



INSTALLATION INSTRUCTIONS

3920, 3921, 3922, 3933

Torsion Key

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: **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.

1. Jacking and supporting vehicle

- a) Open the hardware kit and remove contents. Refer to the part list to verify parts are present.
- b) 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).
- c) 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.
- d) 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. Check for possible interference with any lines, wires, cables, or other easily damaged components.

! 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.

2. Front Torsion Bar Adjustment Arm ("torsion key") Replacement

! Torsion Bars are springs and 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. Use the proper tools to unload/load torsion bars while performing this installation.

- a) Measure and record the factory adjustment bolt settings. This information will be helpful if the vehicle is ever returned back to stock ride height.

- b) Install Torsion Bar Unloading/Loading Tool (GM #J36202 or equivalent), (Photo #1) as described in the factory service manual, to the adjustment arm and cross member.
- c) Increase the tension on the adjustment arm until the load is removed from the adjustment bolt and the adjuster nut.
- d) Remove the adjustment bolt and the adjuster nut (Photo 2).
- e) Remove the unloading tool, allowing the torsion bar to unload.
- f) Remove the adjustment arm by sliding the torsion bar forward until the torsion bar clears the adjustment arm. (Photo #3) **DO NOT** remove the torsion bar completely from the lower control arm. Use your hand to support the adjustment arm as the adjustment arm releases from the torsion bar.
- g) Replace the OEM adjustment arm with the Belltech lowering adjustment arm included with this kit. The part is an exact replacement for the OEM component. Be sure to orient the replacement adjustment arm as shown (Photo 4).
- h) While supporting the adjustment arm, slide the torsion bar rearward until the torsion bar fully engages the adjustment arm.
- i) Install the unloading tool to the adjustment arm and the cross member.
- j) Increase the tension on the adjustment arm in order to load the torsion bar.
- k) Install the adjustment bolt and the adjuster nut.
- l) Remove the unloading tool, releasing the tension on the torsion bar until the adjustment bolt takes up the load.
- m) Repeat the steps above to replace other torsion bar adjustment arm.

3. Finishing Installation

- a) 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.
- 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) Once vehicle is on ground check the height of the front, side to side. Use the adjusting bolts to level vehicle, if necessary.
- e) 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.
- f) Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

