# belitech

#### INSTALLATION INSTRUCTIONS

# 25003 Ver. 2 ADJUSTABLE STRUT

2007 2WD & 4WD TAHOE, AVALANCHE, YUKON, SILVERADO, SIERRA RAISING AND LOWERING YOUR VEHICLE

#### **IMPORTANT NOTE**

THIS KIT GIVES YOU THE OPTION OF A 0" TO 2" DROP AS WELL AS A 1" TO 2" LIFT IN 0.5" INCREMENTS.

#### **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 this 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 the vehicle until all work has been completed and checked. Torque all hard ware 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 the installation process. **Note:** We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

Note: On some vehicles when using the full 2" drop it might not be possible to get the vehicle into OE camber specifications. In this case it may be necessary to purchase Belltech 1º

camber cams (part #: 4951) or Belltech 2º upper control arm bushings (part #: 4955)

#### **RECOMMENDED TOOLS:**

- Blocks and Wheel chocks
- Ratcheting Socket Wrench
- Safety Glasses
- Floor jack and Jack Stands
- Torque Wrench 10-75 lb ft. range
- Properly rated floor jacks and support stands
- Combination Wrench
- Torque wrench: 0-75 lb ft. range

#### KIT INSTALLATION

- **1a.** Open the hardware kit and remove all of the contents. Refer to the parts list (Page 6) to verify that all parts are present.
- **1b.** Park the vehicle on a smooth, level concrete or seasoned asphalt surface and activate the parking brake. Block the REAR wheels of the vehicle with appropriate wheel chocks; making sure the vehicle's transmission is in 1st gear (manual) or "Park" (automatic).
- **1c.** Using a properly rated floor jack, lift the FRONT 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.

**1d.** It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage. Make sure that the support stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

## **REMOVING THE O.E.M. FRONT STRUT**

- 2a. Locate the top three mount bolts of the front spring/strut assembly.
- 2b. Using an 18mm wrench, remove all three mounting nuts that attaches the top of the spring/strut assembly to the chassis.



2c. As you did for the top mounts, remove the two bottom mounting nuts of the spring/strut assembly.



#### **END LINK REMOVAL**

3a. Locate the end link mounts. Using an 18mm wrench, un-bolt the mount nuts from the end links. Remove the end links completely.



## REMOVE THE SPRING/STRUT COMPLETELY

4a. Once all mounts have been un-bolted, hold the spindle assembly while slightly pushing down, dislodging the bottom spring/strut assembly from its bottom mounts dislodging the entire spring/strut assembly from its perch.



! Coil 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 vehicle. Be careful not to damage the brake hoses.

## PRE-ASSEMBLY OF THE STRUT

The installation pictures shown have been done at a professional installation shop. It is important to use a spring compressor to compress the spring before removing the top mount bolt or serious injury may occur.

5a. Mount the entire spring/strut assembly in the fixture. To ease the installation of the new strut, mark a white line down the center of the assembly for alignment purposes only showing the front of the top mount. Compress the spring.



5b. Using an 18mm socket wrench, remove the top mount.



5c. Remove the top spring perch.

5d. Install your required spacers for the desired height onto the BELLTECH shock. (page 7)

# SEE TABLE ON PAGE 7 FOR CORRECT NUMBER OF SPACERS TO INSTALL FOR DESIRED HEIGHT FOR BOTH AUTORIDE AND NON-AUTORIDE VEHICLES

5f. Assemble the new BELLTECH height adjustable strut using the BELLTECH vent disc, OEM spring, new BELLTECH spring seat, BELLTECH bump stop and the OEM top mount that includes the boot and the spring isolator.







#### **RE-ASSEMBLY OF THE FRONT SHOCK/SPRING**

6a. Re-install on the new assembly, the shock/spring the same way the O.E.M. shock/spring was removed. You will re-use the OEM nut clips to install the new BELLTECH strut.

6b. In reverse order, follow Steps 2c thru 2a.

Note it may be necessary to unbolt the upper control arm from the spindle to fit the strut into the mounted position. If this is necessary, remove the upper ball joint nut from the spindle and disconnect the ball joint from the spindle. Install the Belltech strut following Step 6b. Rebolt the upper ball joint to the spindle and tighten all the fasteners to factory specifications.



6c. Reattach the swaybar end links to 18ft-lbs.

#### FINALIZING THE INSTALLATION

All hardware being fastened to the vehicle's original fastening points should be torqued to the factory specifications (Reference Service Manual for Specifications). To prevent chassis damage, never overtorque the hardware.

- **7a.** Check that all components and fasteners have been properly installed, tightened and torqued.
- **7b.** Check brake hoses and other components for any possible interference.
- **7c.** Lift the vehicle and remove the support stands. Carefully lower the vehicle to the ground.
- **7d.** 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.

**7e.** Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

PART NUMBER	DESCRIPTION	QTY	
25003	SHOCK	1	
25003-008	8mm SPACER	8	
25003-010	10mm SPACER	1	
4926-001	BELLTECH Bump Stop	1	
65210031	Vent Disc	1	
25003-002	BELLTECH Spring Perch	1	

# **SPACER TABLES**

#### Without Auto Ride

			NUMBER OF RINGS TO PUT ON STRUT				
ITEM NO.	PART NO.	ITEM	LOWERING	LOWERING	OEM	LIFTING	LIFTING
		DESCRIPTION	HEIGHT 2"	HEIGHT 1"	HEIGHT	HEIGHT 1"	HEIGHT 2"
			50.8mm	25.4mm	0" 0MM	25.4mm	50.8mm
1	25003-008	8mm (0.315in)	0	2	4	6	8
		Ring					
2	25003-010	10mm (0.4in)	1	1	1	1	1
		Ring					

#### With Auto Ride

			NUMBER OF RINGS TO PUT ON STRUT				
ITEM NO.	PART NO.	ITEM	LOWERING	LOWERING	OEM	LIFTING	LIFTING
		DESCRIPTION	HEIGHT 2"	HEIGHT 1"	HEIGHT	HEIGHT 1"	HEIGHT 2"
			50.8mm	25.4mm	0" 0MM	25.4mm	50.8mm
1	25003-008	8mm (0.315in)	0	2	4	6	8
		Ring					
2	25003-010	10mm (0.4in)	0	0	0	0	0
		Ring					

NOTE: If a half inch increment height, between -2 and +2 inches, is desired, please add one 25003-008 ring to the shock from the next lowest increment from the table above. For example, if a 1.5 inch drop is desired, place one 25003-008 ring on the shock (one more ring than on -2 inch drop).