

Steering Control

INSTALLATION INSTRUCTIONS

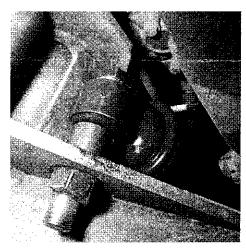
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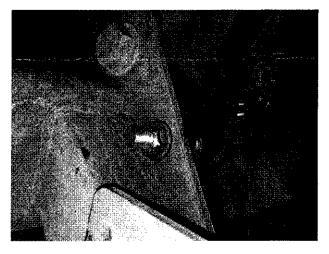
S-1460K4 (Custom – ABS Interference)

PARTS NEEDED 41-230	SAFE T PLU	S Unit (Blue)	
S-1460K4	Mounting Hardware Kit consists of:		
	55-217.5	Tie Rod Bracket	
	12-38-2000K	3/8 X 2" U-Bolt Kit	
	16-175	3/4" X 1" X 1" Spacer	
	10-8-400	³/4" X 4" Bolt	
	10-8-300	3/4" X 3" Bolt	

Thoroughly clean the section to tie rod before attaching bracket.

- Step 1. On the <u>Passenger Side</u>, locate pre-existing hole of the frame to the rear of the shock on the brace bracket. This will be our location to drill a single mount hole.
- Step 2. Proceed to drill a ¾" hole into existing hole. If no hole exists, drill a ¼" pilot hole first, then drill out ¾" installation hole.

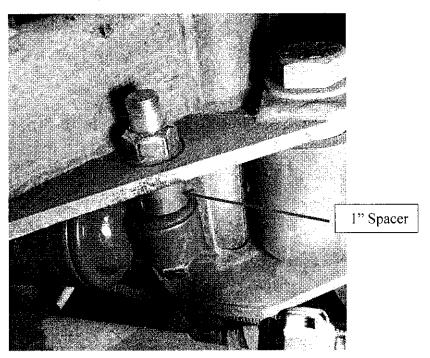




Step 3. Take your 4" x 3/4" bolt with 3/4" flat washer and slide bolt into hole that was just drilled.



Step 4. Take your 1" spacer onto bolt then slide <u>Large End of Safe T Plus</u> unit onto bolt. Take another 3/4" flat washer and 3/4" locking nut and start it onto the 3/4" bolt. Tighten the 3/4" lock nut down to 80 – 90 foot pounds of torque. The Safe T Plus unit should be securely mounted to the drilled hole location.



Step 5. Next, take your 55-217.3 tie rod bracket and assemble to tie rod with bracket on top edge of 3/4" mounting hole, facing in a vertical position towards the rear of vehicle (see below).





Step

IMPORTANT

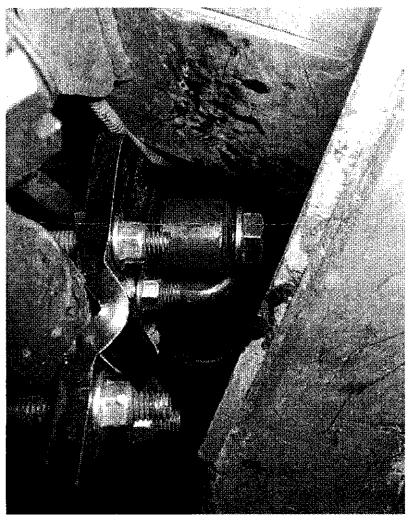
6.

Rotate the 55-217.3 tie rod bracket in a vertical position on the tie rod. It will be very compact underneath. The key is to position the 55-217.3 tie rod bracket to allow the Safe T Plus 41-230 unit total clearance from contact with any other components. Then, tighten U-Bolt to tie rod to **20 foot pounds of torque**.

(Note: Over-tightening the U-bolts will cause the 55-217.3 bracket to start bending – if this occurs, please contact the Safe T Plus factory. Over-tightening the U-bolts could cause the U-bolts to start slipping on the tie rod).

Step 7. Tighten the Small End of the Safe T Plus to the 55-217.3 tie rod bracket using the 3/4" bolt, washer and nut. Tighten the 3/4" bolt and nut to 80-90 foot pounds of torque.



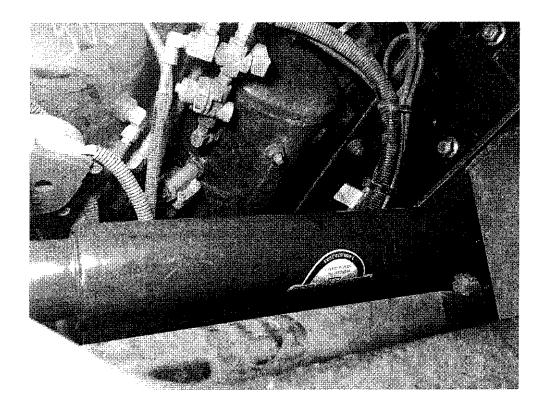


Once Safe T

Plus is tightened down to the frame and tie rod bracket, a full turn rotation turn test is required. Make a full right and left-hand turn, verify that the Safe T Plus 41-230 unit is not touching or making contact with any other components underneath. If Safe T Plus touches or makes contact with another component, rotate the 55-217.3 tie rod bracket slightly in the proper direction to get full clearance. If Safe T Plus is still touching or contacting components, please call our technical support (800) 872-7233 for further assistance.

Step

8.



Step 9. **ROAD TEST & ADJUSTMENT PROCEDURES:** See attached documents.

After your first road trip with Safe T Plus Steering Control installed, please let us know how Safe T Plus performed. We enjoy hearing from our clients. You may contact us at support@safe-t-plus.com or (800) 872-7233.



Road Test & Centering/Adjustment Procedures



To ensure proper alignment and installation of the SAFE-T-PLUS unit, the vehicle should be road tested.

Take along a **9/16"** deep well socket wrench to fit the U-bolts on the tie rod. While driving on a straight stretch of road, vehicle should easily follow a straight course, if not, adjustment is necessary.

To adjust Safe-T-Plus Steering Control follow the below instructions:

- 1. After installation, test drive the vehicle
- 2. Try to test with the most perfect conditions: straight road, no crown, limited wind (if possible), freeways seem to work best or large parking lots.
- 3. Hold steering wheel in a <u>straightforward</u> position to determine if the vehicle is tracking straight or pulling to the left or the right.
- Stop vehicle, and set brakes.
- 5. Take note of where the steering wheel must be held to track straight down the road, and mark it accordingly. Pull in somewhere, and with the motor, steering pumps, all running. Have someone hold that steering wheel firmly in exactly the proper position.*
- 6. Underneath the vehicle, slightly loosen nuts on tie rod U-bolts and allow unit to self-center. tap the Safe-T-Plus unit a few times with your fist, or a rubber mallet, and let the internal spring push / pull the tie rod bracket into a neutral position. (Frequently this slight movement is not noticeable)
- 7. At this point, take a moment to square-up the U-bolts as they lay up and across the tie rod. If you've left them askew, they may pull the bracket out of position as they tighten.
- 8. Retighten the U-bolt nuts (only 20 lbs. of torque)
- 9. Now test drive again.
- 10. Repeat this step if necessary until vehicle will hold a straight line**

Note:

- *Be mindful that if you are holding 2 to 3 inches of steering wheel against the spring to track straight, it's only 1/16 to 1/8 of an inch down below on the tie rod bracket.
- **Repeat if necessary, until you're satisfied. Once completed you should be able to achieve holding your lane position for a 1/2 mile or so at freeway speeds, with hand gently resting on the steering wheel without correcting.

Extra Detail on Final Adjustments (Tips)

- Using tape, you can stick a ruler or pencil to the dash to act like a centering indicator for more accuracy.
- Another trick is marking the left and right limits of any inherent slop in the center of the steering wheel operation. At the shop, line up the center marks, and do the install.



• Be patient, be precise when moving the tie rod bracket, as just a 1/16 of an inch will make the difference in drifting off half a lane in 100 yards or less.

When making very small adjustments, (1 ½ inches of steering wheel displacement or less) it may be necessary to hold the steering wheel in the direction of correction just a little beyond the required (¾ to ½ inch more) in order to "load up" the internal spring just a little and let the unit help with the relocation of the tie rod bracket. There really isn't any other way to move the tie rod bracket without having some assistance holding the steering wheel while adjustments are being made down below.

If overshooting the desired results, mark a line a set distance from the tie rod bracket so that they can measure in what direction, and how far each adjustment was made.

A "how-to" properly center/adjust Safe-T-Plus
Control video is available on our
to help guide you through the
adjustment procedures. Feel free to
video at www.safe-t-plus.com
right).



Steering website

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If you need additional assistance, please call us toll-free (800) 872-7233 or email us at support@safe-t-plus.com and technical support will be happy to assist.

