



## INSTALLATION INSTRUCTIONS

23323

### "PRO" COIL KITS

**Congratulations! You were selective enough to choose a BELLTECH PRODUCT.**

**! PLEASE NOTE:** This kit is **NOT** designed to be installed on vehicles equipped with the optional "Auto ride" (Z55) shock-dampening and ride-height control systems.

**! PLEASE NOTE:** Vehicles equipped with height controlled shocks (Sachs Nivomats) may have to purchase shock extension kit **#6651** to achieve the desired drop.

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: 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: *0-75 lb ft. range*
- Ratcheting socket wrench and sockets sets
- Safety Glasses
- Spray lubricant

**SAFETY REMINDER: PROPER USE OF SAFETY EQUIPMENT AND EYE/FACE/HAND PROTECTION IS ABSOLUTELY NECESSARY WHEN USING THESE TOOLS TO PERFORM PROCEDURES!**

#### **KIT INSTALLATION**

As this is a relatively involved installation, we recommend that a qualified mechanic at a properly equipped facility perform it. We also recommend that the installation be performed on a firm, flat and level surface, such as seasoned asphalt or concrete. The use of safe and properly maintained equipment is very important! In order to document any possible irregularities in the factory ride height of your vehicle, please take a few moments to measure and record the vehicles ride height. We also recommend measuring and recording all stock driveline angles prior to installing this kit. This information may be helpful if vibration problems arise after installation.

## 1. JACKING, SUPPORTING AND PREPARING THE VEHICLE

- a) Block the front wheels of the vehicle with appropriate wheel chocks.
- b) Loosen, but **DO NOT** remove, the rear wheel lug nuts.
- c) Using a properly rated floor jack, lift the rear of the vehicle off the ground. Lift the vehicle so that the rear tires are approximately 6-8 inches off the ground surface.
- d) Support the rear of the vehicle using two (2) support stands, rated for the vehicle's weight. Locate two (2) support stands on the horizontal portions of the frame rails just forward of the rear lower trailing arm pivot locations. 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) Slowly lower the vehicle 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. Proper use of safety equipment and eye/face/hand protection is absolutely necessary when performing the following procedures!

**! WARNING: WHEN REAR AXLE IS LOWERED, SOME ABS WIRES, BRAKE LINES, AND DIFFERENTIAL BREATHER HOSES WILL BE STRETCHED. BE CAREFULL NOT TO STRETCH THEM TOO FAR. THIS MAY CAUSE BRAKE FAILURE AND/OR ABS WIRE SEPERATION. INSTALLING ONE SIDE AT A TIME WILL LIMIT THE NEED TO LOWER THE REAR END AS MUCH.**

## 2. REAR COIL SPRING REMOVAL AND RE-INSTALLATION

- a) Support the rear axle with support stands, one located on each end. Be careful not to lift the vehicle off of support stands.
- b) Locate and remove from the frame, on both sides, the ABS sensor wire clip. (photo 1)
- c) Remove bolt that attaches brake line to the differential. This will allow the lines to be move during the spring installation. (photo 2)
- d) Detach the end-links from the rear stabilizer bar (Photo 3).
- e) Loosen and remove the lower shock absorber attachment nuts and bolts using 21mm socket and wrench (Photo 4). Retain factory hardware for reuse.
- f) Using the support stands or floor jack, lower rear axle housing to remove pre-load from the coil springs until they are completely unloaded. Be careful not to stretch lines or wires.

**! 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 and/or driveline while lifting/supporting rear axle assembly.**

- g) Carefully remove the OEM coil springs from their mounting locations (Photo 5). Retain the upper and lower spring insulators for later reuse.
- h) Position the Belltech lowering coil springs in place of the OEM components (Photo 6). Be sure to install and locate the upper and lower insulators as removed above. **If you are using the one inch spacer to reduce the amount of lowering, install them at this time to the bottom of the spring, on the axle spring mounting point.**
- i) Remove the factory jounce-stops from the frame mounts by twisting and pulling down and away from frame rail.
- j) Install the replacement bump stops into the original locations.
- k) Raise the rear axle. Be sure that the coil springs properly engage their mountings.

### 3. FINALIZING THE SHOCK INSTALLATION

- a) Insert bolts through axle mounts and lower shock absorber ends. Secure with bolts and nuts. Tighten and torque nuts to 70 lb-ft.
- b) Re-attach the OEM end-links to the rear stabilizer bar.
- c) Re-attach brake line bolt, ABS sensor clip.

### 4. FINALIZING THE INSTALLATION

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

