounting hardware back into its stock location. Torque the U-bolts to 110 Ft. lbs.
25. Once the U-bolts are tight, raise the rear end with the jack until the frame begins to lift off the jack stands. Now tighten all six-spring eyebolts to factory specifications. (PHOTO 22)
26. Release pressure from the floor jack so the truck is again securely on the jack stands.
27. Slide drivers side emergency cable through the kit supplied bracket. The stock emergency brake bracket can now be attached to the new adapter bracket. Use the stock bolt and nut to mate the two pieces. There is a slot in the new bracket where the tab on the stock bracket fits. Make sure these are aligned and tightened completely. Re-install the factory grommet into the new adapter bracket. (PHOTOS 23, 24 & 25)

IMPORTANT: The emergency cable must be re-adjusted to factory specifications after the installation of this kit. Failure to do so may damage the emergency brake system and/or the kit supplied bracket.

28. Install the kit supplied transmission tail shaft spacers by removing the stock transmission mounting bolts and raising the rear of the transmission with a jack or suitable lifting device. (PHOTO 26) To ease installation of the kit supplied transmission bolts; remove the bottom transmission mount nut and the transmission mount. Install the kit supplied transmission mount bolts through the transmission mount flanges and locate the kit-supplied spacers over the bolts with the kit supplied washers on the ends of the spacer tubes against the transmission housing and transmission mount. (PHOTO 27 & 28) Re-install the transmission mount with the bolts and spacers intact and start all the hardware related to this mount before applying final torque. Torque the bottom transmission mount nut to 35-40 Ft-lbs. and the kit supplied spacer bolts to 47-52 Ft-lb. (PHOTO 29)
29. On an extended cab vehicle, it will be necessary to remove a portion of the under-cab cross member to allow drive shaft clearance after installation of the center carrier bearing spacer. To ease this process, remove the bolts that retain the center carrier bearing to the vehicle cross member. Slide the propeller shaft assembly as far to one side as possible. Locate the kit supplied template on the center of the

cross-member as directed by the instructions on the template. (PHOTO 30) After marking the front and rear of the cross member as directed (PHOTO 31), remove the section indicated with a Sawzall, plasma cutter or suitable tool. (PHOTO 32) **CAUTION: Always wear eye protection when using power tools.**

30. Lift the drive shaft assembly and install the kit supplied center carrier bearing and the vehicle cross member with the "feet" of the spacer down toward the vehicle cross member. (PHOTO 33) Install and torque the kit supplied hardware to 47-52 Ft-lbs.
31. Install the kit supplied lower shock extensions making sure they slip into the cutout on the stock mounts. (PHOTO 34) Install the kit supplied 9/16" bolts, washers and spacers through the stock shock mounts and shock extensions. (PHOTO 35) Torque the 9/16" hardware to 100-120 ft-lbs. Drill a 5/16" hole through the back of the stock shock mounts using the hole in the shock extensions as a guide. (PHOTO 36) Install and torque the kit supplied 5/16" hardware to 15-20 ft-lbs.
32. Upgraded shocks can be installed at this time. Otherwise install the stock shock using the original mounting hardware.
33. Replace the truck bed. Be sure all eight bolts, ground straps, and filler neck hardware is replaced.
34. Install the wheels and tires, raise the truck, remove the stands and lower the truck to the ground. The installation is completed. **IMPORTANT:** Re-torque U-bolts after 100 and 500 miles.

PART LIST FOR 6907 CHEVY

REAR LOWERING KIT

PART No.	DESCRIPTION	QTY.
6900-030	Front Hanger, LH	1
6900-040	Front Hanger, RH	1
6400-100	Shackle	2
6907-003	Parking Brake Cable Bracket	1
6550-050	S hock Ext.	2
110408	1/2"-20 x 1-1/4" NF Grade 8 CS ZP	10
110402	1/2"-20 NF GRC LN ZP	10
110660	1/2" A325 FW ZP	20
110252	Spring Center Bolt 3/8"-24 x 5"	2
110257	Coupling Nut 3/8"-24 x 1-1/8"	2
4977-001	4° Pinion Shim	2
110456	9/16"-12 x 3-1/2" Grade 5 CS ZP	2
110454	9/16"-12 Nylon LN ZP	2
110670	9/16" A325 FW ZP	4
7000-880	Sleeve	2
4918-001	Urethane Bump Stop	2
110201	5/16"-18 x 1" Grade 5 CS	2
110203	5/16"-18 Nylon LN ZP	2
110204	5/16" A325 FW ZP	4
110305	7/16" x 20 Nylon LN ZP	2
110312	7/16"-20 x 3" NC Grade 8 CS ZP	2
110645	7/16" A325 FW	4
6925-010	Carrier Bearing Spacer	1
6500-010	Transmission Spacer 1"	1
403785	10 – 1.5mm x 55mm Grade 8 ZP CS	2









