

## INSTALLATION INSTRUCTIONS

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# IMPORTANT NOTE 25001

THIS KIT GIVES YOU THE OPTION OF A 1" TO 3" DROP AS WELL AS A 1" LIFT IN ½" INCREMENTS FOR YOUR 04-UP FORD F150 2WD.

#### **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 your vehicle 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.

#### **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

1

Combination Wrench

•Torque wrench: 0-75 lb ft. range

Open Wrench

#### 1 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. Do not begin work if parts are missing.
- **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. 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 bottom mounting bolt of the spring/strut assembly.



## 3. <u>END LINK &STEERING ARM REMOVAL</u>

3a. Locate the end link mounts. Un-bolt the mounting nuts to the end links. Remove the end links completely.



3b. Locate Steering arm link at spindle. Unbolt the steering arm bolt and disconnect stud from spindle.



## 4. REMOVE THE SPRING/STRUT COMPLETELY

4a. Once all mounts have been un-bolted, hold the spindle assembly and 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.

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



5b. Using an open wrench, remove the top mount.



5d. Install your required spacers for the desired height on the BELLTECH Lifting & Lowering Shock.

			NUMBER OF RINGS TO PUT ON STRUT				
ITEM NO.	PART NO.	ITEM	LOWERING	LOWERING	LOWERING	OEM	LIFTING
		DESCRIPTION	HEIGHT 3"	HEIGHT 2"	HEIGHT 1"	HEIGHT	HEIGHT 1"
			76.2mm	50.8mm	25.4mm	0" 0MM	24.5mm
1	25003-015	16mm (0.63in)	0	1	2	3	3
		Ring					
2	25003-008	8mm (0.315in)	0	0	0	0	2
		Ring					

NOTE: If a half inch increment height, between -3 and +1 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 2.5 inch drop is desired, place one 25003-008 ring on the shock (one more ring than on -3 inch drop).

Caution: The maximum lower range of the Belltech 25001 Shock is 3 inches. Do not lower the vehicle

below 3 inches with the addition of a lowering spring, this may greatly reduce the performance of the shock and may not allow the vehicle to reach alignment specifications.

5e. Assemble the new BELLTECH height adjustable strut using the Belltech Vent Disk, Belltech spring perch, OEM Spring, the Belltech bump stop and the OEM top mount.







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

- 6a. Re-install on the new assembly, 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.



PART NUMBER	DESCRIPTION	QTY
25001-001	Shock	1
25003-016	Spacer	3
25003-008	Spacer	2
4927-001	Bump Stop	1
65210031	Vent Disk	1

# **ALIGNMENT INSTRUCTIONS For 2"-3" Lowering**

#### **IMPORTANT NOTE:**

! This process is not normally needed for the Belltech 2" drop but is recommended for use with the Belltech 3" drop coil springs allowing for additional adjustment to obtain proper alignment.

#### LENGTHENING THE ALIGNMENT SLOT

- 1. Remove the bolts from the lower control arm using a 21mm & 27mm wrench and or socket.
- 2. Pull the lower control arms down and out of the way to allow for a working area within the slotted holes (photo 1).
- **3.** Insert a stock bolt in the slot locations on the lower control arm mount, position the bolt against inner slot side then scribe a line along the bolt flange (Photo 2). It is helpful to outline the profile so it can be easily fallowed while cutting (Photo 3). Perform this marking technique on all eight slots.
- **4.** Using a die grinder and carbide metal cutting bit remove the material outlined as preformed in step 3 (Photo 4). Photo 5 shows proper material removal.
- 5. Once all the holes have been slotted remove any burrs then reattach the lower control arms.









