



## INSTALLATION INSTRUCTIONS

300 W. Pontiac Way Clovis, CA 93612 toll free: 1-800-445-3767 web: www.belltech.com

### 6566 1.5" Rear Lifting Kit 2009-2013 FORD F-150 2WD SHORT BED

Thank you for being selective enough to choose our high quality 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 (page 3) is in the kit. **DO NOT** begin installation if any parts are 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 and six (6) support stands
- Wheel chocks
- Metric socket set up to 27mm
- Metric combination wrench set up to 27mm
- Impact wrench
- Safety Glasses

#### JACKING, SUPPORTING AND PREPARING THE VEHICLE

- a) Block the front wheels of the vehicle with appropriate wheel chocks. Make sure the vehicle's transmission is in "Park" (automatic) or 1<sup>st</sup> gear (manual). Activate the parking brake.
- b) Loosen, but **DO NOT REMOVE**, the rear wheel lug nuts.
- c) Lift the rear of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so that the rear tires are approximately 6-8 inches off the ground surface.
- d) Support the vehicle using four (4) support stands, rated for the vehicle's weight. The stands should be positioned, two on each of the frame rails, just forward of the front leaf spring hangers and just below the rear leaf spring shackle hangers. Prior to lowering the vehicle onto stands, make sure the supports will securely contact the straight, flat portions of the frame rails. It is very important that the vehicle is properly supported during this installation to prevent frame damage and personal injury! Make sure that the support stands are properly placed prior to performing the following procedures.

- e) Lower the vehicle slowly onto the stands and, before placing the vehicle's weight on them, again check that they properly and securely contact the frame rails as described above. Check for possible interference with any lines, wires, or cables.
- f) Remove the rear wheels from the vehicle.

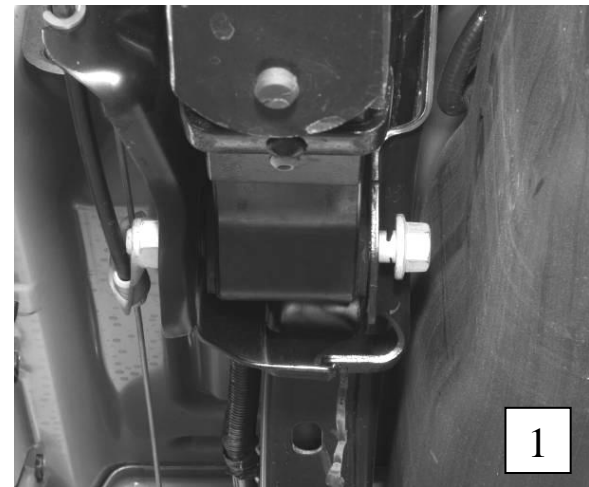
**SAFETY REMINDER:** Check for safe vehicle stability before proceeding under the vehicle to begin the following procedures. Never work under a vehicle supported by only a jack. Always use properly rated support stands to support the vehicle.

**PRE-INSTALLATION / DIS-ASSEMBLY**

**1. LEAF SPRING REMOVAL**

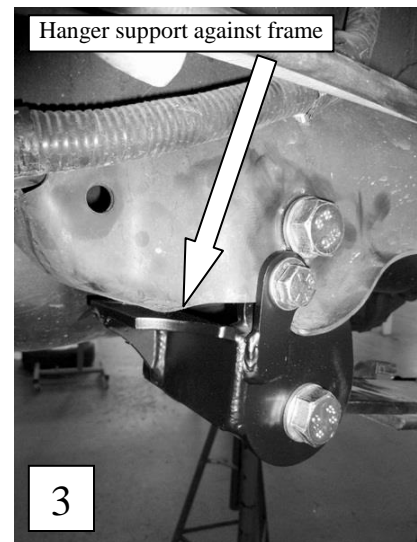
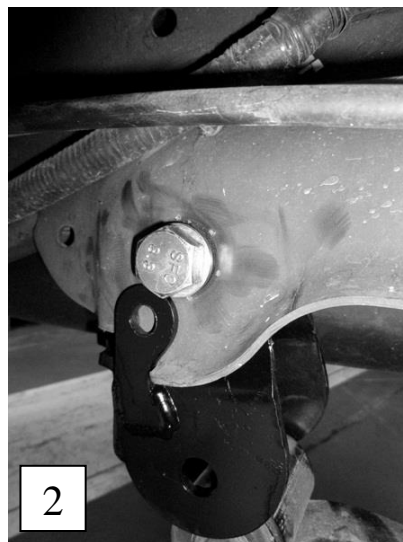
**Warning:** Leaf springs may be under tension. Springs under tension store a great amount of energy. Use caution during the following steps to avoid personal injury and/or damage to vehicle. Be careful not to damage the brake hoses and/or driveline while relocating rear axle assembly.

- 1a) Properly support the axle using a jack or lifting device so that it can be raised and lowered. Also support the rear axle near the rear u-joint to keep the axle from rotating once unbolted.
- 1b) Remove lower mounting bolts of both shocks using an **18mm** and **15mm** socket and or wrench.
- 1c) Remove the passenger side front spring hanger bolt using a **24mm** and **27mm** socket and or wrench.
- 1d) Loosen the front spring hanger nut and bolt with **24mm** and **27mm** tools Back the bolt and nut off sufficiently to expose the bolt shank. Due to the fuel tank location, the driver side front spring hanger bolt needs to be cut off. Cut off the head of the bolt, being careful not to damage the fuel tank (**Photo 1**).
- 1e) Lower axel to drop the front leaf springs out of original mounting location to provide room for hanger installation.



**2. LEAF SPRING HANGER INSTALLATION**

- 2a) Install the hanger into the front leaf spring mount and the supplied mounting bolt, washers, and lock nuts. Do not tighten the bolts yet. (**photo 2**)
- 2b) Push the lower portion of the hanger forward on the vehicle until the support rests **firmly against the frame bracket**. (**photo 3**) During installation on the drivers side, place a barrier between the original frame bracket and the gas tank to prevent damage to the gas tank during drilling.



- 2c) Clamp the hanger into place or have an assistant hold the bracket in place during drilling to ensure the hole location does not move. Drill a  $\frac{1}{2}$ " hole centered in the hole of the locating tab. (**Photo 2**) Drill all the way through both sides of the original bracket.

- 2d) Install the supplied bolts, washers, and lock nuts through though the hole that now goes through the frame. **(Photo 3)** Tighten 1/2" bolt to **40 ft. lbs.** Tighten large mounting bolts to **75 ft. lb.**

### 3. **LEAF INSTALLATION**

- 3a) Raise the axle upward into the vehicle so the springs may seat in new spring hanger.  
 3b) Starting from the passenger side, place the leaf spring in the Belltech front spring hanger and insert the bolt. Once in, rotate the spring back and insert the lower shackle bolt in the rear hanger. Torque the front spring hanger bolt to **95 ft lb**; leave the rear shackle bolt loose it will be tightened after the vehicle has been set down.  
 3c) Repeat this process on the driver side leaf spring. For the driver side front leaf spring bolt, used the supplied 18x2.5x140mm bolt, Nyloc and washers. The bolt will need to be inserted from outside in and torqued to **95 ft lb** with **27mm** tools.  
 3d) Reinstall both rear shocks, torque to **75 ft lb.**

### 4. **FINALIZING THE INSTALLATION**

- 4a) Re-install wheels and torque to the Manufacturer's specifications.  
 4b) Check that all components and fasteners have been properly installed, tightened and torqued.  
 4c) Lift vehicle and remove support stands. Carefully lower vehicle to ground.  
 4d) Check brake hoses, cables and other components for any possible interference.  
 4e) Check for wheel/tire to chassis/body interference.  
 4f) 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 lowered.  
 4g) Take the vehicle to a qualified shop for 4-wheel alignment.  
 4h) Check all of the hardware and re-torque at intervals for the first 10, 100, and 1000 miles.

The front of the vehicle **MUST BE** lowered accordingly for proper handling and performance and also to maintain warranty. See the current *Belltech Application Guide* or contact you nearest *Belltech Dealer* for the appropriate part numbers for your application.

#### Parts List: 6566 Lifting Hanger Kit

Part #	Description	Quantity
644-030-99	Lifting Leaf Spring Hanger LH	1
644-040-99	Lifting Leaf Spring Hanger RH	1
110264	HH Cap Screw M18-2.5 x 140mm	3
110265	Nylon Lock Nut M18-2.5	3
110403	1/2"-20 Nyloc Lock Nut	2
110430	1/2"-20 x 5" Hex Bolt	2
110502	5/8" Washer	6