

This product is designed to eliminate side shift of the rear axle suspended on OEM leaf springs on 2003 and newer Chevrolet Express 3500/4500 and GMC Savana 3500/4500 chassis with open C-channel frame.

Will not fit coaches with box frame. May not fit if air bags are installed.

Installation time is 1.5 hours.

A qualified mechanic using normal automotive tools and following all safety measures known should perform installation of this product.



ltem #	Description	Qty
1	SS450-1 Track Rod	1
2	Jam Nut – ¾ 16 UNF	1
3 4	Rod End Assembly	1
	SS350-3 Frame Bracket	1
5	480020 Nut Plate	1
6	SS618 Axle Cleat	1
7	SS350-2 Axle Bracket	1
8	³ ⁄ ₄ x 3" UNF Bolts	2
9	3/4 UNF Lock Nuts	2
10	¾" ID Flat Washers	4
11	1/2" x 1-1/4" UNF Bolts	2
12	½" UNF Jam Nuts	4
13	5/8" x 2" UNF Bolts	2
14	5/8" ID Flat Washers	2
15	5/8" ID Lock Washers	2
16	1⁄2" UNF Tall Nuts	2
17	1/2" ID Flat Washers	2 2 2 2 1
18	4" x ½" U-Bolt	1
19	Zip Ties	2
20	Split Conduit	1
21	Loctite	1

Item #	Torque Spec (Ft-Lbs.)		
2	100-150		
8	150-180		
11	40		
13	100		
18	70		

A. Preparation

Move the coach to a level, flat surface. If necessary, drive the rear wheels of the coach onto 4" high blocks and set the brakes or you may drive the coach over a work pit and chock the front wheels. The weight of the coach must be on the suspension when installing the Track Rod. Block off adequate space at the rear of the coach to work.

B. Installation of the Axle Bracket

The Axle Bracket Assembly will install on the passenger side of the rear axle, on the 4" section of axle tube to the left of the passenger side sway bar saddle bracket, as shown in *Figure 1*. View is from behind rear axle.

Install the **4**" x $\frac{1}{2}$ " **U-Bolt (Item 18)** from beneath the axle. Place the **SS6189 Axle Cleat (Item 6)** over the U-Bolt from the top of the axle, followed by the **SS350-2 Axle Bracket** (Item 7) with the $\frac{3}{4}$ " eyelet facing straight down as shown in *Figure 1*. Tuck parking brake cable under Axle Bracket as shown.



Install ¹/₂" Flat Washers (Item 17) and ¹/₂" UNF Tall Nuts (Item 16). Tighten just snug for now.

C. Installation of the Frame Bracket

The Frame Bracket Assembly will install on the drivers' side frame rail, in front of the fuel tank and crossmember and below the electronic module bracket as shown in *Figure 2*.

Place the **480020 Nut Plate (Item 5)** on top of the frame rail flange with lip facing inward and down. Position the **SS350-3 Frame Bracket (Item 4)** below the frame rail flange in line with the 480020 Nut Plate. Install the **5/8**" **x 2**" **Bolts (Item 13)** from the bottom of the Frame Bracket with **5/8**" Lock Washers (Item 15) and **5/8**" **Flat Washers (Item 14)**.

Use Loctite and tighten just snug for now. Check for clearance to brake lines/wiring/etc., applying **Split** Conduit and **Zip Ties** as necessary to maintain clearance.



D. Installation of Rod Assembly and Final Torque

Use the **SS450-1 Track Rod Assembly (Items 1-3)** to confirm the position of both the Axle Bracket Assembly and Frame Bracket Assembly. Confirm that both Rod Ends sit flush on the Axle and Frame Brackets. The bend in the bar will face toward the back of the coach, to provide clearance to the differential.

Tighten the vertical 5/8" bolts on the Frame Bracket Assembly to bring the Frame Bracket and Nut Plate flush against the bottom and top of the frame rail flange. Then, tighten the $\frac{1}{2}$ " x 1-1/4" UNF Bolts (Item 11) to push the Nut Plate against the inside of the frame, approximately 40 ft-lbs. Take care not to bow out the Frame Bracket by overtightening. Next torque the 5/8" bolts 100 ft-lbs. Now, using Loctite, tighten the $\frac{1}{2}$ " Jam Nuts (Item 12) against the bracket to lock the $\frac{1}{2}$ " UNF Bolts into place and keep them from backing out.

Re-check alignment between brackets and Track Rod Assembly. Now, once Axle Bracket position is confirmed, torque ½" UNF Tall Nuts on U-bolt to 70 ft-lbs. Install the two remaining ½" Jam Nuts to the U-bolt and tighten securely.

<u>With the weight of the coach on the suspension</u>, install the Track Rod Assembly to the Frame Bracket and Axle Bracket using the **3/4**" **Bolts, Lock Nuts** and **Flat Washers (Items 8, 9, 10)**, loosely at first. Be sure that there is a flat washer on each side of each of the urethane bushings on the rod ends. The adjustment end of the Track Rod Assembly will attach to the Frame Bracket as shown below in *Figure 3*.

Adjust the rod length to allow the rod end bolts to line up at normal ride height. Torque the rod end bolts to 150-180 ft-lbs. Tighten the ³/₄" **Jam Nut (Item 2)** to approximately 100-150 ft-lbs. Double check to confirm clearance between all SS350 kit components and all nearby OE components.



E. Follow-Up

Double-check the fasteners to make sure all are properly torqued. Test drive. To register your product for warranty purposes, go to the SuperSteer website at www.SuperSteerParts.com and fill out the online registration card. Re-check torque in 6 months.

Your comments are greatly appreciated.

Please feel free to contact SuperSteer at 888-898-3281 or e-mail at Sales@SuperSteerParts.com



LIMITED LIFETIME SUPERSTEER WARRANTY

1. WARRANTY

1a. WARRANTY OF CONFORMITY AT TIME OF SALE

SUPERSTEER warrants that at the time of sale of this product it will be free from defects in material and manufacture and will conform to SUPERSTEER'S specifications for the product.

1b. CONDITIONAL LIMITED LIFETIME WARRANTY

In addition to the preceding time-of-sale warranty, if the product registration is completely and accurately filled out at supersteerparts.com within thirty (30) days of purchase, SUPERSTEER will provide a Limited Lifetime warranty after sale the product will remain in good working order, PROVIDED THAT the product is installed and maintained in accordance with SUPERSTEER'S instructions and is not subjected to: (a) alteration or unauthorized repairs or repairs by anyone other than SUPERSTEER or a SUPERSTEER -authorized service center, (b) misuse, abuse, commercial use, or improper maintenance, (c) Acts of God (including without limitation hurricanes, tornadoes, floods, or other severe weather or natural phenomena), (d) failures due to products not supplied by SUPERSTEER, or (e) other treatments, uses, or installations for which the product was not intended. This warranty extends only to the first retail purchaser-consumer of the product and is not transferable.

2. DISCLAIMER OF OTHER WARRANTIES

The preceding warranties are the exclusive and sole express warranties given by SUPERSTEER. They supersede any prior, contrary or additional representations, whether oral or written. No agent, representative, dealer or employee has the authority to alter or increase the obligations or limitations of this warranty. Any implied warranties, including the WARRANTY OF MERCHANTABILITY and any WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, are limited in duration to thirty days or the term of the applicable express warranty provided above, whichever is longer. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

3. EXCLUSIVE REMEDY FOR ANY NONCONFORMITIES

If during the applicable Warranty Period, the product does not conform to the preceding Warranties, notify SUPERSTEER as provided below, and within a reasonable time SUPERSTEER will provide, at its option, one of the following: (1) replacement components for any nonconforming or defective product or components or (2) the percentage of the purchase price for the nonconforming product equal to the percentage of the Warranty Period remaining when SUPERSTEER is notified of the nonconformity. SUPERSTEER will, at its option, (a) use new and/or reconditioned parts in performing warranty repairs and making replacement products, (b) use parts or products of original or improved design in the repair or replacement. If SUPERSTEER repairs or replaces a product, its warranty continues for the remaining portion of the original Warranty Period or 60 days from the date of the return shipment to the customer, whichever is greater. All replaced products and all parts removed from repaired products become the property of SUPERSTEER. SUPERSTEER will not provide, and will not be liable for, labor, costs of removal or reinstallation of components, disposal, shipping, freight, taxes, or other incidental charges.

4. DISCLAIMER OF INCIDENTAL AND CONSEQUENTIAL DAMAGES

For any breach of warranty, the Owner must telephone SUPERSTEER at 1-888-898-3281 within thirty (30) days after discovering the nonconformity. Do not return any product without first calling SUPERSTEER and getting a return authorization number. Returned products must include the return authorization number and a copy of the original invoice, bill or other proof of the date of purchase. The date of purchase must coincide with the original warranty registration card on file. SUPERSTEER will authorize (a) shipment of the product to SUPERSTEER or (b) repair or replacement at the nearest warranty service center—in both cases with shipping at your expense. Do not purchase replacement parts or pay for repair labor—you will not be reimbursed. Compliance with the requirements of this paragraph is a condition to coverage under the Warranty: if these requirements are not complied with, SUPERSTEER will have no obligation to provide any remedy for any breach of warranty.

4. DISCLAIMER OF INCIDENTAL AND CONSEQUENTIAL DAMAGES

IN NO EVENT SHALL SUPERSTEER BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM NONDELIVERY OR FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

5. APPLICABLE LAW

This Warranty will be interpreted, construed, and enforced in all respects in accordance with the laws of the State of Oregon, without reference to its choice of law rules. The U.N. Convention on Contracts for the International Sale of Goods will not apply to this Warranty.

6. SEVERABILITY

If any provision of this warranty is found to be invalid or unenforceable, then the remainder shall have full force and effect, and the invalid provision shall be partially enforced to the maximum extent permitted by law to effectuate the purpose of the agreement.

7. ADDRESS FOR NOTICES TO SUPERSTEER

SuperSteer, 458 Redwood Hwy, Grants Pass Oregon 97527

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.