INSTALLATION INSTRUCTIONS FOR MCI BUS

PARTS NEEDED: 2-08-05

41-230 SAFE-T-PLUS unit (Blue)

M-139K3 Mounting Hardware Kit consists of:

55-139 Anchor Bracket 55-208 Tie Rod Bracket 10-8-400 3/4-16 X 4" Bolts (2)

14-800 3/4-16 Stover Lock Nut (2) 12-38-1750K 3/8 X 1-3/4" U-Bolt Kit

Anchor Bracket 55-139 mounts to the jack pad with the two 3/4 X 4" bolts and lock nuts provided (see sketch).

Tie Rod Bracket 55-208. Using U-Bolts provided, install Tie Rod Bracket on tie rod (see sketch). **DO NOT TIGHTEN AT THIS TIME.**

Thoroughly clean the section of tie rod before attaching bracket.

- Step 1. Set front wheels of vehicle to a straight-ahead position. This is **IMPORTANT.** Later adjustment of the Tie Rod Bracket may be avoided if front wheels are set perfectly straight.
- Step 2. Attach Anchor Bracket around jack pad with the two 3/4 X 4" bolts and lock nuts provided (see sketch).
- Step 3. Install Anchor Bracket end of unit first. Align holes and insert one of the 3/4" bolts provided, using a flat washer on the opposite side of the unit-mounting eye from bracket.
- Step 4. Install 3/4" locknut to mounting bolt and tighten with a wrench to 80-90 foot pounds of torque.
- Step 5. Attach the unit to the tie rod by sliding Tie Rod Bracket to align the nearest 3/4" hole in bracket with unit mounting eye. Insert 3/4" bolt provided through aligned holes. Using a flat washer on opposite side of unit mounting eye from bracket, fasten locknut and tighten with a wrench enough to allow the unit eyelet to easily rotate around mounting hole.
- Step 6. Rotate Tie Rod Bracket around tie rod so that the small diameter end of the SAFE-T-PLUS unit is approximately 1/2" lower than the large end of the unit.
 - When positioned, tighten the four (4) U-Bolt nuts to 25-35 foot pounds of torque while maintaining and even amount of threads extending past each nut.
- Step 7. Tighten 3/4" locknut to 80-90 foot pounds of torque.
- Step 8. Check to be sure installed unit clears all other parts of vehicle by turning steering wheel to both extremes right and left positions. If unit scrapes or binds at any point, review these instructions and make necessary corrections by rotating unit on the tie rod to obtain necessary clearance.

Step 9. **ROAD TEST & ADJUSTMENT PROCEDURES:** To ensure proper alignment and installation of the SAFE-T-PLUS unit, the vehicle should be road tested. Take along a 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, take note of where the steering wheel must be held to track straight down the road, and re-mark it accordingly. 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.

A note here: I try to test with the most perfect conditions, straight road, no crown, freeways seem best for me, but I've also used parking lots too.

Now is where the extra hands come in handy. Pull in somewhere, and with the motor, steering pumps etc, all running; have someone hold that steering wheel firmly in exactly the proper position. Underneath, slightly loosen the 9/16 nuts on the tie rod bracket, 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. You may feel it move, more than see it, as were talking about very small increments.

Another note: 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. Tighten everything back up. Dust yourself off. Test drive again.

Repeat this step as necessary to achieve a satisfactory result. It takes patience, but once accomplished Safe-T-Plus is a trouble free, maintenance free product providing years of dependable service.

Additional help needed? Call 800-872-7233 for assistance.

