



INSTALLATION GUIDE

PART NUMBER: 150210

LIFT KIT

GM 1500 TRUCK 2WD / 4WD | 2019+

6" TO 8" LIFTED RIDE HEIGHT

300 W. PONTIAC WAY. CLOVIS, CA 93612
PHONE: 800-445-3767 | EMAIL: [INFO@BELLTECH.COM](mailto:info@belltech.com)

THANK YOU

Thank you for choosing our high quality Belltech product. We have spent a great deal of time developing our line of products so that you will receive maximum performance with minimal difficulty during installation. Soon your vehicle will be on the road looking and feeling much improved.

Please take a moment to read all instructions and warnings prior to installation of your new Belltech product and before operating your vehicle. If you have any questions or concerns regarding any step in the installation process, please do not hesitate to call or email our customer support specialists who are trained to help you through any portion of this process.

Before You Begin:

It is of the utmost importance that you confirm all of the components listed on the parts list is in the kit. You can find this list located on the last page(s) of your instructions. Do not begin installation if any part is missing. Instead, please call our Belltech customer service specialists.

Belltech Customer Support:

Phone: 1-800-445-3767

Email: info@belltech.com

Safety Information:

Warning: Do not work under a vehicle supported only by a jack. Place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

Proper use of safety equipment and eye/face/hand protection is absolutely necessary when performing any of the following instructions.

We strive for an exceptional experience for all our valued customers. If for any reason you need assistance with your Belltech products, please do not return the product to the store you purchased from, but rather call our dedicated customer service experts, from 7am to 5pm PST.

We recommend that a qualified mechanic, at a properly equipped facility, perform this installation.

It is very helpful to have an assistant available during installation.

Before Driving Your Vehicle:

It is important to double check all brake hoses, cables, and other components to be sure there is no interference. You must also check for wheel/tire to chassis/body interference. If any issues are found, review your installation instructions to be sure no steps were missed and any problems are corrected.

Make sure your vehicle is aligned immediately following installation.

Check all hardware and torque at intervals for the first 10, 100, and 1000 miles.

Some of Belltech's products are designed to improve your vehicle's off-road performance. Leveling/lifting your vehicle may result in an altered center of gravity. It is crucial to use extreme care when operating your vehicle to prevent rollover and/or loss of control.

Any changes in your vehicle's suspension may result in transformed handleability. Please test-drive your vehicle in a remote location so you can become accustomed to the revised driving characteristics.

Perform headlight check and adjustment.

Failure to drive any modified vehicle in a safe manner may result in harm or death.

Never operate your modified vehicle under the influence of drugs, alcohol, or lack of adequate sleep.

Always wear your seatbelt.



DIFFICULTY:



INSTALLATION TIME:

6-8 Hours +
Alignment

RECOMMENDED TOOLS:

- Properly rated floor jack
- Support stands
- Wheel chocks
- 1/2" or 3/8" drive wrench
- Metric socket wrench set
- Metric wrench set
- Tape measure
- Marking Pen
- Torque wrench up to 200 ft lbs

SPECIALTY TOOLS:

- Reciprocating saw with metal cutting blades
- Dead blow hammer



FITMENT GUIDE

35 x 12.50 with 17 x 9 and 4.5" backspacing

35 x 12.50 with 20 x 9 and 6.25" backspacing

37 x 12.50 with 20 x 9 and 6.25" backspacing

FITMENT NOTE:

Does NOT fit Models with ARC, Magnetic Ride Shocks, Autoride, or AT4.

Will NOT add the stated additional lift to Chevy Trail Boss / GMC Elevation Models with the 2" Factory Lift.

DO NOT drive your 4WD vehicle over 50 mph / 80 km/h while in 4H Auto/ 4H.

INSTALLATION PREPARATION:

Before beginning the installation process, measure the hub to fender heights for your vehicle and record them in the "Before" section. After your vehicle has been modified, record the new measurements in the, "After" section. This way, you can compare the resulting height to the original. When taking the measurements, measure vertically from the center of the wheel to the inner edge of the fender.

Before:

LF: _____

RF: _____

LR: _____

RR: _____



After:

LF: _____

RF: _____

LR: _____

RR: _____

JACKING, SUPPORTING, AND PREPARING THE VEHICLE

1. Park your vehicle on a smooth, level, concrete or seasoned asphalt surface.
2. Block the rear wheels of the vehicle using wheel chocks. Make sure the vehicle's transmission is in "PARK" (automatic) or 1st gear (manual).
3. Activate the parking brake.
4. Break loose, but do not spin the wheel lug nuts to ease in removal when the wheels are in the air.
5. Lift the front of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so the front tires are approximately 6-8 inches off the ground.
6. Place support stands rated for the vehicles weight. The stands should be positioned in the factory specified locations. (Refer to the owner's manual). Prior to lowering the vehicle onto stands, make sure the support stands will contact the chassis. It is very important that the vehicle is properly supported to prevent any harm to oneself or to the vehicle.
7. Lower the vehicle slowly onto the support stands.
8. Remove the front wheels.



Technician Reminder:

Never work under a vehicle supported only by a jack. It is necessary to place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

FRONT SUSPENSION REMOVAL

9. Detach the underbody splash shield and skid plate using a 13mm wrench.



10. Place a jack underneath the lower control arm to support the assembly and loosen the top and bottom control arm bolts to allow the control arms to move easier.



Technician note:

Mark the settings on the eccentric washers to retain approximate factory alignment during reassembly.

11. Use an 18mm and 9mm wrench to disconnect the sway bar from the end links. Remove the sway bar bushing brackets with a 10mm socket.

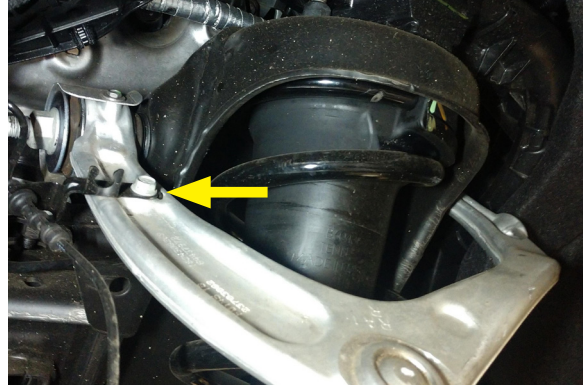


12. Remove the 21 mm tie-rod end nut. If the ball joint stud spins while removing the nut, use a 10 mm wrench to hold the stud in place. Strike the side of the spindle mounting point with a dead-blow hammer to separate the tie-rod end. Before removing the outer tie-rod end, mark the position of the inner tie-rod jam nut to help maintain the original alignment setting. Then detach the outer tie-rod end from the steering linkage.



FRONT SUSPENSION REMOVAL CONTINUED

13. Detach the brackets that connect the ABS sensor on the side of the spindle and upper control arm using a 10mm socket.



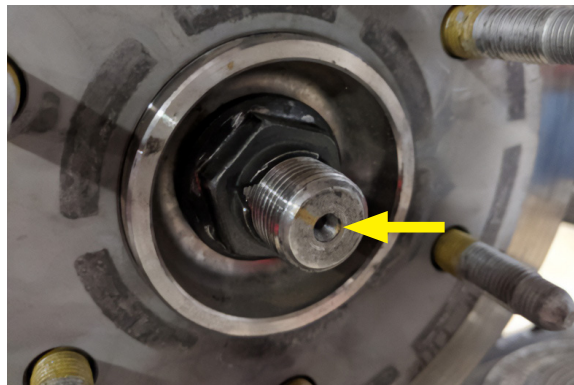
14. Remove the 18mm bolts from the brake caliper and detach the assembly from the steering knuckle. Use a zip-tie or wire hook to hold the caliper to the chassis and prevent damage to the brake line.



15. With a T30 TORX key, remove the brake rotor retaining bolt and slide the brake rotor off the hub.



16. Remove the 36mm axle nut. This will prevent the axle from being pulled out of the differential. Tap the locating hole on the front of the axle if it does not move freely.



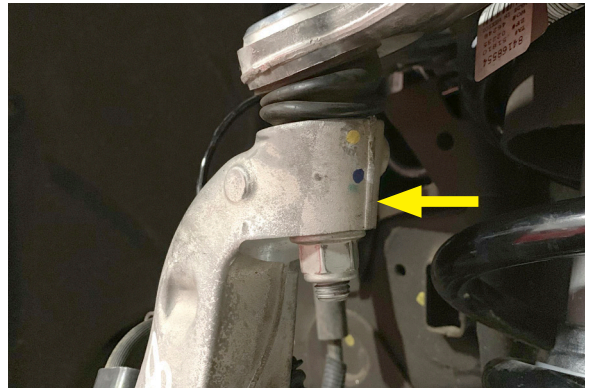
FRONT SUSPENSION REMOVAL CONTINUED

17. Break loose the 18mm upper ball joint nut but do not remove it yet. Strike the ball joint boss with a dead blow hammer to dislodge the upper control arm from the spindle. Allow the spindle to droop as you slide the axle shaft out of the hub.

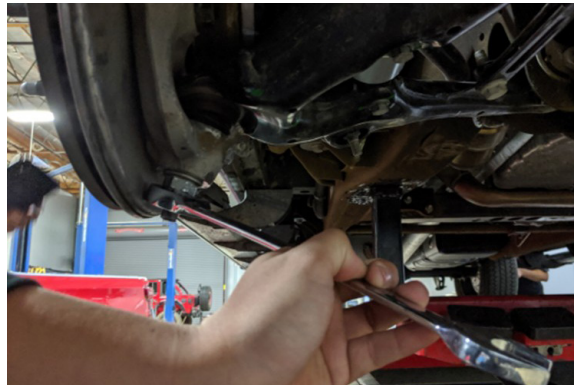


Technician warning:

The upper control arm may be under tension. Support the spindle assembly by attaching a strap or cable through the upper ball joint boss and securing it to a suitable point on the chassis. This will prevent the spindle from dropping too far or swinging while servicing the front suspension.



18. Remove the 24 mm lower ball joint nut. Strike the lower ball joint boss to separate the ball joint from the lower control arm. If necessary, insert a hex key into the lower ball joint to prevent it from spinning while removing the nut. Support the spindle as the ball joint separates to prevent damage. Detach the spindle assembly from the vehicle.



19. The struts must be removed from the vehicle.



Technician Note:

For Strut Spacer Installation: Please refer to the included LK3002-888 strut spacer kit instructions for installation procedures. Complete the strut spacer installation after the new Belltech front crossmember has been installed.

For Trail Performance Strut Installation: Please refer to the included 28019-888 instructions for setting and installing the lift struts. Complete the lift strut installation after the new Belltech front crossmember has been installed.

For Trail Performance Coilover Installation: Please refer to the included 15303-888 instructions for setting and installing the coilovers. Complete the coilover installation after the new Belltech front crossmember has been installed.

FRONT SUSPENSION REMOVAL CONTINUED

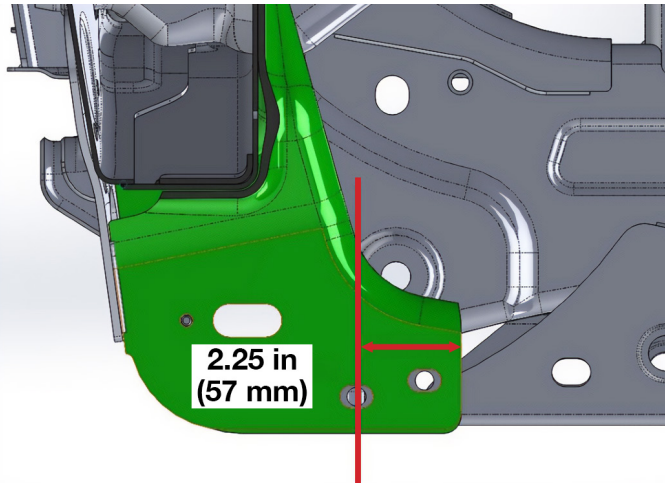
20. Remove the 27mm lower control arm bolts to detach the arms from the vehicle.



21. Use a floor jack or pole jack to support the front differential and control the height for the next steps in the installation.

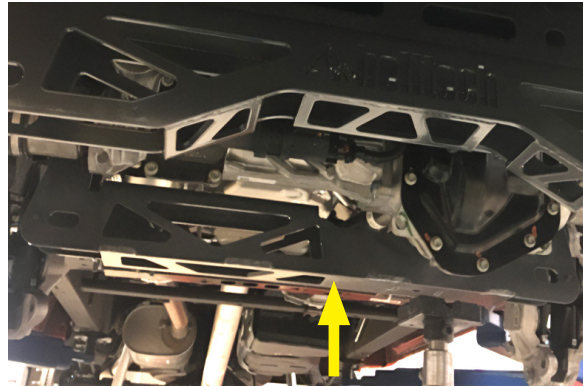
22. Remove the original crossmember located beneath the front differential to provide the necessary clearance for the differential to be lowered. Use a 21 mm wrench and socket to remove the differential mounting hardware.

23. Using a reciprocating saw, carefully cut 2.25" off the driver-side crossmember mount at the location shown in the image below to provide additional clearance for the differential. Deburr and paint the bare metal edges to prevent corrosion.



BELLTECH FRONT SUSPENSION INSTALLATION

24. Attach the Belltech rear crossmember, part# 150210-102-99, to the original rear crossmember with the supplied M16 x 2 - 120 mm bolts, M12 washers, and Nyloc nuts found in hardware kit 150201A-777. Torque the bolts to 180 ft lbs.



25. With the jack securely positioned underneath the front differential, remove the differential mounting hardware securing it to the chassis. Slowly lower the differential with the jack until it is positioned just above the rear Belltech crossmember.
26. Place the Belltech front differential drop crossmember, part# 150210-105-992, against the original passenger side chassis mount and into the driver side mount. Fasten the driver side differential mount with the original bolt and the passenger side mount with the supplied M14 x 2-120 mm bolt, large 45 mm OD washer, and M14 Nyloc nut found in hardware kit 150210B-777.



27. Use the jack to lift the differential into the drop crossmember tabs and fasten both sides with the supplied M14 x 2 - 100 mm bolts, and M14 washers. Use the Nyloc nut on the passenger side. Fasten the rear differential mount to the rear crossmember with the original bolt. Torque all M14 and the original bolts to 120 ft lbs.



BELLTECH FRONT SUSPENSION INSTALLATION CONTINUED

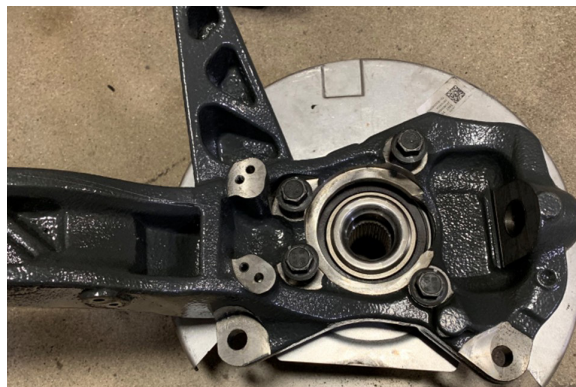
28. Attach Belltech front crossmember, part# 150210-101-99, to the original front crossmember with the supplied M16 x 2 - 120 mm bolts, M12 washers, and Nyloc nuts found in hardware kit 150201A-777. Ensure the Belltech logo faces toward the front of the vehicle. Torque the bolts to 180 ft lbs.



29. Attach the original lower control arms to the new front and rear Belltech crossmembers using the factory hardware. Install the control arm bolts through the oblong mounting holes and start all fasteners by hand but do not torque yet.
30. Install the strut or coilover assembly per the instructions included before continuing with the next step. Use the supplied M10 x 1.5 - 70mm bolts, M10 washers, and Nyloc nuts found hardware kit 150201E-777 to fasten the lower strut mount to the lower control arms. Torque to 55 ft lbs.



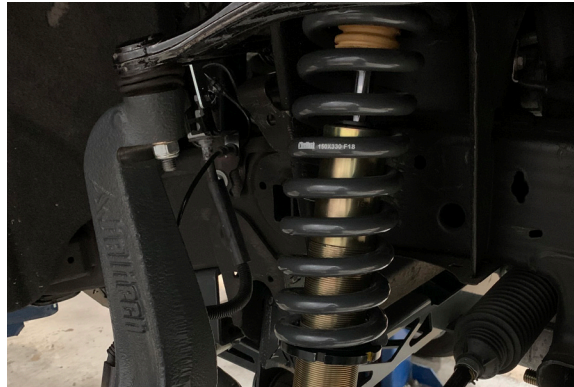
31. Transfer the hubs, O-rings, brake backing plates from the original spindles onto the new Belltech lift spindles. Ensure the backing plates are installed in the OEM orientation. Torque the hub bolts to 111 ft lbs. + 30-45 degree turn.



32. Use a floor jacks or pole jacks to support the lower control arms and adjust the height for the next steps in the installation.

BELLTECH FRONT SUSPENSION INSTALLATION CONTINUED

33. Place the spindle assembly onto the lower ball joint and fasten with the original nut. Do not torque yet.
34. Place the CV axle in the hub and ensure it is properly seated in the splines.
35. Attach the spindle to the upper ball joint. Torque the upper ball joint nut to 26 ft lbs., Final Pass: 85-95 degrees.



36. Torque the lower ball joint nut to 37 ft lbs., Final Pass: 125-135 degrees.
37. Secure the CV axle to the hub using the original axle nut. Torque the axle nut using the following sequence: First Pass: 133 ft lbs., Second Pass: Reverse 45 degrees, Final Pass: 199 ft lbs.
38. Mount the brake rotor onto the hub and tighten the TORX bolt onto the wheel hub. Torque to 16 ft lbs.
39. Mount the brake caliper assembly onto the Belltech spindle and torque original caliper bolts to 37 ft lbs. + 30-45 degree turn.
40. Place the supplied Belltech tie-rod ends, part# 150210-110, onto the steering linkage using the markings made during removal. Tighten the jam nut. Attach the tie-rod ends to the spindles, torque the nut to 26 ft lbs. + 93°.



41. Attach the Belltech front sway bar drop brackets to the original sway bar bracket mounting locations on the chassis. Install the driver-side bracket (Part #150210-113L-99) and passenger-side bracket (Part #150210-113R-99) using the supplied M10 x 1.25 x 25 mm bolts, M10 washers, and Nyloc nuts included in hardware kit LK4000-777. Torque the bolts to 37 ft lbs.



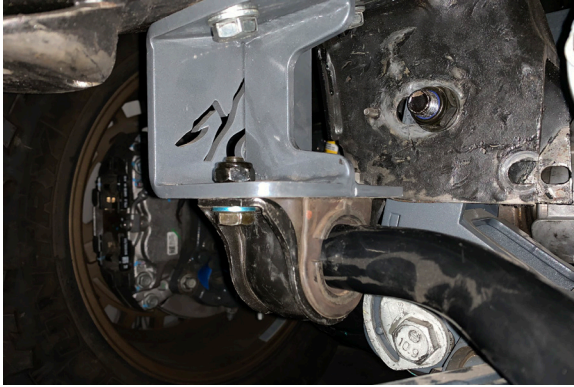
Technician Note:

If Belltech sway bar 5426 is installed with this lift kit, follow the instructions supplied with the sway bar kit and skip to step 44.

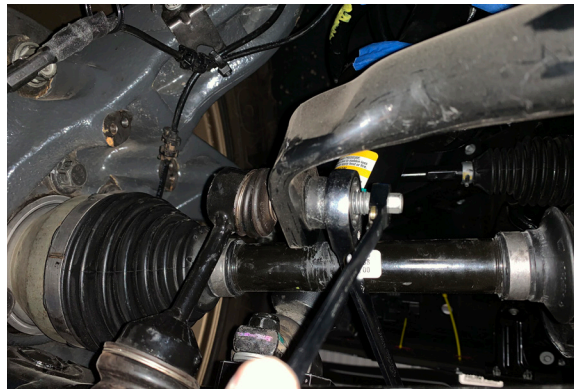


BELLTECH FRONT SUSPENSION INSTALLATION CONTINUED

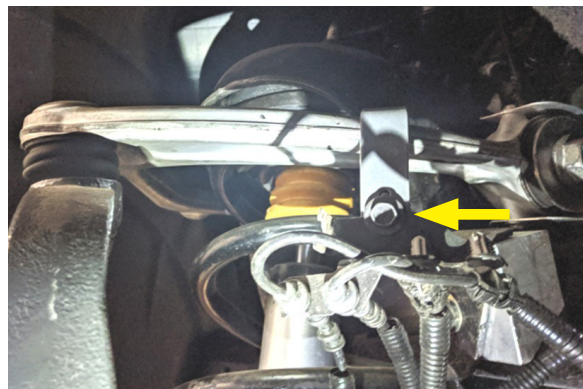
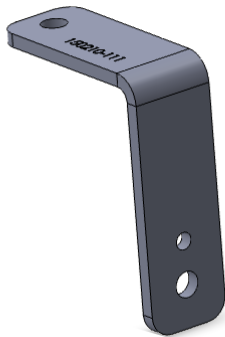
42. Attach the original sway bar assembly on the Belltech front drop brackets using the original hardware. Do not torque yet.



43. Attach the sway bar to the upper end links with the original nuts. Torque the end link nuts to 74 ft lbs. and torque the bushing bracket bolts to 37 ft lbs.



44. Attach the Belltech front brake line relocation brackets, part #150210-111-99, to the original mounting locations on the upper control arms with the original bolts. Secure the original brake lines to the relocation brackets using the supplied M6 x 1 - 16 mm bolts, M6 washers, and Nyloc nuts included in hardware kit 150210H-777. Torque to 80 in lb.



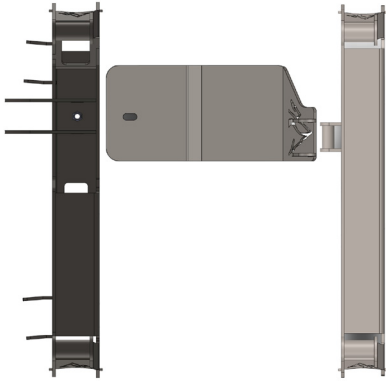
45. Attach the ABS line brackets to the spindles and control arms with the original bolts. Torque to 80 in lb.

BELLTECH FRONT SUSPENSION INSTALLATION CONTINUED

46. Tighten the lower control arms using the marked settings on the eccentric washers to retain approximate factory alignment. Please ensure the final torque is applied during alignment.



47. Attach the Belltech skid plate, part #150210-108-99, between the mounting bracket on the front crossmember and the welded nut in the rear crossmember. At the front crossmember, secure the skid plate using the supplied M12 x 1.75 x 100 mm bolt, M12 washer, and Nyloc nut included in hardware kit 150210F-777. Torque the front mounting hardware to 50 ft-lbs. At the rear crossmember, secure the skid plate using the supplied M12 x 1.75 x 30 mm bolt and M12 washer. Torque the rear mounting hardware to 30 ft-lbs.



48. Remove the two 21 mm nuts securing the crossmember at the center of the vehicle. Do not remove the crossmember or the bolts; only the nuts need to be removed. Retain all factory nuts.
49. Position the Belltech rear compression arm brackets, part# 150210-107RD-99 (driver side) and 150210-107RP-99 (passenger side), over the existing studs and reinstall the factory nuts to secure the bracket. Do not torque yet.



BELLTECH FRONT SUSPENSION INSTALLATION CONTINUED

50. Press the supplied flange bushings and spacer tubes, included in hardware kit 150201-100-HW, into the ends of the Belltech compression strut arms part# 150201-106.



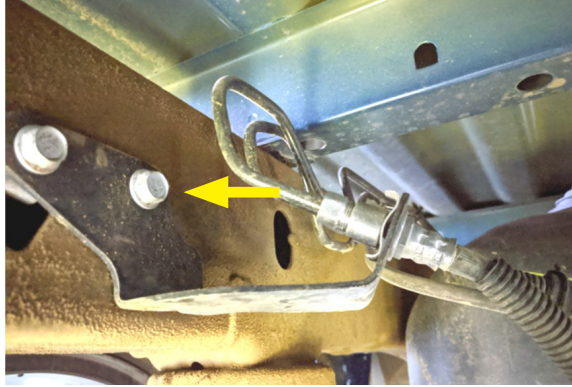
51. Once assembled, attach them to the compression arms brackets and the brackets on the rear Belltech crossmember using the supplied M12 x 1.75 - 110 mm bolts, M12 washers, and Nyloc nuts included in hardware kit 150210C-777. Torque to 60 ft lbs.



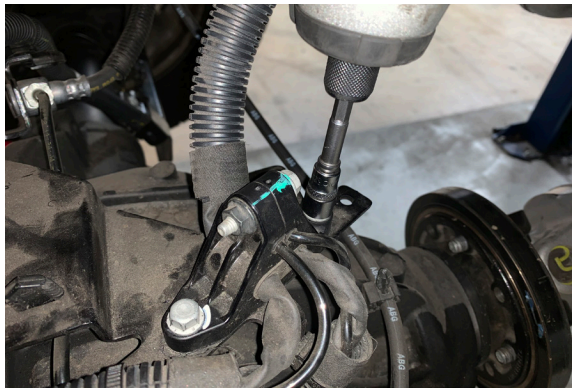
52. Mount the front wheels and tighten the lug nuts but do not torque yet.

REAR SUSPENSION REMOVAL

53. Chock the front wheels to prevent the vehicle from moving while the rear end is lifted.
54. Raise the rear of the vehicle and place jack stands under the frame rails. Carefully lower the vehicle onto the jack stands and remove the wheels.
55. Place a jack or lifting tool at the rear axle to adjust the height as needed.
56. Remove the two 13 mm bolts securing the rear brake line bracket to the inside of the chassis and retain the factory hardware. Release the brake line clips to provide additional slack and prevent the brake lines from being damaged during installation.



57. Remove the 10 mm bolts holding the rear brake line bracket to the top of the rear differential and retain the factory hardware.



58. Remove the factory shock absorbers using a 21mm wrench & socket. The factory hardware will be reused.
59. Loosen the 21mm U-bolt nuts evenly until removed. Detach the original U-bolts to remove the factory blocks. Slowly lower the axle using the floor jack.



REAR SUSPENSION INSTALLATION

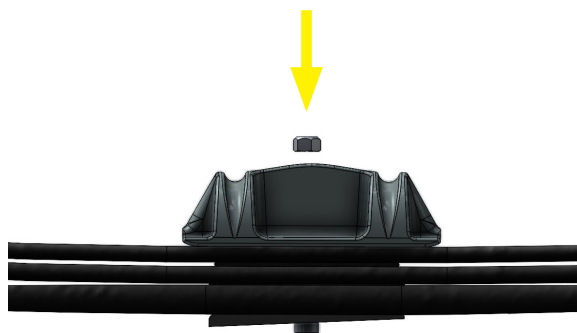


Technician Note:

For models with **round** U-bolts please proceed to replace the upper U-bolt mounts in step 60.

For models with **squared** U-bolts, do not remove the original upper U-bolt mounts, proceed to step 63.

60. If the vehicle is equipped with ROUND U-bolts, remove the 15 mm leaf spring center nut and detach the original upper U-bolt mount.



61. Place the supplied Belltech squared upper U-bolt mounts, part# 6528-003-99, on the leaf springs over the center bolt. Fasten the leaf spring and the upper mount with the original nut.

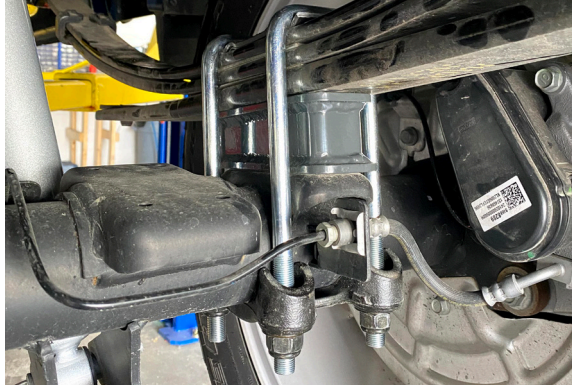


62. Place the Belltech lift block, part# 150210-201-99, on the original spring pad with the flat part of the block on the spring and the narrow end toward the front. Raise up the axle to meet the springs, ensure to align the center pin.



REAR SUSPENSION INSTALLATION CONTINUED

63. Use the jack to apply slight pressure at the rear axle, keeping the pin properly aligned during installation. Install the supplied Belltech square U-bolts with the 9/16" washers and Nyloc nuts included in hardware kit 150210D-777. Ensure the U-bolts are properly seated before tightening.



64. Tighten in a crossing pattern; then torque to First Pass: 59 ft lbs., Second Pass: Loosen 180 degrees, Third Pass: 59 ft lbs., Final Pass: 120-140 degrees.
65. Remove the 10 mm socket head bolts from the bump stops to detach them. Attach the supplied Belltech bump stop extenders, part# 150210-203, and fasten the extender to the chassis using the supplied M10 x 1.5 - 130 mm socket head bolts included in hardware kit 150210D-777. Attach the original bump stops with the original bolts to the Belltech extenders.



66. Mount the supplied Belltech shock absorbers using the original hardware. Torque the upper bolt to 70 ft lbs. and the lower nut to 118 ft lbs.



REAR SUSPENSION INSTALLATION CONTINUED

67. Attach the supplied Belltech rear differential brake line bracket, part# 150210-211-99, to the differential using original bolts. Secure the original brake line bracket to the new bracket using the supplied M6 x 1 - 16 mm bolts, M6 washers, and Nyloc nuts included in hardware kit 150210H-777.



67. Attach the Belltech rear brake line bracket, part# 150210-212-99, to the chassis using original bolts. Secure the original brake line bracket to the new bracket using the supplied M8 x 1 - 16 mm bolts, M8 washers, and Nyloc nuts included in hardware kit 150210G-777.



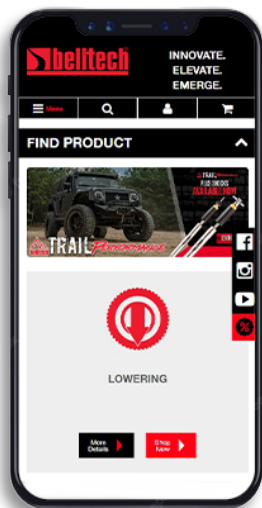
68. Reattach the brake line clips to their original mounting locations. Before continuing, verify that all brake lines have adequate slack and are properly routed without being stretched, kinked, or contacting surrounding components.

FINALIZING THE INSTALLATION

69. Mount the wheels and tighten the lug nuts.
70. Lift the vehicle and remove the support stands.
71. Carefully lower the vehicle onto the flat ground.
72. Torque the lug nuts to 140 ft lbs.
73. Check that all components and fasteners have been properly installed and torqued.
74. Read and perform all tasks in the “Before Driving Your Vehicle” section of page 1 of your instructions.

THANK YOU FOR CHOOSING BELLTECH.

You are now a part of the Belltech family and we are eager to catch a glimpse of your newly modified vehicle. Give us a shout out and let us know how much you love our product. Don't forget, we offer other Belltech related merchandise for you and your vehicle on our website www.belltech.com



belltechsuspension



Belltech Suspension



@belltechsuspension



@belltechsuspension

If you have any questions, concerns, or warranty related issues regarding your Belltech product, please call or email our experienced customer service specialists.

Belltech Customer Support:

Phone: 1-800-445-3767

Email: info@belltech.com

KIT CONTENTS



LK1004		
Part number	Description	Qty
150210-101-99	FRONT CROSSMEMBER	1
150210-102-99	REAR CROSSMEMBER	1
150210-110	TIE-ROD END	2
150210-105-992	FRONT DIFFERENTIAL DROP CROSSMEMBER	1
150210-777	HARDWARE KIT	1

LK2000		
Part number	Description	Qty
150210-103L	SPINDLE (LH)	1
150210-103R	SPINDLE (RH)	1

LK4000		
Part number	Description	Qty
150210-113L-99	SWAYBAR DROP BRACKET (LH)	1
150210-113R-99	SWAYBAR DROP BRACKET (RH)	1
LK4000-777	HARDWARE KIT	1

LK1005		
Part number	Description	Qty
150210-107RD-99	REAR COMPRESSION ARM BRACKET	1
150210-107RP-99	REAR COMPRESSION ARM BRACKET	1
150201-106	BOXED COMPRESSION STRUT ARM	2
150210-212-99	REAR BRAKE BRACKET	1
150210-111-99	FRONT BRAKE LINE RELOCATION BRACKET	2
150210-211-99	REAR DIFFERENTIAL BRAKE LINE BRACKET	1
150210-108-99	SKID PLATE	1
150210-201-99	LIFT BLOCK	2
150210-203	BUMP STOP EXTENDER	2
11U1012-951	SQUARED U-BOLT	4
6528-003-99	UPPER U-BOLT MOUNT	2

LK9701R		
Part number	Description	Qty
TP2220FF	REAR TRAIL PERFORMANCE SHOCK	2

KIT CONTENTS

150210-777		
Part number	Description	Qty
150210A-777	CROSSMEMBER HARDWARE KIT	1
150210B-777	FRONT DIFFERENTIAL DROP HARDWARE KIT	1
150210C-777	COMPRESSION ARMS / BRACKETS HARDWARE KIT	1
150210D-777	U-BOLT / BUMP STOP HARDWARE KIT	1
150210E-777	FRONT STRUT HARDWARE KIT	1
150210F-777	SKID PLATE HARDWARE KIT	1
150210G-777	REAR BRAKE LINE BRACKET HARDWARE KIT	1
150210H-777	FRONT / REAR BRAKE LINE HARDWARE KIT	1
9999-001	RED THREADLOCKER	1

150210A-777		
Part number	Description	Qty
110242	M16 X 2 NYLOC NUT	4
110219	M16 WASHER	8
110218	M16 X 2 - 120 MM BOLT	4

150210B-777		
Part number	Description	Qty
110222	M14 X 2 NYLOC NUT	2
110223	M14 WASHER	4
110224	M14 WASHER (45 MM OD)	1
110220	M14 X 2 - 100 MM BOLT	2
110221	M14 X 2 - 120 MM BOLT	1

150210C-777		
Part number	Description	Qty
110243	M12 X 1.75 NYLOC NUT	4
110228	M12 WASHER	8
110227	M12 X 1.75 - 110 MM BOLT	4
150201-100- HW	HARDWARE KIT	1
113251	FLANGE BUSHING	8
8615-003-95	SPACER TUBE	4

150210D-777		
Part number	Description	Qty
110240	9/16"-18 NYLOC NUT	8
110241	9/16" WASHER	8
110287	M10 X 1.5 - 130 MM BOLT	2

150210E-777		
Part number	Description	Qty
110238	M10 X 1.50 NYLOC NUT	4
110239	M10 WASHER	8
110237	M10 X 1.5 - 70 MM BOLT	4

150210F-777		
Part number	Description	Qty
110243	M12 X 1.75 NYLOC NUT	1
110228	M12 WASHER	3
110225	M12 X 1.75 - 30 MM BOLT	1
110226	M12 X 1.75 - 100 MM BOLT	1

150210G-777		
Part number	Description	Qty
110233	M8 X 1 NYLOC NUT	2
110245	M8 WASHER	4
110232	M8 X 1 - 16 MM BOLT	2

KIT CONTENTS

150210G-777		
Part number	Description	Qty
110233	M8 X 1 NYLOC NUT	2
110245	M8 WASHER	4
110232	M8 X 1 - 16 MM BOLT	2

150210H-777		
Part number	Description	Qty
110235	M6 X 1 NYLOC NUT	4
110117	M6 WASHER	8
110234	M6 X 1 - 16 MM BOLT	4

LK4000-777		
Part number	Description	Qty
110244	M10 X 1.25 NYLOC NUT	4
110239	M10 WASHER	8
110230	M10 X 1.25 - 25 MM BOLT	4



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