

# INSTALLATION INSTRUCTIONS

1075 North Ave. Sanger, CA 93657-3539 local: 559-875-0222 fax: 559-876-2259 toll free: 800-445-3767

# 6400, 6401, 6403, 6404, 6405, 6406, 6425, 6590, 6700, 6702 Lowering Shackles

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**: <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, support stands, and wheel chocks
- Combination wrench set
- Torque wrench: 50-250 lb ft. range
- Ratcheting socket wrench and socket sets
- Safety Glasses

## JACKING, SUPPORTING AND PREPARING THE VEHICLE

- 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.** 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.
  - 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.
- **4.** Slowly lower the vehicle onto the stands and, before placing the vehicle's entire weight on them, again check that they properly and securely contact the chassis as described above.

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5. Check for possible interference with any lines, wires, cables, or other easily damaged components.

### SHACKLE INSTALLATION

- 1. Block the front wheel and raise the back of the truck. Place jack stands under the frame just ahead of the front spring hangers.
- 2. Position the rear end with a floor jack so there is no pressure on the leaf springs at the rear shackles. Remove the spring eyebolts from the shackle and remove it from the leaf spring. **CAUTION:** Leaf springs are under tension, use caution when disconnecting. (Photo 1 & 2)
- 3. Lift the rear of the spring up and place the new shackle on the spring. Make sure you put the spring eyebolt in from the inside out so the threads are toward the outside. (Photo 2)
- 4. Lower the shackle into position, into the stock hanger on the frame and slide the spring eyebolt through the spring into place. (Photo 3) Raise the truck with the floor jack just until the truck lifts off the stands. Now tighten the four spring eyebolts on the shackles. Remove the jack stands carefully and lower the truck to the ground. Your installation is now complete.
  - 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.
- **6.** Check that all components and fasteners have been properly installed, tightened and torqued.
- 7. Check brake hoses, and other components for any possible interference.
- **8.** Lift vehicle and remove support stands. Carefully lower vehicle to ground.
- **9.** 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.
- **10.** Installation is complete. Check <u>all</u> of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

### **SPECIAL INSTRUCTIONS**

### For the 6406 shackles

- When installing the 6406 shackles you must fold the bed flange to one side or trim the flange for adequate shackle clearance (Photo 4).
- It is helpful to bolt the shackle to the hanger and swing it thru its range of motion to see where the flange needs to be modified.

## PART LIST FOR LOWERING SHACKLE KITS and/or SPACERS KITS

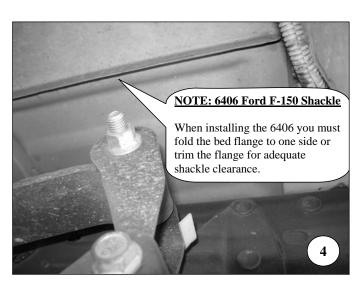
Part Number	Description	Qty
6400-100	2" Lowering Shackle	2
6403-100	3" Lowering Shackle	2
6404-100	1/2" Lifting Shackle	2
6405-100	1" Lowering Shackle	2
6406-100	2" Lowering Shackle	2
6425-010	2" Lowering Shackle	2
6590-010	2" Lowering Shackle	2
6700-100	1" Lowering Shackle	2
6702-100	Shackle	2
6401	Shackle & Spacer	2/8







6400,6401,6403,6404,6405,6406,6425,6590,6700-888 08/07  $\circledcirc$  A Division of KW AUTOMOTIVE North America, Inc.



# SPECIAL INSTRUCTIONS

## For the 6401 SPACERS

 When installing the 6401 SPACERS, simply loosen the four (4) <u>ubolt</u> nuts, remove the top spacer block, add the four (4) new spacers, re attach the four (4) nuts. Torque to manufacturers specifications. See photos below.



TOP SPACER BLOCK

**NEW SPACERS** 



## INSTALLATION INSTRUCTIONS

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# 12463-12464 PRO COIL INSTALLATION

2007

## **IMPORTANT NOTE**

# THIS KIT GIVES YOU THE OPTION OF A 2" DROP, <u>SPRING ONLY</u> OR USE OF THE SPACERS TO REDUCE THE DROP TO 1 1/2" OR 1" ONLY

### **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: <u>DO NOT</u> 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 camber cams (part #: 4951) or Belltech 2° upper control arm bushings (part #: 4955)

#### RECOMMENDED TOOLS:

• Blocks and Wheel chocks

Properly rated floor jacks and support stands

Ratcheting Socket Wrench

Combination Wrench

Safety Glasses

• Torque wrench: 0-75 lb ft. range

### 1 KIT INSTALLATION

- **1a.** Open the hardware kit and remove all of the contents. Refer to the parts list (Page 3) 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 sup ports will securely contact the chassis.

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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.

## 2. REMOVING THE O.E.M. FRONT SPRINGS

- 2a. Locate the top three mount bolts of the front spring (Photo 1).
- **2b.** Using an 18mm wrench, remove all three mounting nuts that attaches the top of the spring assembly to the chassis (**Photo 2**).
- **2c.** As you did for the top mounts, remove the two bottom mounting nuts of the shocks/spring assembly. (**Photo 3**).

### 3. END LINK REMOVAL

**3a.** Locate the end link mounts. Using an 18mm wrench, un-bolt the mount nuts to the end links (**Photo 4**). Remove the end links completely.

# 4. REMOVE THE SHOCK/SPRING COMPLETELY

**4a.** Once all mounts have been un-bolted, hold the spindle assembly and slightly pushing down dislodging the bottom shock/spring assembly from its bottom mounts (**Photo 5**), dislodging the entire shock/spring assembly from its perch. (**Photo 6**).

! 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.

## 5. PRE-ASSEMBLY OF THE SPRING

The installation pictures shown have been done at a professional installation shop.

- **5a.** Mount the entire shock/spring assembly in the fixture. To ease the re-assembly of the shock/spring we have marked a white line down the center of the shock/spring assembly for alignment purposes only (**Photo 7**).
- **5b.** Using an 18mm socket wrench, remove the top mount (**Photo 8**).
- **5c.** Remove the top spring perch (**Photo 9**).
- **5f.** Remove the O.E.M. spring from the O.E.M. shock. Place the new spring onto the O.E.M. Shock (**Photo 12**).
- **5g**. Reinstall on the new spring, the O.E.M. top spring perch (**Photo 13**).
- **5h.** Included in this kit are four, (4), spring distance spacers. Using one spacer per side, gives 1/2" in height. Using two spacers gives 1" in height (**Photo 14**).

- **5i.** These spring distance spacers fit only one way. They match the pattern of the O.E.M. top spring perch. (**Photo 15**).
- **5j.** Place the top spring mount back atop in its original position, with the new modified bump stop (**Photo 16**).

### 6. RE-ASSEMBLY OF THE FRONT SHOCK/SPRING

- **6a.** Re-install the new assembly of the shock/spring the same way the O.E.M. shock/spring was removed.
- **6b.** In reverse order, follow Steps 2c thru 2a.
- **6c.** Reattached swaybar end links to 18ft-lbs.

## 7. FINALIZING THE INSTALLATION

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.

- **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.

### PARTS LIST FOR QUAD CAB AND EXT CAB

PART NUMBER	DESCRIPTION	QTY
4463-001	SPRING	2
34855-001	SPACER	4
4926-001	BELLTECH BUMPSTOP	2

### PARTS LIST FOR STD CAB

PART NUMBER	DESCRIPTION	QTY
4462-001	SPRING	2
34855-001	SPACER	4
4926-001	BELLTECH BUMPSTOP	2



PHOTO 1



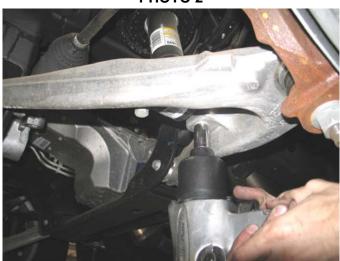
PHOTO 4



PHOTO 2



**PHOTO 5** 



**PHOTO 3** 



**PHOTO 6** 



BEISSBA Marrifin 4

**PHOTO 7** 

**PHOTO 9** 





**PHOTO 8** 

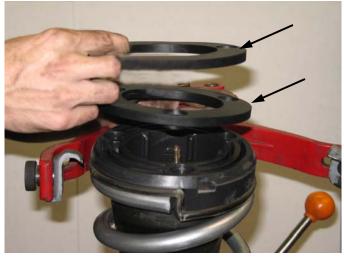
**PHOTO 12** 



**PHOTO 13** 



**PHOTO 15** 



**PHOTO 14** 



**PHOTO 16** 



SHOWN IS KIT 12463/4 TWO(2) SPACERS = 1" IN HEIGHT FOR EACH SIDE