INSTALLATION INSTRUCTIONS

140 – 141

COMPLETE LOWERING KIT

2002-UP CHEVROLET TRAILBLAZER & GMC ENVOY

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.

Please note that this Belltech lowering kit will lower these vehicles approximately 2 inches in front and 3 inches in the rear. We **DO NOT RECOMMEND** this kit on vehicles that have been lowered with other aftermarket suspension components. **This kit is designed to work with only Belltech products**.

In order to further improve handling performance, **we recommend** that you install Belltech rear (5530) Anti-Sway Bars when installing this kit.

NOTE: Confirm that all of the hardware listed in the parts list is in the kit. **Do not** begin the installation if any of the parts are missing. Contact us immediately if you believe anything is missing. Read the instructions thoroughly before beginning the installation. It is absolutely imperative that you follow these directions in their exact order.

Warning: **DO NOT** work under a vehicle supported by only the jack. Place support stands securely under the vehicle in the manufactures specified locations unless other wise instructed.

Warning: **DO NOT** drive the vehicle until all the work has been checked. Torque all hardware to factory specifications.

RECOMMENDED TOOLS:

- Properly rated floor jack and six (6) support stands
- Wheel chocks
- Metric socket wrench set
- Metric box wrench set
- ½" drive torque wrench (lb-ft)
- 3/8" drive torque wrench (lb-in)
- Safety Glasses
- Saw or cutting device

! **NOTE**: It is very helpful to have an assistant during installation

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 fill out the **Belltech Vehicle Inspection Record** included with these instructions. **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. Make sure the vehicle's transmission is in "Park" (automatic) or 1st gear (manual-if offered). Activate the parking brake.

b) Loosen, but **DO NOT REMOVE**, rear wheel lug nuts.

c) Using a properly rated floor jack, lift the front of the vehicle off the ground. Lift the vehicle so that the front tires are approximately 6-8 inches off the ground surface.

d) Support the front of the vehicle using two (2) support stands, rated for the vehicle's weight. The stands should be positioned, one on each of the frame rail, just rearward of the front wheel openings. Prior to lowering the vehicle onto stands, make sure the supports will securely contact the straight, flat portions of the frame rails.

e) Support the front 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.

! 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.

f) 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.

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.

2. FRONT SPRING INSTALLATION

a) Remove front wheels.

b) Start by loosening, then removing the three (3) retaining nuts on the top of strut. Remove the bolt that holds the bottom of strut. In order to ease the installation, remove the end link bolts on the Sway Bar. The strut should now be free, raise the spindle and control arms by pushing up on the spindle. The strut will come out without removing any other pieces. Next you will need a spring compressor, compress the spring to release all pressure on the upper spring seat. Then remove nut on the top of the strut.

c) Decompress the spring, remove old spring and replace it with the Belltech drop spring. Reverse #6 to reassemble. If installing shocks, now is a good time, the new one will bolt up in same location. Tighten and torque shock bolts to 20-25ft./lbs. Tighten large strut bolt to 50ft.-lbs. Re-attach the end links to the Sway Bar, tighten and torque to about 20ft./lbs.

d) Re-install the front wheels, lift vehicle off the stands, remove and then lower vehicle to the ground.

3. REAR BUMP STOP INSTALLATION

NOTE: Repeat STEP 1, JACKING AND SUPPORTING THE VEHICLE

ADDENDUM:

Using a saw or cutting device, cut(modify) the factory Bump Stops. Recommended overall length should be at 2.5”(inches)

NOTE: It may be necessary to use a screwdriver to pry the jounce-stop out

a) Install the Belltech jounce-stop that is supplied with the kit. Repeat the procedure for the other side of the vehicle.

a. Support the rear axle with the support stands, one located on each end. Be careful not to lift the vehicle off of the support stands

b. Detach the end-links from the rear stabilizer bar.

! 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 the vehicle. Be careful not to damage the brake hoses and /or driveline while lifting/supporting the rear axle assembly.

b) Loosen and remove the upper and lower shock absorber attachment nuts and bolts using a 21mm socket and wrench. Lower the rear axle (if necessary) and remove the shock absorbers from the rear axle. Retain the factory hardware for reuse later.

c) Using the support stands or floor jack, lower the rear axle housing to remove the weight from the coil springs until they are completely unloaded.

d) Carefully remove the OEM coil springs from their mounting locations. Retain the upper and lower spring insulators for later reuse.

e) Re-install the factory or replacement (recommended) Belltech Nitro-Active® or Nitro-Drop® rear shock absorbers, using the original hardware, into the upper mounts. Tighten and torque nuts to 70 lb ft.

f) Position the Belltech lowering coil springs in place of the OEM components. Be sure to install and locate the upper and lower insulators as removed above.

g) Raise the rear axle. Be sure that the coil springs properly engage their mountings.

h) With the axle housing properly supported, install the shock absorbers in the lower axle mounts.

4. REAR SHOCK ABSORBER INSTALLATION

a) Loosen and remove the upper and lower shock absorber attachment nuts and bolts using 21mm socket and wrench. Lower the rear axle (if necessary) and remove the shock absorbers from the rear axle. Retain the factory hardware for reuse.

b) Install the upper-shock mounting bolts and hardware supplied with the kit.

c) Install the kit-supplied Nitro-Drop® rear shock absorbers, using the supplied hardware, into the upper mounts.

d) With the axle housing properly supported, install the shock absorbers with spacers into the lower axle mounts. (Photo #3)

e) Secure with bolts and nuts. Tighten and torque nuts to 70 lb-ft.

5. FINALIZING THE REAR SUSPENSION INSTALLATION

f) Re-install the rear wheels and torque to the manufacturer's specifications

g) Check that all components and fasteners have been properly installed, tightened and torqued.

h) Lift the vehicle and remove the support stands.

6. FINALIZING THE INSTALLATION

i) Check the brake hoses, cables and other components for any possible interference.

j) Check for wheel/tire to chassis/body interference.

k) 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 may handle substantially different.

l) Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

m)

PARTS LIST FOR 140-141 KIT

Part #	Description	Quantity
4925-001	Foam Bump Stop	2
4925-888	Installation Instructions	1
8532/2210DD	Nitro Drop II / Street Performance	2
140-001	Coil Spring Front 2" Drop	2
140-002	Coil Spring Rear 3" Drop	2
112431	Rear Shock Spacer	4