

# INSTALLATION EUIDE

PART NUMBER: 6528 FLIP KIT AND C-NOTCH KIT GM 1500 2WD | 2019+

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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 the installation of your new Belltech product and before operating your vehicle. For any questions or concerns regarding the steps in the installation process, please do not hesitate to call or email our customer support team 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.







#### **RECOMMENDED TOOLS:**

- Properly rated floor jack
- Support stands
- Wheel chocks
- Safety glasses
- Marking pen
- Wrench set
- Socket wrench set
- Marking pen

- Grinder with abrasive cut-off wheel
- Power drill and drill bits
- Large C-clamps
- Medium weight ball peen hammer and center punch
- Tape measure
- Steel construction square
- 1/2" drive torque wrench up to 200 ft lbs.

### **INSTALLATION PREPARATION:**

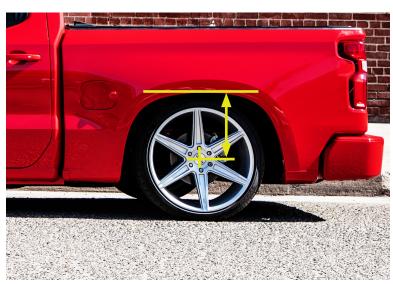
Before beginning the installation process, measure the hub to fender heights for your vehicle and record them in the "Before" section. After your vehicle has been modified, record the new measurements in the, "After" section. This way, you can compare the resulting height to the original. When taking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

Before:

LF:\_\_\_\_

**RF:**\_\_\_\_\_

RR:



After:

**RF:**\_\_\_\_\_

RR:

#### **JACKING, SUPPORTING, AND PREPARING THE VEHICLE**

- 1. Park your vehicle on a smooth, level, concrete or seasoned asphalt surface.
- Block the front 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 rear of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so the rear tires are approximately 6-8 inches off the ground.
- 6. Place support stands rated for the vehicles weight. The stands should be positioned, two on each of the frame rails, just forward of the front leaf spring hangers and just below the rear leaf spring shackle hangers. 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. Place a support stand under each side of the axle to support the weight of the axle. Make sure these are only supporting the weight of the axle; allowing the other 4 support stands to support the frame.
- 8. Lower the vehicle slowly onto the stands.
- 9. Remove the rear wheels.
- 10. Remove the rear shocks with a 21mm socket and wrench.
- 11. Remove the 13mm bolts holding the brake line bracket to the frame on the driver side.
- 12. Detach the OEM wire loom from the frame on the passenger side.

# 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.

#### FRAME PREPARATION



Due to the design of the included frame notch supports, referred to as "C-Notch", some installers may prefer to remove the box to facilitate access to the frame. Refer to the appropriate General Motors service manual for recommendations regarding pickup box removal procedure.

Proper use of safety equipment and eye/face/hand protection is absolutely required when performing the following procedures.

To avoid chassis damage, perform the following procedures to only ONE frame rail at a time.

13. Use template 6628-887, provided in the kit, with the notch portion just above the bump stop bracket and align the half circle with the vertical oval on the frame. The upper line should be align with the top of the frame with the forward arrow pointing towards the front of the vehicle. There is a secondary front hole to align to get as accurate as possible.





- 14. Clean the surface where the notch will be made so that using a permanent marker to mark the frame is visible.
- Trace the notch on the template, onto the frame. Marking the corners and drilling each corner with a 1/4" drill bit will make cutting more efficient.



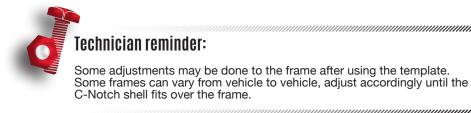
WARNING: Due to the close proximity of the fuel tank to this area, we DO NOT recommend using a flame-cutting torch or plasma cutter when performing these operations. Excess heat can easily damage the frame rail and other adjoining components.

#### FRAME PREPARATION CONTINUED

16. Cut along the marked lines carefully, DO NOT remove any material from the frame rail that is not shown or described here.



- 17. Deburr all cut edges, paint cut edges and bare metal to prevent rust.
- 18. Slide the outer notch over the frame. It may be necessary to use a soft face hammer to position the C-Notch shell over the frame.



19. With the C-Notch installed against the outside face of the frame rail, use a paint marker or center punch to mark all the holes onto the frame using the C-Notch to locate the holes.



20. Drill the holes using a 1/2" (50.2mm) drill bit. On both sides of the frame rail.



#### **BELLTECH C-NOTCH INSTALLATION**

21. Install the C-Notch outer shell with the inner support bracket using the supplied three 1/2"-20 x 4-1/2" bolts, three 1/2"-20 Nyloc nuts, and a washer on both sides of the bolt. Torque to 60 ft lbs.



22. Install the supplied bump stop in the hole found at the bottom of the C-Notch outer shell using the hardware included with the bump stop.



23. Install four 1/2"-20 x 1-1/2" bolts, four 1/2"-20 Nyloc nuts, and a washer on both sides of the bolt on the top and bottom tabs of the C-Notch assembly. Torque to 40 ft lbs.



24. On the driver side, mount the OEM brake bracket onto the rear section of inner support bracket using the original 13mm bolts.



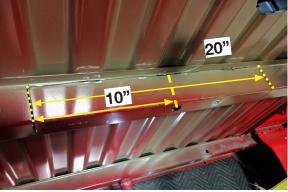
#### **BELLTECH C-NOTCH INSTALLATION CONTINUED**

25. Use zip ties to place the OEM wire loom on the passenger side inner support bracket. Use the two holes at the rear section.

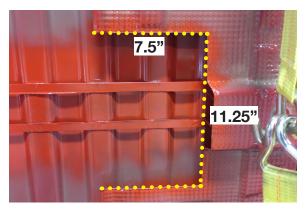


- 26. The crossmember on the box that sits above the rear differential must be notched. Remove the heat shield from the passenger side of the crossmember.
- 27. From the edge of the crossmember measure 14" toward the center. Use a permanent marker to mark the beginning of the section to be cut and measure another 20" for the total cut. Use the existing hole in the center of the crossmember as a guide to confirm the distance, this should be 10" from the initial mark.





28. The heat shield must be cut 11.25" X 7.5" over the section that was originally attached to the crossmember.



29. Once the cutting is complete; grind away any sharp edges and paint any exposed metal with spray paint to prevent corrosion.

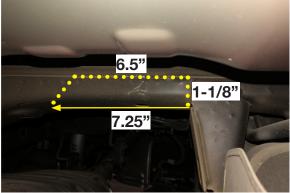
#### **CROSSMEMBER SUPPORT NOTCH**

30. Remove the four 15mm bolts connecting driveline flange to the rear differential flange. Once removed, push the driveshaft toward the front of the vehicle to dislodge the flange from its seated position. Secure driveline to avoid any unwanted force or damage to the transmission yoke or driveline.



31. Place the provided template, 6528-060-887, on the forward most crossmember support; flush against the gas tank support drop down. Mark the surface to be cut. The cutline should rest just above the welded seam. Using a angle grinder remove the lower section of the crossmember.





32. Use the notch assembly to check fitment and clearance. Grind away any areas needed to allow the outer notch to fit flush. Place the backing plate on the opposite side and use the supplied 7/16-20 x 1" bolts at the top and bottom tabs to align the notch assembly together. Mark the three holes on each side of the crossmember to insure proper alignment.



#### **CROSSMEMBER SUPPORT NOTCH CONTINUED**

33. Remove the notch assembly. Use a 1/2" drill bit to drill holes through both sides of the support arch. After cutting is complete, grind away any sharp edges and paint any exposed metal with spray paint to prevent corrosion.



34. Place the outer notch and backing plate on the support notch and secure them with the supplied hardware. Use the 7/16-20 x 1" bolts at the tabs and the 7/16"-20 X 5-1/2" bolts on the drilled holes. Use the 7/16"nuts and washers; torque to 60 ft lbs.



35. Attach the driveshaft to the axle using the original hardware. Torque the for bolts to 71 ft lbs.



#### LEAF SPRING PREPARATION AND FLIP KIT INSTALLATION

36. Ensure the axle is supported before removing the U-bolts. Remove the 21mm U-bolt nuts to detach to the rear axle from the leaf spring.



- 37. Carefully, lower the axle from the leaf spring and support it; ensure not to put tension on any electrical or brake lines/hoses that are attached to it.
- 38. Break loose but do not remove the 15/16" rear leaf spring and shackle mounting bolts yet.
- 39. Remove the front leaf spring mounting bolt first; let the leaf spring rest on the axle. Remove the bolt securing the rear shackle to the hanger. Carefully remove the leaf spring assembly from the vehicle.





- 40. The leaf springs are side specific. Mark each leaf spring LEFT, RIGHT, and FRONT side to ensure they are installed correctly.
- 41. The 15mm center bolt pin direction must be reversed on both leaf springs. Use a set of C-clamps to hold the leaf spring assembly together while reversing the center bolt. While the center pin is removed, remove the stock U-bolt positioning bracket as it will not be used with the new Belltech flip kit.





## LEAF SPRING PREPARATION AND FLIP KIT INSTALLATION CONTINUED

42. Install the supplied Belltech shackle 6704-100 with the supplied bolt, nut, and washer to the rear of the leaf spring. Place the bolt in the outward position. Do not torque yet.



- 43. Raise the axle for clearance to place the leaf spring under the axle and clearance to place leaf spring in its OEM mounts.
- 44. Use the original hardware to attach the front of the leaf spring first; tighten but do not torque yet.
- 45. Attach the rear Belltech shackle to the rear leaf spring hanger using the original bolt. The leaf spring is now located underneath the rear axle.



- 46. Remove the 13mm bolt holding the brake line bracket below the spring pad.
- 47. With the rear axle still raised and supported, place Belltech saddle 6528-020 on top of the leaf spring with the hole over the head of the spring center bolt. The window of the saddle will sit towards the rear of the vehicle. Place the saddle under the axle from back to front, positioning the brake line bracket inside the saddle window.



#### LEAF SPRING PREPARATION AND FLIP KIT INSTALLATION CONTINUED

- 48. Slowly, lower the axle onto the saddles. The ears should fit into the stock spring perches on the axle tubes. Make sure both ears on each saddle locate completely in the perches.
- 49. Place the Belltech U-bolt mount, 6528-003, on top of the spring pad. Place the supplied U-bolts on the mount with the U-bolts inside the two bent flanges so they are locked into position.





50. Place the Belltech U-bolt plate, 6545-010, under the leaf spring with the offset hole toward the front of the vehicle. This allows the U-bolts to pass through the appropriate slots. Attach the plate using the 9/16"-18 washers and Nyloc nuts. Torque the nuts in a cross pattern to 90 ft lbs.



51. Attach the brake line bracket to the axle with the original bolt. If any electrical lines/brackets where removed, please attach them as well.



## LEAF SPRING PREPARATION AND FLIP KIT INSTALLATION CONTINUED

- 52. Belltech transmission spacer 6528-050 replaces the OEM spacer. It is used to correct a small vibration in the driveline.
- 53. Use a jack to support the transmission and control the height during the replacement process.
- 54. From under the center of the crossmember, remove the 18mm center nut. At the OEM spacer, remove the two 15mm bolts. Raise the transmission with the floor jack and detach the spacer from the transmission.



55. Attach the new Belltech transmission spacer to the transmission with the original bolts. Torque to 43 ft lbs.



- 56. Lower the floor jack to secure the transmission with the crossmember center nut; torque to 33ft lbs. plus a 45-55° turn.
- 58. Mount the wheels and tighten the lug nuts.
- 59. Lift the vehicle and remove the support stands.
- 60. Carefully lower the vehicle onto the flat ground.
- 61. Attach the rear shocks using the original hardware. Torque the upper bolt to 70 ft lbs. and the lower bolt to 118 ft lbs.
- 62. Torque the front leaf spring mount bolt to 118 ft lbs. and the rear shackle nuts to 85 ft lbs.

# FINALIZING THE INSTALLATION

- 63. Torque the lug nuts to 140 ft lbs.
- 64. Check that all components and fasteners have been properly installed and torqued.
- 65. 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









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

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# KIT CONTENTS



	6528	
Part number	Description	Qty
6628-001-99	C-NOTCH LH OUTER	1
6628-003-99	C-NOTCH RH OUTER	1
6628-008-99	C-NOTCH SUPPORT LH	1
6628-010-99	C-NOTCH SUPPORT RH	1
6528-060-991	DRIVELINE NOTCH ASSEMBLY	1
6528-007-99	DRIVELINE NOTCH BACKING PLATE	1
6545-010-99	U-BOLT PLATE	2
6528-003-99	UPPER U-BOLT MOUNT	2
6528-020-99	AXLE SADDLE	2
6594-007-951	SQUARED U-BOLT	4
6704-100	LIFT SHACKLE ASSEMBLY	2
6528-050-99	TRANSMISSION SPACER	1
6528-777	HARDWARE KIT	1
6628-887	TEMPLATE	1
6528-060-887	TEMPLATE	1

	6528-777	
Part number	Description	Qty
110403	NYLOC NUT 1/2"-20	20
110409	HEX HEAD BOLT 1/2"-20 X 1-1/2"	8
110427	HEX HEAD BOLT 1/2"-20 X 4-1/2"	12
110660	FLAT WASHER 1/2"	48
112196	HEX HEAD BOLT 7/16"-20 X 5-1/2"	3
110301	HEX HEAD BOLT 7/16"-20 X 1"	3
110645	FLAT WASHER 7/16"	12
110305	NYLOC NUT 7/16"-20	6
110241	FLAT WASHER 9/16"	8
110455	NYLOC NUT 9/16"-18	8
4924-001-BN	BUMP STOP	2