



## INSTALLATION INSTRUCTIONS

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### 6605 - 6607 FLIP KIT CHEVROLET C/K 1500 / 2500 PICK UP

**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 values specified.
- Reminder:** Proper use of safety equipment and eye/face/hand protection is absolutely necessary when using these tools to perform procedures!

**Note:** This is a relatively complex installation and as such we recommend that a qualified mechanic perform it. We also recommend that to retain the stability of the leaf spring pack and axle assembly, only one side of the vehicle should be modified at a time.  
**NOTE:** As it may be necessary to temporarily loosen fuel tank mounting straps to install driver side hanger, we recommend that the fuel level be as close to empty as possible to reduce fuel tank weight.

#### **RECOMMENDED TOOLS:**

- Properly rated floor jack, support stands, and wheel chocks
- Combination wrench set
- Torque wrench: *0-75 lb ft. range*
- Ratcheting socket wrench and socket sets
- Air Chisel / Die grinder W/ cut off wheel
- Heavy Duty Drill
- C-Clamps
- Safety Glasses

#### **KIT INSTALLATION**

1. Open the hardware kit and remove all of the contents. Refer to the part list (Page 5 & 6) to verify that all parts are present.
2. Park the vehicle on a smooth level asphalt or concrete surface. Place a block in front of and behind the front wheels. Jack up the rear of the vehicle and place jack stands securely under the frame in the manufacturer's specified locations. Remove the rear wheels.
3. For better access to the rear suspension, we recommend removal of the bed from the vehicle. (PHOTO 1) This involves removal of 8 chassis-to-bed bolts, two grounding straps, the tail light harness, and the fuel filler neck flange.

4. Block the front wheels of the vehicle and raise the rear wheels of the vehicle off the ground with a floor jack rated for this load. Position a set of jack stands rated for this load forward of the front leaf spring packs hangers. (PHOTO 2) Lower the vehicle down onto these jack stands and verify the vehicle's stability with the floor jack located under the center of the rear axle housing. Remove the rear wheels from the vehicle.
5. With a floor jack located under the center of the rear axle housing apply a slight amount of preload to the leaf spring by raising the floor jack pad to touch the rear axle housing and then raise the rear axle housing another 1/4" to 1/2".
6. Remove the lower shock mount eyebolts, and swing the shock bodies down and away from the rear axle housing. (PHOTO 3)
7. Starting on the driver's side of the vehicle, remove the U-bolt nuts, leaf spring plates and U-bolts. (PHOTO 4 & 5) Lower the floor jack to allow the rear axle to drop clear of the leaf spring pack. **NOTE: DO NOT** allow the rear axle to drop to the point that the rear brake line is put under any strain.
8. Supporting the forward end of the rear leaf spring pack, remove the forward leaf spring eyebolt from the forward leaf spring hanger. Lower the leaf spring to rest on the rear axle tube housing. Support the rear end of the leaf spring pack and loosen the bolts that secure the rear leaf spring shackle to the rear spring hanger and leaf spring eye. Remove the shackle eye-to-rear hanger bolt and remove the leaf spring pack from the vehicle. **NOTE:** The rear leaf spring pack is fairly heavy and awkward to lift. Assistance in removal of this part from the vehicle is **highly recommended**.
9. Remove the bolts that secure the brake line and wiring harness to the inside of the frame rail. There are two bolts securing the brake line transition fitting to the chassis and two bolts securing the rigid brake line and electrical wiring to the chassis. (PHOTO 6,7, & 8) These parts are secured in nylon clips and must be maintained clear of the vehicle chassis while the modification of the chassis for C-section installation is performed.
10. Locate the kit-supplied template onto the chassis side rail following the instructions on the template. Secure the template in place using tapered punches or suitable instruments. (PHOTO 9)
11. Mark the upper and lower hole locations on the chassis with a center-punch at the locations indicated. (PHOTO 10) If the lower hole locations are below the bottom of the chassis rail, mark the lower hole locations along the angled lines on the template so that they fall on the chassis rail.
12. Using a scribe, or suitable instrument, scribe a line connecting the center-punched locations on the chassis rail. (PHOTO 11) At the locations where the scribed lines run off the bottom of the chassis, use a combination square to scribe a line across the bottom of the frame, perpendicular to the long axis of the vehicle.
13. Drill 1/2" holes through the chassis at the upper punched locations. **NOTE: Use extreme caution when drilling near brake lines and electrical wiring to avoid damage to these components.** Also drilling the chassis can be made easier by initially using a smaller "pilot" drill and then increasing drill bit sizes to the final 1/2" size. **CAUTION: Always wear eye protection when using power tools.**
14. Cut the chassis along the lines scribed in step 10. Use of a die grinder with a cutoff wheel, a Sawzall, or a plasma cutter will work in this application. (PHOTO 12) Cutting to the center of the holes leaves the radius of the hole intact. This reduces the possibility of a stress crack developing at the end of the cutting line. **CAUTION: Always wear eye protection when using power tools. NOTE: DO NOT use a cutting torch on the vehicle chassis.**
15. Deburr the edges of the cutout location using a file or suitable tool.

16. Locate the appropriate C-section on the side of the chassis rail using a locating punch through the locating holes in the C-section and the chassis rail. Making sure that the C-section top flange is in contact with the top of the vehicle chassis, then clamp the C-section into place using C-clamps or a suitable tool.
17. Using the 1/2" holes in the C-section as guides, drill through the 8 holes located on the side of the chassis and the 2 hole locations on the bottom of the chassis. Deburr these holes after the drilling operation is complete. (PHOTO 13 & 14) **NOTE: Use caution when drilling through the chassis rail so that brake lines and electrical wiring and components are not damaged.** Also the drilling operation can be eased by drilling the initial holes with a small "pilot" drill bit and then using progressively larger drill bits until the final 1/2" size is reached. **CAUTION: Always wear eye protection when using power tools.**
18. Install the 1/2" hardware supplied with the kit in the drilled holes. (PHOTO 15 & 16) On the left hand side of the vehicle, the brake line junction bracket will be located by installing one of its original securing bolts through the bracket lower hole, and through the corresponding hole in the C-section. The upper bracket hole will be clearance drilled with a 1/2" drill bit and the upper kit supplied bolt will secure the bracket and C-section to the chassis. (PHOTO 17) Secure the electrical wiring to the brake line with wire ties. Torque the 1/2" hardware to 110-120 Ft-lb. **NOTE: Torque the hardware on the side of the C-section first, and then torque the bolts at the two bottom locations.** Install the kit supplied bump stops in the hole in the bottom of the C-section center area. (PHOTO 18)
19. On an extended cab vehicle with a two-piece driveshaft, clamp the leaf spring pack together with C-clamps and remove the stock leaf spring center bolt. (PHOTO 19) Install the kit supplied leaf spring center bolt from the bottom of the leaf spring and torque the coupling nut to 55-60 Ft-lb. (PHOTO 20) Set the kit supplied 4 degree shim and the rear axle tube saddle over the nut on the leaf spring center bolt. Mark the nut on a line flush with the bottom sides of the rear axle tube saddle. (PHOTO 21) Remove the axle tube saddle and the shim and trim the center bolt nut 1/8" lower than the previously marked spot. (PHOTO 22) This will allow sufficient clearance for the axle tube when the assembly is torqued together. **CAUTION: Always wear eye protection when using power tools.**
20. Raise the rear axle with the floor jack to the point that the leaf spring can be installed underneath it. Install the forward end of the leaf spring into the forward spring hanger and fir the leaf spring eye pivot bolt and nut but do not tighten at this time. (PHOTO 23) Lift the rear of the leaf spring so that the shackle can be located in the aft leaf spring hanger. Install the rear leaf spring shackle eye bolt and nut, but do not tighten at this time. (PHOTO 24)
21. Install the rear axle tube saddle and shim over the leaf spring center bolt nut with the thickest portion of the shim toward the rear of the vehicle and the cutout in the shim secure against the spring center bolt nut. **NOTE: The hole in the bottom of the rear axle tube saddle should be forward of the side-to-side saddle centerline.** (PHOTO 25)
22. Lower the rear axle into the saddle making sure that the "ears" on the axle tube saddle locate under the edges of the rear axle tube spring pad. (PHOTO 26) Install the kit supplied U-bolts, washers, nuts, and spring bottom plate. (PHOTO 27) Torque the nuts in 5 to 10 Ft-lb increments to a final torque of 85-100 Ft-lb.
23. Repeat steps 5 though 20 for the passenger side of the vehicle.

24. Install the kit supplied transmission tailshaft spacers by removing the stock transmission mounting bolts and raising the rear of the transmission with a jack or suitable lifting device. (PHOTO 28) To ease installation of the kit supplied transmission bolts, remove the bottom transmission mount nut and the transmission mount. Install the kit supplied transmission mount bolts through the transmission mount flanges and locate the kit supplied spacers over the bolts with the kit supplied washers on the ends of the spacer tubes against the transmission housing and transmission mount. (PHOTO 29 & 30) Re-install the transmission mount with the bolts and spacers intact and start all the hardware related to this mount before applying final torque. Torque the bottom transmission mount nut to 35-40 Ft-lbs, and the kit supplied spacer bolts to 47-52 Ft-lb. (PHOTO 31)
25. On an extended cab vehicle, it will be necessary to remove a portion of the under-cab crossmember to allow driveshaft clearance after installation of the center carrier bearing spacer. To ease this process, remove the bolts that retain the center carrier bearing to the vehicle crossmember. Slide the propeller shaft assembly as far to one side as possible. Locate the kit-supplied template on the center of the crossmember as directed by the instructions on the template. (PHOTO 32) After marking the front and rear of the crossmember as directed (PHOTO 33), remove the section indicated with a Sawzall. Plasma cutter or suitable tool. (PHOTO 34) **CAUTION: Always wear eye protection when using power tools.**
26. Lift the driveshaft assembly and install the kit supplied center carrier bearing spacer between the center carrier bearing and the vehicle crossmember with the "feet" of the spacer down toward the vehicle crossmember. (PHOTO 35) Install and torque the kit supplied hardware to 15-20 Ft.lb.
27. Install the kit supplied lower shock extension making sure that they slip into the cutout on the stock shock mounts. Torque the 9/16" bolt and nut to 180-185 Ft.-lb. Drill the small hole in the side or the back of the shock mount so that the kit supplied 5/16" bolt engages both the stock mount and kit supplied shock extension. Torque this 5/16" hardware to 15-20 Ft.-lb. (PHOTO 36, 37 & 38)
28. Re-install the shocks into the shock extensions and torque the original nut and bolt to 105-110 Ft.-lb. (PHOTO 39 & 40)
29. Re-install the wheels and tires and torque the lug nuts to 80-85 ft.-lb.
30. Raise the vehicle with the floor jack to clear the jack stands. Remove the jack stands and lower the vehicle to the ground. Install the bed of the vehicle. Check for any contact between the C-sections and the bed cross braces. Relieve the bed cross braces as necessary to the point that there is no contact between the cross braces and the C-sections. It is also necessary to remove a section of the bed cross brace that is located directly above the vehicle rear axle housing. This should be accomplished with a die grinder and a cutoff wheel, Sawzall or other suitable tool. (PHOTO 41 & 42) **CAUTION: Always wear eye protection when using power tools.** Re-install all bed mounting hardware. With the full load of the vehicle on the tires, torque all the leaf spring and shackle eye bolts to 81 Ft.-lb. The installation is complete.
31. **NOTE:** Re-check the torque on U-bolts after 10 miles, and then after 100 and 1,000 miles.

**PART LIST FOR 6605**  
**CHEVY CK 1500 FLIP KIT**

<b>PART No.</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
6605-887	Template	1
6605-010	Spacer Tube .75" x .120" x 1.25	2
110625	Flat Washer 3/8"	6
110502	Flat Washer 5/8"	8
110505	Nylon Insert Lock Nut 5/8"	8
110408	1/2"-20 x 1-1/4" HHCS	20
110402	Stover Lock Nut 1/2"-20	20
110660	Flat Washer 1/2"	44
110201	5/16"-18 x 1" HHCS	2
110204	Flat Washer	4
110203	Nylon Insert Lock Nut 5/16"-18	2
110456	9/16"-12 x 3.5 HHCS	2
110670	Flat Washer 9/16"	4
4915-001	Bump Stop	2
110454	Nylon Insert Lock Nut	2
7000-880	Spacer Tube .75" x .085" x 1.625"	2
111052	10mm-1.5 x 60mm HHCS	2
6550-050	Shock Extension	2
6600-005	Saddle	2
6600-015	U-Bolt	4
6600-010	U-Bolt Plate	2
6605-100	C-Section L.H.	1
6605-200	C-Section R.H.	1

**PARTS LIST FOR 6607  
CHEVY CK 1500 FLIP KIT**

6600-015	U-Bolt	4
6605-887	Template	1
6605-010	Spacer Tube .75" x .120" x 1.25"	2
110655	7/16"-20 x 3-1/2" HHCS	2
110303	Stover Lock Nut 7/16"-20	2
110645	Flat Washer 7/16"	4
110625	Flat Washer 3/8"	6
110502	Flat Washer 5/8"	8
110505	Nylon Insert Lock Nut 5/8"-18	8
110408	1/2"-20 x 1-1/4" HHCS	20
110402	Stover Lock Nut 1/2"-20	20
110660	Flat Washer 1/2"	40
110201	5/16"-18 x 1" HHCS	2
110204	Flat Washer	4
110203	Nylon Insert Lock Nut 5/16"-18	2
110456	9/16"-12 x 3.5" HHCS	2
110670	Flat Washer 9/16"	4
4915-001	Bump Stop	2
4977-001	Pinion Shim 4°	2
110252	Spring Center Bolt 3/8"-24 x 5	2
110257	Coupling Nut 3/8"-24 x 1-1/8"	2
110454	Nylon Insert Lock Nut 9/16"-12	2
7000-880	Spacer Tube .75" x .085" x 1.25"	2
111052	10mm-1.5 x 60mm HHCS	2
6550-050	Shock Extension	2
6600-005	Saddle	2
6600-010	U-Bolt Plate	2
6605-100	C-Section L.H.	1
6605-200	C-Section R.H.	1
6925-050	Bearing Spacer	1

















