## INSTALLATION INSTRUCTIONS FOR WORKHORSE STAIGHT AXLE W-20 & W-22

PARTS NEEDED: BKB - 4/8/03

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

W-104K1.5 Mounting Hardware Kit consists of:

55-104-5 Anchor Bracket 55-206 Tie Rod Bracket 12-38-1375K 3/8 X 1-3/8 U-Bolt Kit

- 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. Remove two nuts on one leaf spring U-Bolt which is on the Passenger side and toward the rear of the coach. Use plastic or wooden hammer to lightly tap the U-Bolt up enough so that the 55-104-5 Anchor bracket can be inserted between the Tie Rod and the Shock Absorber Mounting Bracket (Anchor bracket angled edge must be toward the tire). Lightly hammer the U-Bolt back down through the axle and the Anchor bracket holes and re-install the washers and nuts which should be torqued to 200 Ft./Lbs minimum.
- Step 3. Install Tie Rod Bracket on tie rod with U-Bolts provided. Do not tighten at this time.
- Step 4. a) Install large end of SAFE-T-PLUS Unit to underside of Anchor Bracket with 3/4" bolt, nut and washer provided. (See sketch)
  - b) Install small end of SAFE-T-PLUS unit to top of Tie Rod Bracket with bolt, nut, & washer provided. Allow enough slack so the tie rod bracket can rotate for alignment to the tie rod. Do not fully tighten at this time. (See sketch)
- Step 5. a) Tighten the unit bolt on Anchor Bracket to 80-90 foot pounds of torque.
  - b) Tighten the U-Bolts on the Tie Rod Bracket to 25-35 foot pounds of torque.
- Step 6. Check to be sure installed unit clears all other parts of vehicle by turning steering wheel to both extreme right and left positions. If unit scrapes or binds at any point, review these instructions and make necessary corrections by rotating unit on Tie Rod to obtain necessary clearance.

Step 7. **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 follow a straight course, if not, adjustment is necessary. To adjust, hold steering wheel in a **STRAIGHTFORWARD** position, stop vehicle, and set brakes. Loosen nuts on Tie Rod U-Bolts and allow unit to self-center. (Frequently this movement is not noticeable). Retighten nuts and test drive again. Repeat this step if necessary until vehicle will hold a straight line. **Note:** You must hold the steering wheel in a straightforward position, with the engine running, until the adjustment has been completed. Otherwise the wheels will return to the pulling position instead of the straight ahead position desired. If you need additional assistance, please call us toll-free at **(800) 872-7233**.

## W-104K1.5 INSTALLATION INSTRUCTIONS

Note: Later Workhorse chassis have more shock mount clearance on the passenger side, nearly 3/8 more. This installation will work anchored in either position.

