belltech®

INSTALLATION GUIDE

PART NUMBER: 350F04
FRONT LOWER CONTROL ARM AND COILOVER KIT
GM C-1500 | 1988-1998

-2” TO -3” ADJUSTABLE RIDE HEIGHT

300 W. PONTIAC WAY. CLOVIS, CA 93612
PHONE: 800-445-3767 | EMAIL: 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: 3-4 Hours + Alignment

RECOMMENDED TOOLS:

- Properly rated floor jack
- Support stands
- Wheel chocks
- Metric and standard socket wrench set
- Metric and standard wrench set
- Hex key set
- Tape measure
- Hammer and rubber mallet
- Safety glasses
- Torque wrench rated up to 150 ft lbs.

SPECIALTY TOOLS:

- Tie-rod end removal tool
- Ball joint removal tool
- Caliper spreader

FITMENT NOTE:

Not all possible wheel sizes and backspacing can be tested. Cautiously check the wheel assembly to the spindle, suspension component, and fender/body clearance before tightening the lug nuts and rotating the wheel assembly. Belltech is not responsible for any wheel, tire, suspension component, and/or body damage caused by failure to check for interference.

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.

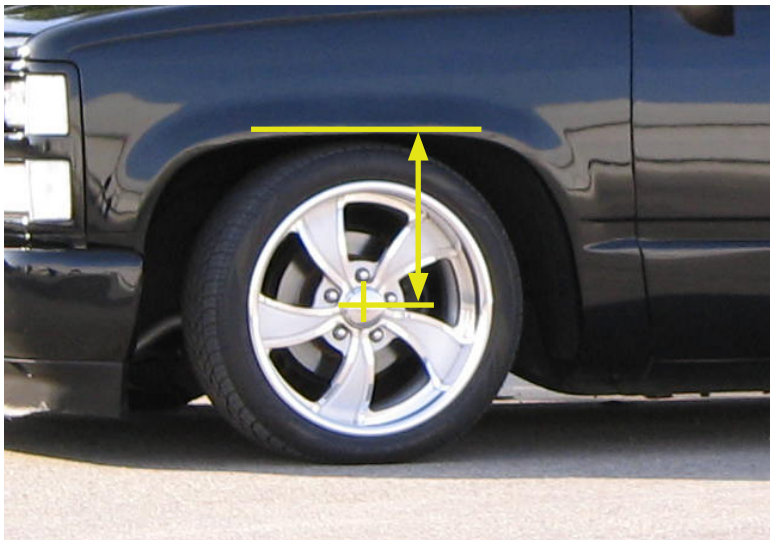
Before:

LF:_____

RF:_____

LR:_____

RR:_____



After:

LF:_____

RF:_____

LR:_____

RR:_____

JACKING, SUPPORTING, AND PREPARING THE VEHICLE

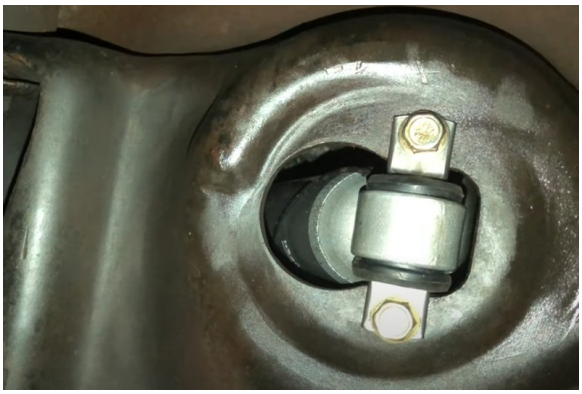
1. Park your vehicle on a smooth, level, concrete or seasoned asphalt surface.
2. Block the rear wheels of the vehicle using wheel chocks. Make sure the vehicle's transmission is in "PARK" (automatic) or 1st gear (manual).
3. Activate the parking brake.
4. Loosen, but do not remove, the front wheel lug nuts.
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 owners 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 ones self or to the vehicle.
7. Lower the vehicle slowly onto the 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.

OEM SUSPENSION REMOVAL

9. Remove the two 13mm bolts holding the bottom of the original shock to the lower control arm.

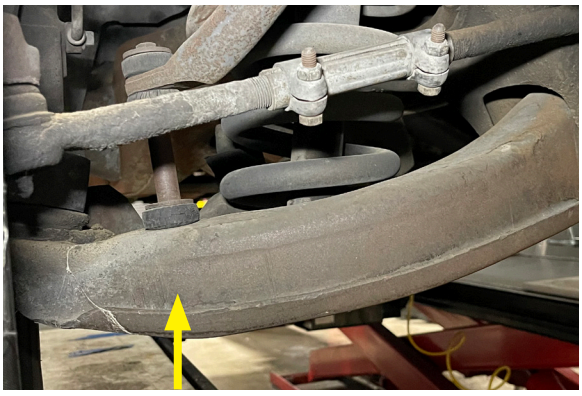


10. Remove the 14mm nuts from upper shock piston rod.

Technician note:

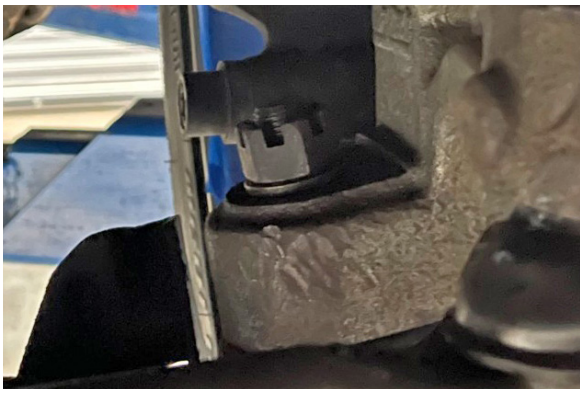
Penetrating fluid may be required to loosen the piston rod nuts.

11. Slide the original shock out through the bottom of the lower control arm.
12. Repeat these same steps on the opposite side of the vehicle.
13. Place properly rated floor jacks under the original lower control arms.
14. Remove the 15mm nuts that secure the end links to the control arms. Detach both end link assemblies from the vehicle.



OEM SUSPENSION REMOVAL CONTINUED

15. Remove the cotter pin and loosen but do not remove the 1” lower ball joint Castle nut.



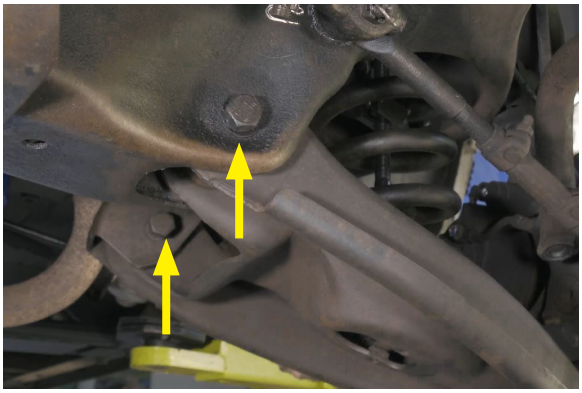
Technician warning:

The lower control arm is under extreme tension due to the coil spring. Use caution when the lower ball joint nut is loosened as the spring WILL expand and push the lower control arm out of the spindle. This can CAUSE HARM and/or INJURY.

16. Use a ball joint puller to dislodge the original lower ball joint from the taper then remove the castle nut.

17. Lower the floor jack slowly to lower the control arm and relieve the tension on the coil spring until it can be removed from the spring pocket. If necessary, pry down on the lower control to gain further clearance.

18. To detach the lower control arm, remove the 24mm nuts and tap the bolts out of the frame. Remove the control arm assembly from the vehicle.

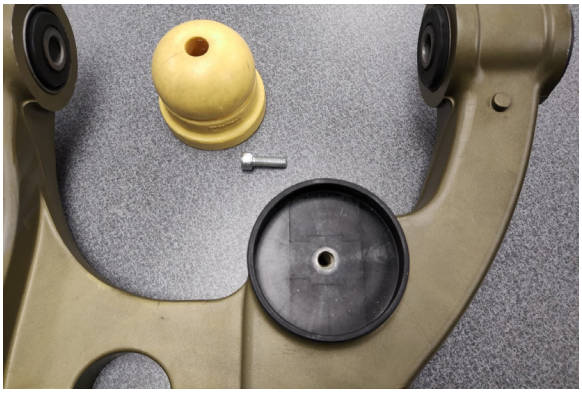


19. Repeat these same steps on the opposite side of the vehicle.

BELLTECH LOWER CONTROL ARM BUMP STOP ASSEMBLY

20. Locate the Belltech bump stops, bump stop cup, and M8 socket head screws supplied in hardware kit 250006-777.

21. Place a bump stop cup on to the new Belltech lower control arm.



22. Fasten the bump stop cup with a supplied M8 socket head screw and tighten it.

23. To attach the Belltech bump stop 4929-001, the bump stop needs to be pressed in one side at a time, see the examples below.

BELLTECH LOWER CONTROL ARM BUMP STOP ASSEMBLY CONTINUED

24. Slowly work around the bump stop cup, pressing in the sides of the bump stop.

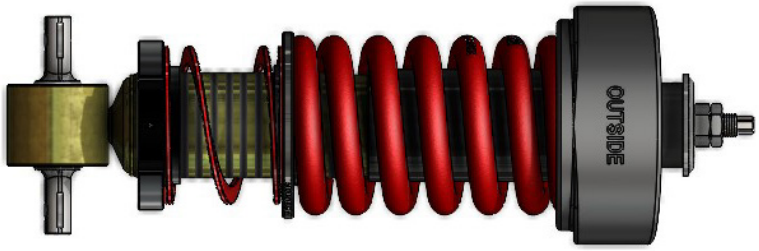
25. Continue pressing around the entire Belltech bump stop until it is fully seated inside the cup.

26. The Belltech lower control arm is ready to be installed. (BLCA-Bump Stop 10)

27. Repeat these same steps on the opposite side control arm.

BELLTECH FRONT COILOVER HEIGHT SETUP AND ASSEMBLY

28. The coilover is delivered as shown below and must be set to the desired ride height.



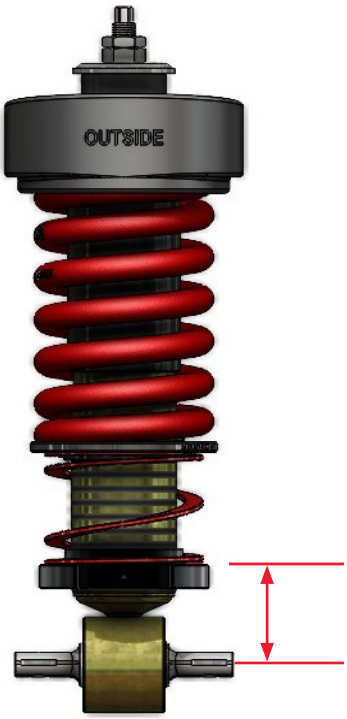
Technician note:

When lowering your vehicle more than 1”, a final shop alignment procedure is recommended to minimize tire wear.

29. Loosen the set screw on the spring perch.

30. Use the provided spanner wrench to turn the bottom spring perch to obtain desired spring perch height. Measure from the top of the perch to the center of the lower mount bushing. Find the appropriate spring perch height by referencing the table below. We do not recommend adjusting outside of the specified height range as the performance of the shock may decrease greatly.

1988-1998 GM C1500 2WD	
Drop (Inches)	“A” Measurement Spring Perch Height
2.0”	3.15” (80mm)
2.5”	2.90” (73.65mm)
3.0”	2.65” (67.3mm)



Technician note:

It is recommended to preset a higher “A” measurement and adjust down, clockwise, to the desired vehicle height once the coilover is installed.

The height table is ONLY for the Belltech coilover, any additional lowering components installed will result in a different final ride height.

Your vehicle’s exact ride heights may vary due to differences in chassis and trim levels. The perch heights depicted on our tables are a suggested starting point.

Belltech does not recommend lowering beyond what is advertised in the table above as the performance of the shock may be greatly decreased.

Ensure the vent disk is placed under the bump stop.

31. Tighten the set screw. Do not over tighten the set screw. Max torque is 1-2 Nm (1.5 ft lbs.)

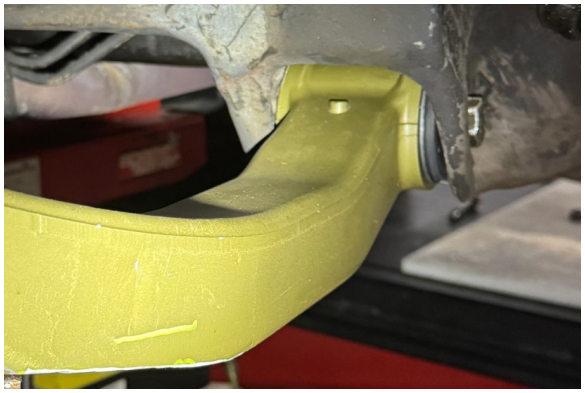
BELLTECH LOWER CONTROL ARM AND COILOVER INSTALLATION

32. Remove the upper jam nuts, cup washer, and rubber grommet. Set them to the side as they will be used for installation.

33. Place the Belltech lower control arms to the frame. Fasten the arms with the supplied M16 x 2.0-120mm bolts, M16 Nyloc nuts, and washers for the bushings at the front. For the rear bushings use the M16 x 2.0-110mm bolts, M16 Nyloc nuts, and washers. Hand tighten the bolts but DO NOT TORQUE YET.

Technician note:

Ensure the control arm is installed in the correct orientation, as a reference, the bump stop will be towards the rear of the vehicle.



34. Place the coilover assembly through the shock tower on the frame. Ensure the coilover upper spring adapter is in the correct orientation. The word “OUTSIDE” is marked on upper spring adaptor must face directly towards the outside of the vehicle. Ensure the marking does not face the front or rear of the vehicle.

35. The spring pocket in the shock tower has notches for the original upper spring seat. The Belltech coilover upper spring adapter accounts for this and will sit securely when its clocked correctly.

BELLTECH LOWER CONTROL ARM AND COILOVER INSTALLATION CONTINUED

36. When the piston rod protrudes past the frame and is exposed, attach the second rubber grommet and cup washer, facing down. Thread on the first supplied piston rod nut.

37. Tighten the first jam nut until the rubber grommet expands to the diameter of the cup washer. Fasten the second jam nut and torque to 10 ft lbs.

38. Lift the Belltech lower control arm up to the Belltech coilover and align the lower bushing mount.

BELLTECH LOWER CONTROL ARM AND COILOVER INSTALLATION CONTINUED

39. Fasten the coilover to the lower control arm with the supplied M14 bolts and nuts. Run the hardware through the bar pin pushing on the lower coilover mount and control arm. Torque to 45 ft lbs.

40. Attach the Belltech lower control arm ball joint onto the spindle. Fasten with the provided castle nut. Torque to 95 ft lbs.

Technician note:

Continue tightening until the slots align and secure it with a cotter pin.

41. Attach the sway bar end link onto the Belltech lower control arm and sway bar with the original hardware. Torque to 13 ft lbs.

Technician note:

If Belltech sway bar part# 5400 or any other front sway bar is also being installed, please follow the supplied instructions and torque to the specifications provided.

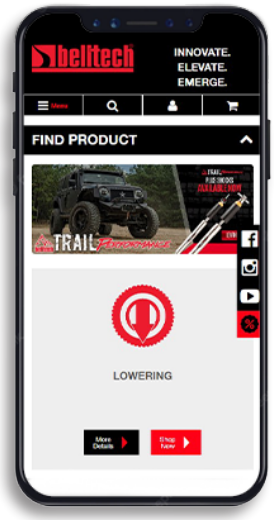
42. Mount the wheels and tires onto the truck, tighten but do not torque the lug nuts. Turn the wheels left and right by hand to ensure the wheel and tire do not contact any suspension components.

FINALIZING THE INSTALLATION

43. Lift the vehicle and remove the support stands.
44. Carefully lower the vehicle onto flat ground.
45. Torque the lug nuts to 125 ft lbs.
46. Roll the vehicle back and fourth to settle the newly installed suspension.
47. Torque the lower control arm bolts to 114 ft lbs.
48. Check that all components and fasteners have been properly installed and torqued.
49. 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



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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:

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Email: info@belltech.com

KIT CONTENTS

350F04		
Part number	Description	Qty
250006-A100L	LOWER CONTROL ARM LH	1
250006-A100R	LOWER CONTROL ARM RH	1
250006-777	HARDWARE KIT	1
15044-100	BELLTECH COILOVER	2
68510039	SPANNER WRENCH	1

250006-777		
Part number	Description	Qty
112151	M12 X 1.75 - 55MM BOLT	2
112165	M12 X 1.75 NYLOC NUT	2
110228	M12 WASHER	4
112125	M16 X 2.0 - 110MM BOLT	2
110218	M16 X 2.0 - 120MM BOLT	2
110219	M16 WASHER	8
110242	M16 X 2.0 NYLOC NUT	4
4929-010	BUMP STOP CUP	2
4929-001	BUMP STOP	2
112006	M8 X 1.25 - 25MM SOCKET HEAD BOLT	2

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