



## INSTALLATION INSTRUCTIONS

150210  
6" LIFT KIT

300 W. Pontiac Way Clovis, CA 93612 toll free: 1

### 19 + GM 1500 2WD/4WD

#### **Excluding: AT4/ Trail Boss Models & CLASSIC body style**

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 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 specified values.

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.

Note: Please refer to component and hardware list before beginning installation to insure all necessary pieces have been supplied and packaged.

#### **Exceptional Customer Experience Guarantee:**

**STOP!** We strive for an exceptional experience for all of our valued customers. If, for any reason, you need assistance with your Belltech products, please do not return the products to the store or website you purchased from. Please call our dedicated experts at (1-800-445-3767) from 7am to 5pm PST.

#### **RECOMMENDED TOOLS:**

- Properly rated floor jack and support stands
- Wheel chocks
- Torque wrench up to 200 ft/lbs range
- Standard and Metric socket wrench set
- Standard and Metric wrench set
- Tape measure
- Dead blow hammer
- Marking pen
- Safety Glasses
- Reciprocating Saw with Metal cutting blades

<b>QTY</b>	<b>PART #</b>	<b>DESCRIPTION</b>
<b>1</b>	<b>5426-300</b>	<b>Front Sway Bar Kit</b>

<b>1</b>	<b>150210-101-99</b>	<b>Front Crossmember</b>
<b>1</b>	<b>150210-102-99</b>	<b>Rear Crossmember</b>
<b>1</b>	<b>150210A-777</b>	<b>Crossmember Hardware Kit</b>
4	110218	M16X2.0 - 120 Bolt
8	110219	M16 Washer
4	110242	M16x2.0 Nylock Nut

<b>1</b>	<b>150210-103R</b>	<b>Right Lift Spindle</b>
<b>1</b>	<b>150210-103L</b>	<b>Left Lift Spindle</b>

<b>1</b>	<b>150210-104-99</b>	<b>Differential Drop down</b>
<b>1</b>	<b>150210B-777</b>	<b>Diff Drop Down Hardware Kit</b>
2	110220	M14 x 2.0 - 100 Bolt
1	110221	M14 x 2.0 - 120 Bolt
2	110222	M14 x 2.0 Nylock Nut
4	110223	M14 Washer
1	110224	M14 Washer (50mm OD)

<b>2</b>	<b>28019</b>	<b>Lifting Strut</b>
<b>1</b>	<b>150210E-777</b>	<b>Strut Hardware Kit</b>
4	110237	M10 x 1.5 - 70mm Bolt
4	110238	M10 x 1.5 Nylock Nut
8	110239	M10 Washer

<b>2</b>	<b>150201-106</b>	<b>Compression Arms</b>
<b>1</b>	<b>150210-107RD-99</b>	<b>Driver Side Bracket</b>
<b>1</b>	<b>150210-107RD-99</b>	<b>Passenger Side Bracket</b>
<b>1</b>	<b>150201-100-HW</b>	<b>Compression Arm Bushing Kit</b>
<b>1</b>	<b>150210C-777</b>	<b>Compression Arm Hardware Kit</b>
4	110227	M12 x 1.75 - 110mm Bolt
8	110228	M12 Washer
4	110243	M12 x 1.75 Nylock Nut

<b>1</b>	<b>150210-108-99</b>	<b>Skid Plate</b>
<b>1</b>	<b>150210F-777</b>	<b>Skid Plate Hardware Kit</b>
1	110226	M12 x 1.75 x 100mm Bolt
1	110225	M12 x 1.75 x 30mm Bolt
1	110243	M12 x 1.75 Nylock Nut
3	110228	M12 Washer

<b>2</b>	<b>150210-110</b>	<b>Tie Rod</b>
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<b>2</b>	<b>150210-201-99</b>	<b>Lift block</b>
<b>4</b>	<b>6593-007</b>	<b>U-bolts</b>
<b>2</b>	<b>150210-203</b>	<b>Bump Stock Extender</b>
<b>1</b>	<b>150210D-777</b>	<b>Lifting Block Hardware Kit</b>
8	110240	9/16" Nylock Nut
8	110241	9/16" Washer
2	110287	M10 X1.5 - 130mm

<b>2</b>	<b>2220FF</b>	<b>SP Shocks</b>
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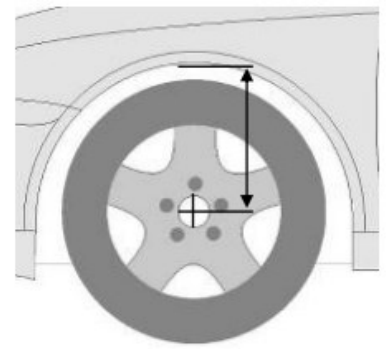
<b>2</b>	<b>150210-110-99</b>	<b>Front Brake Line Relocation Brackets</b>
<b>1</b>	<b>150210-211-99</b>	<b>Rear Diff Brake Line Bracket</b>
<b>1</b>	<b>150210-212-99</b>	<b>Rear E-Brake Bracket</b>
<b>1</b>	<b>150210G-777</b>	<b>Rear Brake Line M8 Hardware</b>
2	110232	M8 x 1.0 - 15mm Bolt
2	110233	M8 x 1.0 Nylock Nut
4	110245	M8 Washer
<b>1</b>	<b>150210H-777</b>	<b>Front/Rear M6 Brake Line Hardware</b>
4	110234	M6 x 1.0 - 16mm Bolt
4	110235	M6 x 1.0 Nylock Nut
8	110117	M6 Washer



## 1) KIT PREPERATION

- a) Before beginning the install process, measure the hub to fender heights for your vehicle so you can compare the resulting height to the original. Measure vertically from the center of the wheel to the inner edge of the fender. Record the results here:

LF: \_\_\_\_\_ RF: \_\_\_\_\_ LR: \_\_\_\_\_ RR: \_\_\_\_\_



- 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).

! 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. !



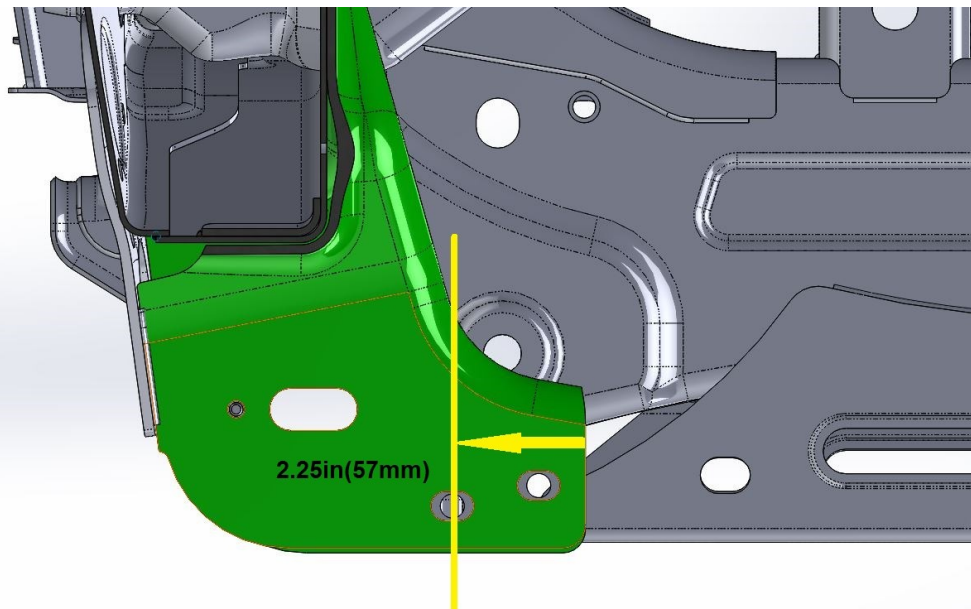
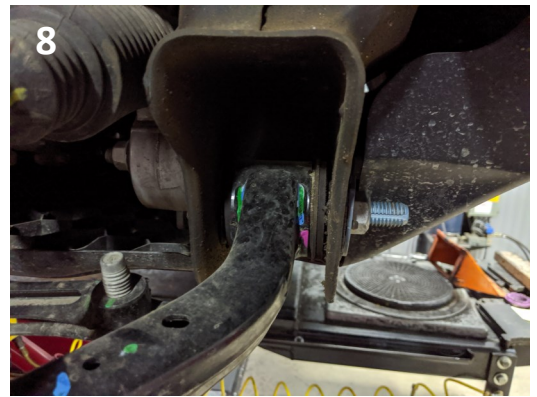
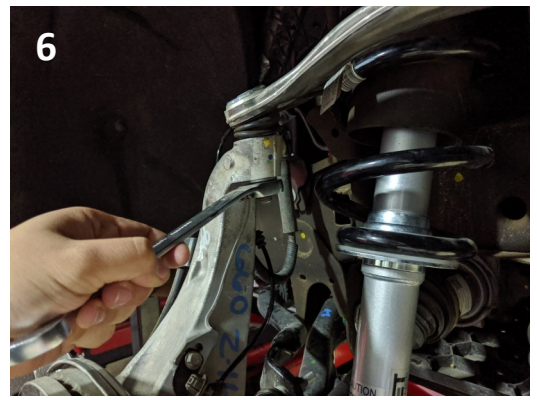
## 2) FRONT INSTALL INSTRUCTIONS

- a) Jack up the front of the vehicle. Place jack stands under the frame rails and lower onto jack stands letting the front suspension hang.
- b) Using a 13mm socket, remove the factory plastic front skid plate. **(PHOTO 1)**
- c) Use a 22mm socket to undo the lug nuts and remove the wheels.
- d) Remove the sway bar from the vehicle completely by disconnecting it from the end link using an 18mm wrench, and removing the brackets using a 10mm socket. **(PHOTO 2)**
- e) Using a 21mm wrench, remove the tie-rod nut. Strike the side of the mount with a dead blow hammer to dislodge the tie rod end. A 10mm wrench may be needed if the ball joint is spinning. **(PHOTO 3)**
- f) Using a 10mm wrench, remove all mounting points for the brake line and abs sensor wire from the control arm and spindle. Undo the Brake Caliper mounting bolts located at the back of the assembly with an 18mm socket and remove them, hang the calipers to prevent stretching of the lines using large zip ties or hangers. Remove the rotors by removing the T30 Torx screw and put it to the side. **(PHOTO 4)**
- g) Remove and unplug the ABS sensor wire from the Spindle. Use a 10mm socket for the ABS Sensor.
- h) Remove the axle nut using a 36mm Socket. This will help prevent the axle from pulling out of the differential and causing damage. **(PHOTO 5)**



## 2) FRONT INSTALL INSTRUCTIONS CONTINUED

- i. Support the spindle by gently lifting against it with a jack. This is to prevent the spindle assembly from falling during the next two steps
- j. Remove the upper ball joint nut using an 18mm wrench. Strike the spindle on the designated Bosses to help separate the upper control arm from the spindle. Be careful, the upper control arm could be under tension. Allow the spindle to droop as you slide the axle shaft out of the hub. **(PHOTO 6)**
- k. Remove the lower ball joint nut using a 24mm wrench and strike it on the designated areas to separate from the lower control arm. Be sure to hold the spindle as it breaks free to prevent damage. **(PHOTO 7)**
- l. Uninstall the strut. The top nuts can be removed with an 18mm wrench. Remove the hardware holding the bottom of the strut to the control arm using a 15mm wrench and socket and remove the strut from the vehicle. **(PHOTO 8)**
- m. Remove the Lower control arms from the frame using a 27mm Socket and wrench. **(PHOTO 9)**
- n. Install the rear crossmember using the supplied M16 bolts, washers and nylock Nuts within the 150201A-777 hardware kit. Torque to 180 ft-lbs. **(PHOTO 10)**
- o. Remove the OEM crossmember underneath the front differential to create clearance for the differential to drop down. All mounting points of the differential can be undone using a 21mm wrench and socket. Use a reciprocating saw to cut the driver side mount as shown in to allow for the differential to clear. **(FIGURE: 1)**

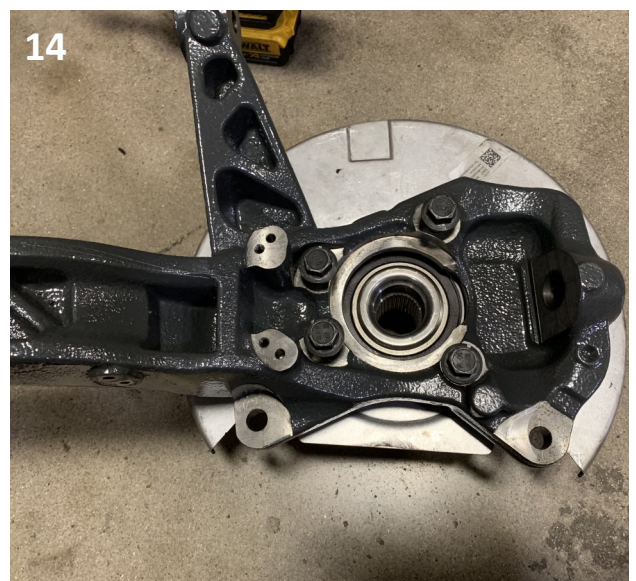
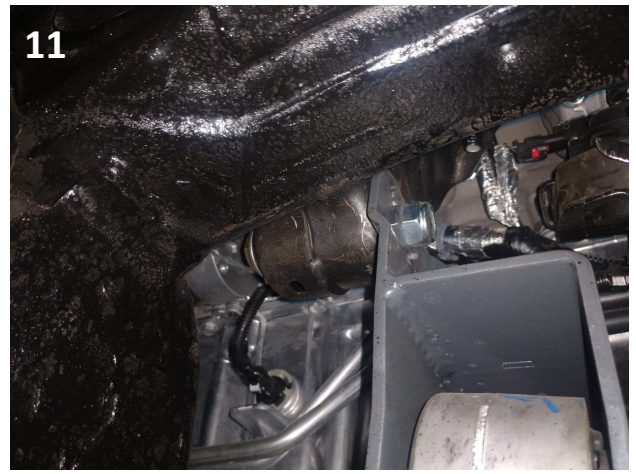


**FIGURE: 1**



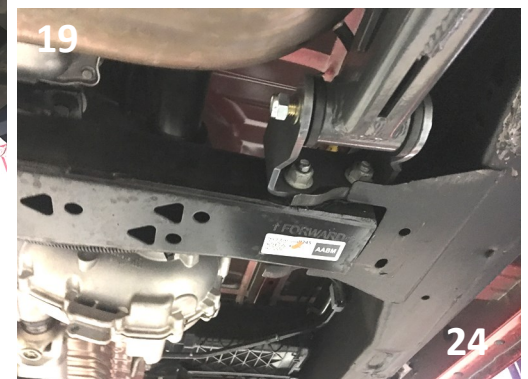
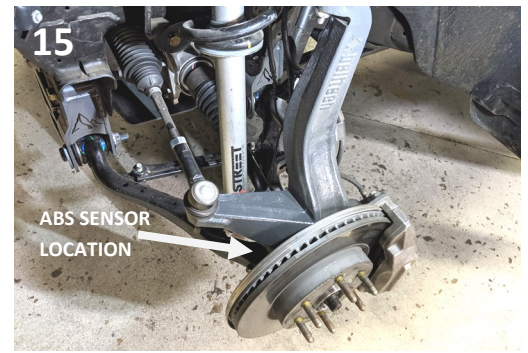
### 3) FRONT INSTALL CONTINUED

- o. Place a jack underneath the front differential and remove the hardware mounting the differential to the frame. Lower until it is almost in contact with the rear crossmember
- p. Install the differential bracket against the OEM frame mount using the supplied M14x2—120mm bolt and large washer within the 150210B-77 hardware kit. Use a jack, lift the differential into the the drop down and secure with the remaining M14 hardware. Using the OEM bolt align the differential and the tabs of the rear crossmember. Tighten all bolts and torque to to 120 ft-lbs. **(PHOTO 11)**
- q. Install the front crossmember using the remaining M16 hardware from 150210A-777 kit. Torque to 180 ft-lb. Reinstall the lower control arms into the slots in the new crossmembers using the factory hardware. **(PHOTO 12)**
- r. Please refer to the provided strut instructions found within the lifting strut packaging, for tips and vehicle ride height set up. After assembly, install the lifting strut, utilizing the factory top mount and the supplied M10 hardware found in 150210E-777 kit. Torque top and bottom to 55 ft-lbs. **(PHOTO 13)**
- s. Remove the hub and brake backing plate from the factory spindle using an 18mm socket. Install on the Lift Spindle. **(PHOTO 14)**
- t. Install the assembled lift spindle in the reverse order of the deinstallation, making sure the axle shaft does not pull out of its mounting point on the differential. Tighten the axle nut to 180ft-lbs.
- u. Torque the upper and lower ball joints to 85 ft-lbs.



## 2) FRONT INSTALL INSTRUCTIONS CONTINUED

- w. Reconnect the ABS harness, sensor, and brake calipers using the OEM hardware. **(PHOTO 15)**
- x. Reinstall the outer tie rod to the spindle using the factory hardware. Torque to 65 ft-lbs. **(PHOTO 15)**
- y. Install new sway bar with new bushings, and brackets as shown. The Belltech front sway bar offers 3 levels of adjustment for the consumer. . **(PHOTO 16)**
- z. Reconnect the sway bar end links back to the lower control arm and sway bar using factory hardware. We recommend starting with the center hole location. The hole closest to the end will be the lightest spring rate, while the inner most hole will be the stiffest Torque to 35 ft-lbs. **(PHOTO 17)**
- aa. Install the skid plate using the supplied hardware in kit **150210F-777** and torque to 50 ft-lbs on the front differential, 30 ft-lbs on the rear differential. **(PHOTO 18)**
- bb. Using a 21mm socket remove the two nuts holding the crossmember located towards the center of the vehicle and install the rear compression arm bracket. The crossmember does not get removed so removing the bolts is not necessary. Factory hardware is retained. **(PHOTO 19)**
- cc. Assemble the Compression arms by pushing the bushings and tubes found in hardware kit 150201-100-HW.. Once assembled mount the compression arms into the brackets and use the hardware supplied in the 150210D-777 hardware pack mount them. Torque to 60 ft-lbs. **(PHOTO 20)**
- dd. Mount the brake line to the upper control arms as shown using the front brake line relocation bracket and the M6 hardware found in 150210H-777. **(PHOTO 21)**
- ee. Lower the front of the vehicle to the ground . The front installation is complete. Check that all hardware is torqued and installed properly.



### 3) Rear Lift Installation

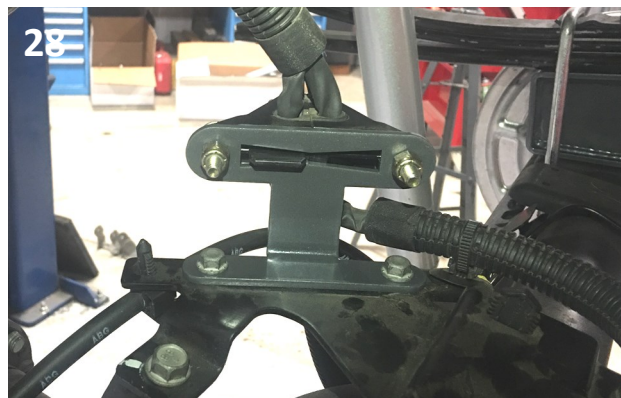
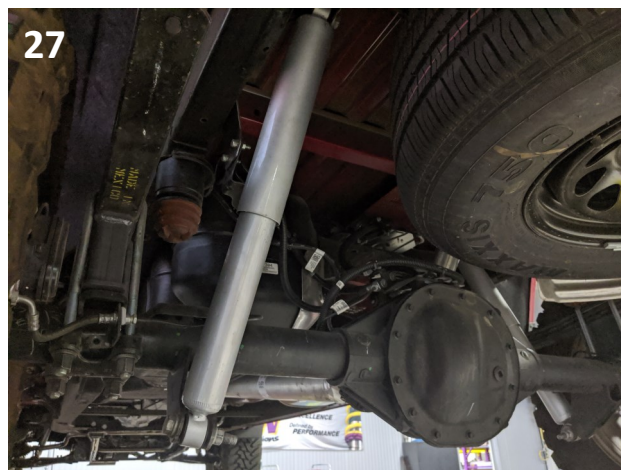
- a) Chock the front wheels to prevent the vehicle from moving while the rear end is lifted
- b) Jack up the rear of the vehicle from the differential.
- c) Place jack stands under the frame rails and lower the vehicle onto the jack stands carefully.
- d) Remove the wheels.
- e) Remove the bolts holding the rear brake line bracket located on the inside of the frame using a 13mm socket. Keep the hardware as it will be reused. It is helpful to locate the brake line holders and to undo them to create slack. This prevents overstretching of any lines during the installation. **(PHOTO 22)**
- f) Remove the bolts holding the rear brake line bracket located on top of the rear differential using a 10mm socket. Keep the hardware as it will be reused **(PHOTO 23)**
- g) Remove the factory shock absorbers using a 21mm wrench & socket. The factory hardware will be reused.
- h) Remove the factory u-bolts by evenly undoing the nuts using a 21mm socket, then remove the factory blocks. Slowly lower the axle to allow for the new 3" block to be installed. **(PHOTO 24)**
- i) Install the block on the factory spring pad with the flat part of the block on the spring and the tapered end towards the front. Jack up the axle to meet the springs, making sure to align the center pin. **(PHOTO 25)**
- j) With the floor jack applying slight pressure to the rear axle to keep the pin aligned, install the new supplied u-bolts and tighten in a crossing pattern, using the **150210D-777** hardware packet.





### 3) Rear Lift Installation Continued

- k) Uninstall the Bump stops using a 10mm socket, and reattach them with the supplied bump stop extenders and allen head bolt found in pscket 150210D-777. **(PHOTO 26)**
- l) Install the new shock absorbers in the factory mounting locations using the factory hardware. Tighten using a 21mm wrench & socket. **(PHOTO 27)**
- m) Install the extended brake line located on top of the differential using the factory hardware to mount it to the differential and the supplied bolts and nuts within 150210H-777 to mount the brake lines to the bracket. **(PHOTO 28)**
- n) Install the Extended brake line bracket located on the rear of the frame as shown. Use the factory hardware to mount the bracket and the supplied hardware within 150210G-777 to mount the OEM bracket to the drop down. **(PHOTO 29)**
- o) Reattach the brake lines and harness wherever it was undone from its factory locations to create slack. Ensure that once reinstalled, none of the brake lines are being stretched before continuing.
- p) Install the tires/wheels.
- q) Jack up the vehicle to remove the jack stands. Remove the jack stands and lower the vehicle to the ground.
- r) The rear installation is now complete.



#### 4) **Post Install**

- a) Check that all components and fasteners have been properly installed, tightened and torqued.
- b) Check brake hoses, and other components for any possible interference.
- c) Reinstall both front wheels and torque lug nuts to OEM ( factory) specifications.
- d) Lift the vehicle and remove stands. Carefully lower the vehicle to the ground.
- e) Test drive the vehicle in a remote location so that you can become accustomed to the altered driving characteristics and handling. Be aware that the vehicle will handle substantially different now that it has been modified.
- f) We recommend the vehicle be taken to a qualified wheel alignment facility to be realigned to factory specifications after completing the install.
- g) Installation is complete. Check ALL of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.