



INSTALLATION INSTRUCTIONS

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4995

Center-Carrier Bearing Adjustment Slide Assembly Installation Instructions ½ Ton Silverado/Sierra (GMT 800/880) Extended 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.

This kit has been specifically engineered for the new GMT 800 series ½ Ton **extended cab GM trucks** utilizing a two-piece driveline design with a center-carrier support bearing assembly. This Adjustment Slide kit allows the driveline to be adjusted **both** vertically and horizontally to assist in eliminating, or greatly reducing, driveline vibrations occurring **after the vehicle has been lowered. We recommend** using only high quality **Belltech** lowering components with this kit.

Note: For stock vehicles exhibiting distinct driveline vibrations, **we recommend** installing our other center-carrier alignment kit, **P/N 4994**. This kit allows the required fine-tuning of the side-to-side (horizontal) center-carrier bearing position to eliminate driveline vibrations on stock extended-cab trucks.

As this is a vehicle-safety related installation, **we recommend** that a qualified mechanic at a properly equipped repair facility perform it. **We also recommend** that the installation be performed on a firm, flat and level surface, such as seasoned asphalt or concrete. **Remember, the use of safe and properly maintained equipment is very important!**

Safety Note: Proper use of safety equipment and eye/face/hand protection is absolutely necessary when performing the following procedures!

Required Tools

Before beginning this installation, review the following tool list and read and understand these instructions completely. **DO NOT** start this installation without **ALL** of the tools listed. Minimum tools required for this installation are:

- Properly rated Floor Jack and Support Stands
- Standard Wrench and Socket Set
- Torque Wrench
- Transmission Plug or Drain Pan
- Scribe and Straight Edge
- C-clamps or Locking Pliers
- Hammer and Center Punch
- Drill Motor with 3/8" Twist Drill
- Reciprocating Action Saw with Fine-toothed Blade
- 10'-12' of Brightly-colored String and Tape
- Cleaning Solvent and Rag
- 3/8" Nut Driver Socket with Drill Attachment

1. Properly lift and support the vehicle as described in the vehicle Owner's or Shop Manual.

2. Using a minimum of four (4) jack stands rated for the vehicle's weight, position the stands so that they properly contact both the forward and rearward frame rails of the vehicle. Slowly lower the vehicle onto the stands and, before placing the vehicle's entire weight on them, check that they properly and securely contact the frame rails.

Note: Check for safe vehicle stability before proceeding under the vehicle to begin the following procedures. **NEVER** work under a vehicle supported only by a jack. Always use properly rated jack stands to support the vehicle.

1. Support the driveline center-carrier bearing (CCB) using a support stand or lift jack.
2. Note the driveline's slip-yoke orientation to the transmission tail shaft and rear axle pinion shaft. The slip-yoke is indexed to the output shaft, with a splined-key, so that it can be re-installed in the same orientation later.
3. Mark orientation of rear driveline U-joint to rear axle-pinion shaft. Loosen and remove two (2) nuts and U-bolts securing U-joint to pinion shaft.
4. Remove two nuts securing the CCB to the frame cross-member mounting bracket.
5. Remove the rear U-joint from the rear pinion. Remove the driveline front yoke from the transmission, being **careful not to damage the seal**. Store the driveline assembly in a safe place to prevent damage. **Note:** A small amount of transmission fluid may leak from the tail shaft. Use a transmission plug to contain hazardous spills.

The factory CCB mounting bracket, located on the frame cross member (Photo 1) must be modified so that the CCB can be adjusted upward to allow for the correct driveline angle adjustment.

1. Locate marking template provided with kit.
2. Align slots in template with slots in the factory CCB mount (Photo 2), making sure that the arrow point towards the front of vehicle.
3. Align the front edge of the template so that it is even with the forward edge of the CCB mount. Using clamps as required, securely fasten the template to the CCB mount so that it will not move.
4. Using a scribe, mark the exact edge layout provided by the template.
5. Mark the arrow indentions located on the template, onto the CCB mounting bracket. These marks will be used to locate centerlines of two (2) 3/8" diameter holes.
6. After making the scribe lines, remove the template.
7. Using scribe and straight edge, scribe three (3) centerlines across bracket, from the marks made in Step 3e, to define center locations for two 3/8" diameter holes. See Figure A for detailed dimensions of layout.
8. Using a center punch and a hammer, punch the two (2) crossing center marks into the CCB mounting bracket.
9. Using a drill motor equipped with 3/8" diameter twist drill, drill two (2) holes centered on punch marks made in Step 3h, through bracket.

10. Using a Reciprocating Action Saw equipped with fine tooth blade, cut off wheel, or similar tool, cut the CCB mounting bracket as shown in Photo 3. Be careful to remove only the bracket section shown in Photo 4.

Note: Due to the close proximity of fuel tank to CCB mounting bracket, we **DO NOT RECOMMEND** using a flame-cutting torch or plasma cutter when performing this operation.

11. Paint all bare metal edges, after cutting, to prevent rust.
12. Place the kit supplied CCB Adjustment bracket above CCB mounting bracket as shown in Photo 5. **Note:** *When installed properly, the two tabs located on the Belltech CCB adjustment bracket should be facing down and pointing toward the rear of the vehicle.*
13. Re-install the driveline assembly, supporting driveline and CCB as described in Step 2a. Be sure to orient the slip-yoke to the transmission output shaft as removed in Step 2b.
14. Re-install the rear U-joint into the rear axle pinion as removed. Secure the rear U-joint to the pinion using the U-bolts and nuts as removed. Torque nuts to 19 ft-lbs.
15. With the driveline and CCB assembly lifted against the underside of mounting bracket, install the CCB reinforcement bracket as shown in Photo 6. Make sure the driveline assembly is located within the reinforcement bracket.
16. Insert two (2) 3/8-16 x 1 1/2" H.H.C.S. with washers, through slotted holes in the adjustment bracket, through mounting bracket and reinforcement bracket, from top. Secure with washers and locknuts. Snug bolts, but **do not** completely tighten at this time.
17. Locate the kit supplied CCB Adjustment bracket to the center-carrier bearing assembly.
18. Install two (2) 3/8-16 x 1 1/2" bolts through the slots in CCB adjustment bracket (from the rear face) and the two top tubular rivets in the CCB assembly (Photo 7). Secure with washers and locknuts. Snug bolts, but **do not** completely tighten at this time.

The horizontal driveline CCB assembly alignment is adjusted by first stretching a reference string from the center of the transmission tail shaft to the center of the rear axle pinion shaft. This string provides a visual reference in determining the true centerline between the transmission output shaft and rear axle pinion shaft.

1. With the transmission temporarily placed in neutral (if necessary), rotate the driveline assembly so that the closest cap on front U-joint of *rear driveline* (just behind CCB assembly) is pointing straight down.
2. Using a rag dampened with a cleaning solvent, wipe clean the lower surfaces of the transmission output housing and the rear axle center-carrier housing so that tape will adhere to them.
Caution: Do not use flammable cleaning solvents around sparks or open flames!
3. Using an approximately 10'-12' length of brightly colored string, fasten one end with tape to the centerline of transmission output tail shaft. Use casting parting-line in tail shaft housing as center reference (Photo 8).
4. Stretch the string taught and attaching the other end of the string to the underside of center-carrier housing at center of rear axle pinion shaft. Make sure the string does not hang-up on the driveline assembly or other parts of the chassis (Photo 9).

5. Sight down the string from the rear of vehicle to make sure it's stretched straight and tight.
6. Visually sight the cap on the front U-joint of the rear driveline directly from below. Adjust the side-to-side position of the CCB assembly, using the slots provided, so that the center of the cap is aligned with string (Photo 10).
7. When the driveline assembly is correctly centered along the string, tighten and torque two (2) vertically oriented bolts installed in Step 4e to 45 ft-lbs.
8. Place the transmission back into "Park" (automatic) or 1st gear (manual) if previously placed in neutral in Step 5a
 - a. Loosen and remove the bolts installed in Step 4g. Allow the driveline assembly to hang down so that it is supported by the CCB reinforcement bracket installed in Step 4d. This will allow access to the slot in top of the adjustment bracket.
 - b. Insert small ¼" long tube spacer between the small, upper slot located at the top of the CCB adjustment bracket and factory tubular frame cross-member.
 - c. Using a drill equipped with a 3/8" nut driver socket, install ¼" self-tapping sheet metal brace-screw with a washer through the slot in the bracket and the tube spacer, threading it securely into the center of factory tubular frame cross-member (Photo 11).
 - d. Re-install bolts, washers, and nuts through adjustment bracket and top tubular rivets in the CCB assembly as removed in Step 6a.
 - e. Position the adjustment bracket so that bolts are pushed all the way towards the top end of the slots. Tighten and torque the bolts to 45 ft-lbs.

Note: The holes in the CCB adjustment bracket are slotted for fine-tuning the vertical CCB position and driveline angles. After completing this installation, further adjustments may be necessary, if undesirable driveline vibrations exist.

9. Check and make sure ALL driveline fasteners have been properly installed and tightened.
10. Remove the jack stands and lower the vehicle to the ground.
11. Check the transmission fluid level as described in vehicle Owner's or Shop Manual. Replace any lost fluid as necessary.
12. Road test vehicle after completing this installation.
13. If any minor driveline vibrations are detected, adjust vertical CCB position as necessary.
14. Check all fasteners after 10, 100, and 1000 mile

Photo Key 4995 CCB Adjustment Slide Instructions

Part No.	Description	Qty.
4995-001	CENTER C.B. HOOP BRACKET	1
4995-003	CENTER C.B. VERT ADJ. BRACKET	1
4995-887	TEMPLATE C.C.B.	1

110060	HH SCREW 1/4" X 1 1/2"	1
110100	FLAT WASHER 1/4" A325	1
110255	NYLON INSERT LOCK NUT 3/8" -16	4
110625	FLAT WASHER A325 3/8"	8
112098	HHCS 3/8" -16 X 1 1/2"	4
112432	SPACER TUBE .625" X .120" X .25"	1

