



## INSTALLATION INSTRUCTIONS

6636

### HANGER and SHACKLE KIT

95'– 99' CHEVY TAHOE / GMC YUKON

**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. As this is a relatively complex installation, we recommend that it be performed by a qualified mechanic or repair facility.**

**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:** In the interest of maintaining rear axle-to-chassis alignment, **WE RECOMMEND performing this installation on only one side of the vehicle at a time.** The installation of this kit requires loosening the fuel tank mounts and repositioning the fuel tank during installation. It is advisable to start the installation with a minimum of fuel in the vehicle's tank. During the installation of this kit, there will be instances where the kit does not supply all of the hardware that will be removed and re-installed during installation. The option to replace worn or damaged non-supplied hardware is the responsibility of the installation technician.

### **RECOMMENDED TOOLS:**

- Properly rated floor jack, support stands, and wheel chocks
- Combination wrench set
- Torque wrench: *0-120 lb ft. range*
- Ratcheting socket wrench and socket sets
- Safety Glasses

### **KIT INSTALLATION**

1. Open the hardware kit and remove all of the contents. Refer to the part list (Page 4) to verify that all parts are present.
2. Park the vehicle on a smooth, level concrete or seasoned asphalt surface and activate the parking brake. Block the FRONT wheels of the vehicle with appropriate wheel chocks; making sure the vehicle's transmission is in 1<sup>st</sup> gear (manual) or "Park" (automatic).
3. Using a properly rated floor jack, lift the rear wheels of the vehicle off the ground. Place support stands, rated for the vehicle's weight, and in the factory specified locations. Refer to the vehicle Owner's Manual. Prior to lowering the vehicle onto the stands, make sure the supports will securely contact the chassis.

4. It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage! Make sure that the supports stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation.
5. Block the front wheel and with a floor jack rated for this load, raise the rear of the vehicle by lifting under the center of the rear axle housing. Position jack stands rated for the load under the chassis side rails just forward of the rear leaf spring pack forward hangers. Lower the vehicle down onto the jack stands and check for vehicle stability while the floor jack is still under the rear axle housing. Remove the rear wheels and tires.
6. Position the floor jack under the rear axle housing. Raise the floor jack until it just touches the rear axle housing and then raise it another 1/2" to 3/4" to slightly load the rear leaf springs. Remove and retain the lower shock mount hardware and remove the rear axle housing U-bolt nuts, washers, U-bolts, and axle tube support plates. (PHOTOS 1 & 2) Remove and retain the lower sway bar end-link attach hardware.
7. Remove the bolt securing the emergency brake cable housings to the chassis rail below the forward leaf spring hanger on the driver's side of the vehicle. (PHOTO 3) Allow the brake cable housings to come clear of the chassis side rail. Lower the rear axle housing to clear the rear leaf spring assembly. **CAUTION:** When lowering the rear axle housing, take care so that brake system lines and hoses are not put under any tension.
8. Loosen the front leaf spring eye hardware and the rear upper and lower shackle eye hardware. (PHOTOS 4 & 5) Supporting the leaf spring ends, remove the leaf spring and shackle eye hardware and remove leaf spring from vehicle. Remove the stock rear axle tube bumps stops from the vehicle. (PHOTO 6) **NOTE:** On the driver's side of the vehicle it will be necessary to reposition the fuel tank to gain access to the forward leaf spring pack eye bolt. With a jack supporting the fuel tank, remove the two fuel tank mounting strap bolts. (PHOTO 7) Lower or reposition the fuel tank only as necessary to gain access to the forward leaf spring eyebolt to prevent fuel system damage.
9. Remove the forward leaf spring hanger by first grinding slots in the rivet heads of the hanger or by drilling through the rivets with a 3/8" drill bit. (PHOTO 8) **CAUTION:** The fuel tank is in close proximity to the chassis rail on the driver's side of the vehicle. **Use extreme care when drilling through rivets so that the fuel system components are not damaged.** After drilling or grinding the rivet heads, cut off the rivet heads using an air chisel or a suitable tool. (PHOTO 9) Punch the remaining rivet shanks through the hanger and chassis rail with a hammer and punch a suitable tool. **Caution: Always wear eye protection when using power tools. Caution: The fuel tank is in close proximity to the chassis rail on the driver's side of the vehicle.** Use extreme care when punching rivet shanks through the chassis so that fuel system components are not damaged.
10. Using a die grinder with a cutoff wheel, or suitable tool, remove a 6" portion of the body flange directly above the forward leaf spring hanger. (PHOTOS 10 & 11) Clean up the hanger rivet holes using a 1/2" drill bit. (PHOTO 12) **CAUTION: Always wear eye protection when using power tools. CAUTION: The fuel tank and electrical components are in close proximity to the chassis rail on the driver's side of the vehicle. Use extreme caution when drilling through the chassis rail that these components are not damaged.**
11. Install the kit supplied hardware from the inside of the chassis rail and slide the kit supplied hanger onto these bolts. (PHOTO 13) Install the kit supplied 1/2" washers and nuts and torque the hardware to 105-115 Ft-lbs. **NOTE:** After completing the driver's side of the vehicle, reposition the fuel tank and reinstall the fuel tank mounting strap bolts. Torque this hardware to 8 Ft-lbs. Also, re-install the brake cable locator bolt and torque the bolt to 10 Ft-lbs.

12. Drill a 3/8" hole 3 1/2" aft of the existing forward bump stop hole and install the kit supplied bump stop. (PHOTOS 14 & 15) Torque the bump stop hardware to 15-20 Ft-lbs.
13. Install the kit-supplied shackle on the rear end of the leaf spring pack. (PHOTO 16) **DO NOT** tighten the leaf spring hardware to final torque at this time. **NOTE:** The shackle should have its hollow body cavity facing forward when installed, as the leaf spring will be situated under the vehicle.
14. Re-install the leaf spring assembly into the hangers, re-installing the OEM hardware in the leaf spring pack and shackle eye. (PHOTOS 17 & 18) **DO NOT** tighten the hardware to final torque at this time. **NOTE:** On some vehicles it may be necessary to relieve the body sub floor in the area of the front leaf spring hanger so that the forward leaf spring eye bolts can be installed into the hanger and leaf spring eye.
15. Raise the rear axle housing to contact the rear leaf spring assembly, positioning the rear leaf spring pack center bolt head in the hole in the rear axle tube housing spring pad. Re-install the OEM U-bolts and other associated hardware and tighten this hardware as necessary to prevent separation of the rear axle housing tube and the rear leaf spring assembly, but not to final torque at this time.
16. Accomplish steps 2 through 11 for the remaining side of the vehicle.
17. Torque the leaf spring pack-to-axle housing tube U-bolts to 81 Ft-lbs.
18. With a jack rated for this load situated under the center off the rear axle housing, raise the rear axle housing so that the rear leaf springs come under compression and just begin to unload the jack stands located under the chassis rails. Reposition the jack stands under the rear axle housing tubes. Lower the vehicle onto the stands. Check for vehicle stability and torque the forward leaf spring eye hardware to 92 Ft-lbs, and the rear upper and lower shackle hardware to 81 Ft-lbs.
19. Re-install the shock absorbers and lower hardware and torque the hardware to 81 Ft-lbs.
20. Re-install the sway bar end-link attachment hardware and torque to 33 Ft-lbs.
21. Re-install the wheels and tires and torque the lug nuts to 120 Ft-lbs.
22. Raise the rear of the vehicle so that the jack stands are unloaded. Remove the jack stands, and lower the vehicle to the ground. The installation is complete.
23. 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 modified.
24. Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

## PART LIST FOR 6636 CHEVY TAHOE

### SHACKLE & HANGER KIT

PART No.	DESCRIPTION	QTY.
6400-100	Shackle with Bushing	2
4920-001	Foam Bump Stop	2
110408	1/2"-20 x 1-1/4" HHCS	8
110402	1/2"-20 Stover Lock Nut	8
110660	1/2" Flat Washer	16
6550-005	Bracket	1
6636-003	Hanger	2





