

# INSTALLATION INSTRUCTIONS

6528 FLIP KIT & C-NOTCH KIT

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## 2019 CHEVROLET SILVERADO 2WD/4WD CREW CAB

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: <u>DO NOT</u> 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: <u>DO NOT</u> drive vehicle until all work has been completed and checked. Torque all hardware to

values specified.

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. Some provided images my

show addition holes / hardware, if instructions do not reference discrepancies please continue

with the provided steps.

#### **RECOMMENDED TOOLS:**

- Properly rated floor jack and six (6) support stands
- Wheel chocks
- Grinder equipped with abrasive cut-off wheel
- 1/2" drive torque wrench
- Standard and Metric socket wrench set
- Standard and Metric wrench set
- Power drill and drill bits
- Large C-clamp
- Tape measure
- Steel construction square
- Medium weight ball peen hammer/ center punch
- Marking pen

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## **KIT INSTALLATION**

As this is a relatively involved installation, **WE RECOMMEND** that a qualified mechanic, at a properly equipped facility, perform such installation. **WE 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 equipment, is very important!

### 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). Activate the parking brake.
- b) Loosen, but **DO NOT REMOVE** the rear wheel lug nuts.
- c) Lift the rear of the vehicle off the ground using properly rated floor jack. Lift the vehicle so that the rear tires are approximately 6-8 inches off the ground surface.
- d) Support the vehicle using four (4) support stands, rated for the vehicle's 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 the stands, make sure the supports will securely contact the straight, flat portions of the frame area. 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.
- e) Lower the vehicle onto the stands slowly and check for possible interference with any break lines, wire and or cables.
- f) Place support stands under each side of the axle to support the weight of the axle. Make sure these are only support the weight of the axle and allowing the 4 other support stands to support the frame.
- g) Remove the rear wheels
- **h)** Remove the rear shocks (dampers)

#### **!SAFTEY REMINDER!**

Check for safe and vehicle stability before proceeding under the vehicle to the begin the following procedures. Never work under a vehicle supported by ONLY a jack. Always use properly rated support stands to support the vehicle.

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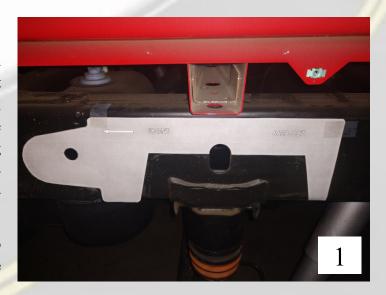
NOTE: DUE TO THE DESIGN OF THE INCLUDED FRAME NOTCH SUPPORTS, HERE-TO-FORE REFFERED TO AS "C-NOTCH", SOME INSTALLERS MAY PREFER TO REMOVE THE BOX TO FACILITATE ACCESS TO THE FRAME. REFER TO THE APPROPRIATE GENERAL MOTORS SERVICE MANUAL FOR RECOMMENDATIONS REGARDING PICKUP BOX REMOVAL PROCEDURE.

PROPER USE OF SAFETY EQUIPMENT AND EYE/FACE/HAND PROTECTION IS ABSO-LUTELY REQUIRED WHEN PERFORMING THE FOLLOWING PROCEDURES.

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

#### 2) **C-NOTCH INSTALLATION**

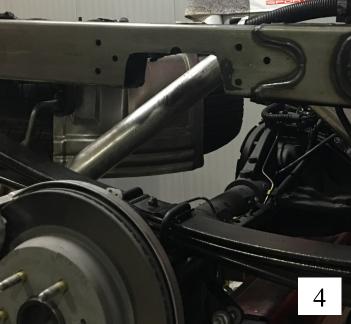
- a) Use template 6628-887, provided in the kit, with the notch portion just above the bump stop bracket and align the half circle with the vertical oval on the frame. The upper line should be align with the top of the frame with the forward arrow pointing towards the front of the vehicle. There is a secondary front hole to align to get as accurate as possible. (Photos 1 & 2)
- b) Clean the surface where the notch will be made so that using a permanent marker to mark the frame is visible.
- c) 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.
- \*\* 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. \*\*





- d) Cut along the marked lines carefully, **DO NOT** remove any material from the frame rail that is not shown or described here.
- e) Deburr all cut edges, paint cut edges and bare metal to prevent rust
- f) 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
- \*\* Some adjustments may be done to the frame after using the template as some frames vary from vehicle to vehicle and adjust accordingly until the C-Notch shell fits over the frame. \*\*
- g) With the C-Notch installed against the outside face of the frame rail and use a paint marker, or center punch, to mark all the holes onto the frame using the C-Notch to locate the holes. (**Photo 3**)
- h) Drill the holes using a 1/2" (50.2mm) drill bit. On both sides of the frame rail. (**Photo 4**)
- i) Install the C-Notch outer shell with the inner support bracket using the 1/2"-20 X 4.5" bolts provided using a washer on either side and using the corresponding Nylon-lock Nut Torque to 60ft/lbs. (**Photo 5**)
- j) Install the four 1/2"-20 X 1-1/2" bolts, washer and Nylon-lock Nut on both the top tabs and bottom tabs. Torque to 40 ft/lbs.
- k) Repeat steps 2a-2j for the other side.







- 1) On the driver side, mount the OEM brake bracket onto the inner C-Notch using the OEM 8MM-1.25, thread directly onto the C-Notch Inner support bracket. (Photo 6)
- \*\* May need to bend some of the brake lines to clear the bed support frame, make sure not to over extend/ bend the break lines \*\*
- m) Install the OEM wire loom on the **PASSANGER SIDE** using the two holes on the inner support bracket and the supplied zip tie. **(Photo 7)**
- n) Install the supplied Bump Stop (5922-001) (Photo 8)



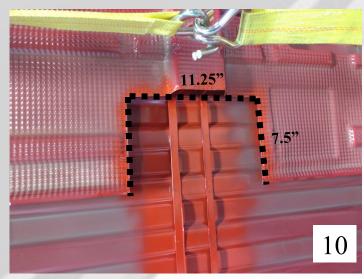




### 3) BED CROSSMEMBER NOTCH

- a) Mark, using a permanent marker, where the cross-member is to be cut. (Photo 9)
- b) The heat shield will need to be cut also, 11.25" X 7.5" (Photo 10)



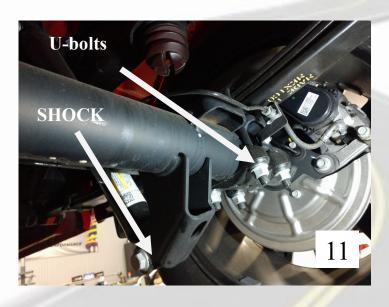


#### **FLIP KIT INSTALLTION**

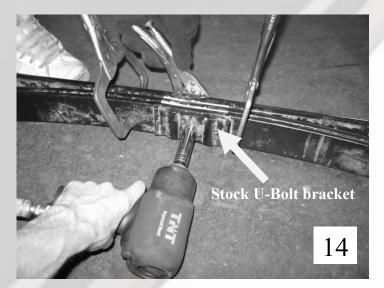
#### 4) <u>LEAF SPRING REMOVAL</u>

- a) Remove the rear shocks
- **b)** Make sure the axle is supported before removing the U-bolts.
- c) Remove the U-Bolts (two per each LEAF SPRING) that are attached to the rear axle and break lines,
  (Photo 11)
- **d)** Lower the axle from the leaf spring and support it; make sure not to put tension on any electrical or break lines/hoses that are attached to it.
- e) Loosen, but do not remove the rear leaf spring mounting bolts as well as the shackle mounting bolts.
- f) Remove the front leaf spring mounting bolt. Once the bolt is removed, the LEAF SPRING should be able to atop of the rear axle. (Photo 12)
- g) Remove the bolts securing the rear shackle to the hanger. Carefully remove the leaf spring. (Photo 13)
- h) Mark each leaf spring LEFT, RIGHT and FRONT side. So they are installed correctly.
- i) Reverse the center bolt pin direction on both the LEAF SPRINGS for proper installing. Use a C-Clamp to keep the leaf spring assembly in tack 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 this Belltech Kit.







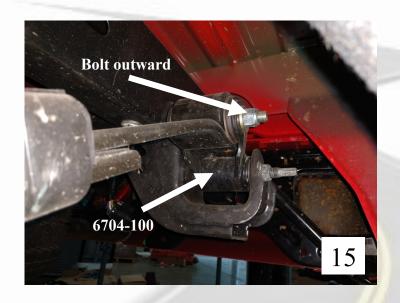


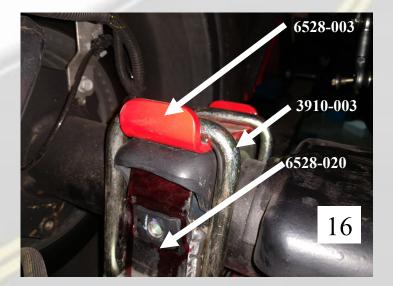
#### 5) LEAF SPRING INSTALLATION

- a) Raise the axle so you have plenty of room to place the leaf spring under the axle and room to bolt leaf spring in its OEM position.
- **b)** Install the supplied Belltech Shackle 6704-100 with its hardware on to the rear of the leaf spring with the bolt in the outward position. (**Photo 15**)
- c) Install the front of the leaf spring first using the original hardware. Start to tighten but do not tighten completely.
- d) Attach the rear Belltech Shackle to the OEM rear leaf spring hanger using the OEM bolt for the hanger. The Leaf spring will now be located underneath the rear axle. (Photo 15)



- a) Place the Belltech Saddles, 6528-020, on top of the springs with the hole over the head of the spring center belt. To properly position the axle, the window of the saddle sits towards the rear of the vehicle slides over and under, back to front, positioning the break line bracket inside the saddle window. (Photo 16)
- b) Lower the axle onto the saddles slowly. 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.
- c) Place the Belltech U-bolt spring pad, 6528-003, on top of the spring pad and using the provided U-Bolts, 3910-003, place them on the spring pad with the U-Bolt inside the two bent flanges so they are locked into position. (Photo 16)
- d) Install the Belltech U-Bolt Plate, 6545-010, under the leaf spring with the offset holes forward, so the U-Bolts pass through the appropriate slots. Attach the plate using washers and locknuts. Tighten and torque locknuts to 90 ft/lbs (Photo 17)
- e) Install the brake lines and electrical brackets (if any removed)
- f) Install rear shocks (OEM or BELLTECH 2208FF)







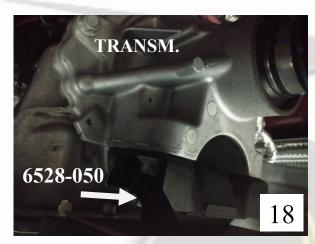
#### 7) 2WD TRANSMISSION SPACER

Transmission spacer, **6528-050**, corrects a small vibration and replaces the OEM spacer.

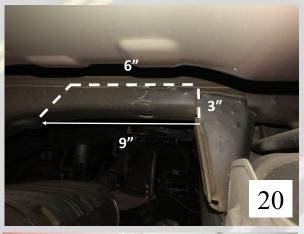
a) Remove the two bolts on either side of the transmission spacer and remove the center nut on the crossmember and

### 8) **CROSSMEMBER SUPPORT NOTCH**

- a) Remove the 4 bolts connecting driveline flange to rear differential flange using a 15mm socket/ wrench. (Photo 19) Once removed, push toward the front of the vehicle to dislodge the flange from its seated position. Secure driveline to avoid any unwanted force on transmission yoke or driveline.
- **b)** Place the provided template on the crossmember support, flush against the gas tank support drop down. Mark the cut surface. The cutline should rest just above the welded seam. Using a angle grinder remove the lower section of the crossmember. DO NOT remove the entire crossmember support, only the lower section is to be removed. (Photo 20)
- c) Using the notch, check fitment and clearance. Grind any areas that do not allow the notch to fit flush. Place backing plate on the reverse side and use the supplied 7/16-20 x 1 1/2 bolts to align the to plates together. Mark the 3 holes on each side of the crossmember to insure proper alignment.
- **d)** Remove notch, and using a 1/2" drill bit, drill holes through both sides of the support notch. After spray cut edges and holes with a sealant to protect against rust and corrosion.
- e) Install both the front and backing pieces of the support notch











PARTS LIST		
PART #	DESCRIPTION	QUANTITY
6628-001	C-NOTCH (LH)	1
6628-008	C-NOTCH STIFFENING PLATE (LH)	1
6628-003	C-NOTCH (RH)	1
6628-010	C-NOTCH STIFFENING PLATE (RH)	1
6545-010	U-BOLT PLATE	1
6528-003	U-BOLT SPRNG PAD	1
6528-020	AXLE SADDLE	1
110660	1/2" FLAT WASHER	48
110424	HH CAP SCREW 1/2"-20 x 3-3/4"	12
110409	HH CAO SCREW 1/2"- 20 x 1-1/2"	8
110403	NYLON LOCK NUT 1/2"- 20	20
3910-003	U-BOLT 9/16"-18 x 2.6" x 7.8"	4
110455	NYLON LOCK NUT 9/16" - 18	8
112196	HH CAP Screw 7/16"-20 x 5 1/2"	3
110301	HH CAP SCREW 7/16" -20 x 1"	3
110645	FLAT WASHER A325 7/16"	12
110305	NYLON LOCK NUT 7/16"-20	6
4924-001-BN	BUMP STOP	2
6704-100	LIFTING SHACKLE ASSEMBLY	2
6528-050	TRANSMISSION SPACER	1