



Models SR7733T, SR10KT SR14KT & SR14K35T Equalized Tandem

Installation Instructions

IMPORTANT:

- ◆ Reinforce trailer frame in section areas between front and rear axles. (Remember that each suspension hanger carries the combined share load of both axles at each side).
- ◆ Use extra caution in case you need to disassemble the suspension; be aware that both Aeon rubber springs (Jounce and Rebound) are factory pre-loaded.
- ◆ Axle seats must be welded to axle after U-bolts are torqued. Do not weld U-bolts

Procedure:

1. Mark frame rails where center of tandem (centerline of tandem axles) should cross frame (fig. 2).
2. Locate hangers on frame rails, opposite to each other. Mate inboard corner faces of each hanger with outboard corner faces of its corresponding frame rail (fig. 1). Move hangers along frame until center of hanger lines up with mark on frame rail at each side. Clamp hangers to frame.

3. Position axle on axle seats and install U-bolts around axle. Insert washers and nuts on the opposite side of control arm plate. Tighten nuts until snug. The arch (or camber) on axle must be facing up when trailer is right side up. Slide axle on axle seats and center it to trailer frame. Ensure that the contact area of U-bolts on axle is free of grease, oil, etc.
4. Make a crossmember and install it between hangers: material is 2"X4"X1/4" Hollow Structural Steel, ASTM A500 Grade C or G40.21 Grade 350W. Saw cut tube to the following length: The measured outside to outside width of trailer frame less 10". Lift crossmember and locate it between hangers. Insert each end of tube in between the two tabs of a hanger. Slide to center crossmember. Make sure hangers are vertical and crossmember is horizontal. Tack weld and then weld crossmember to hanger tabs all around tabs. Crossmember can also be bolted to hangers in case welding is not practical or not preferred: use four 1/2" bolts, 3-1/2" long together with lock nuts and washers (fig 1). Use holes of tabs as templates to locate and drill holes in the tube.

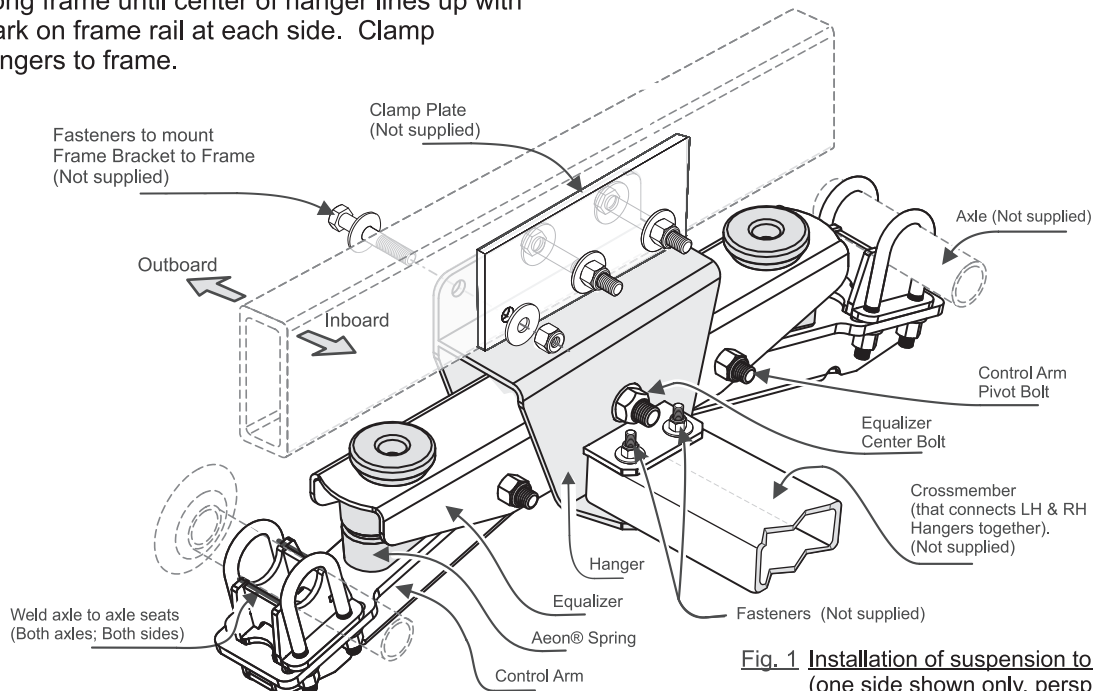


Fig. 1 Installation of suspension to trailer frame (one side shown only, perspective view from inboard)



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Procedure: (Cont.)

5. To align axle, locate the left hand and right hand side hangers on frame rails, opposite to each other. Move hangers along frame until center of spindles line up with marks on the frame rails, viewing from top (fig. 2). Clamp hangers to frame. Measure and compare distances "A" and "B". Reposition hangers until the difference between "A" and "B" measurements is less than 1/8".
6. Once axles are aligned, torque U-bolts to 70-75 ft-lbs in a crisscross pattern. Drill three holes in the frame at each side using holes of hanger as a template. Use 5/8" (grade 5 min.) bolts, lock-nuts, and 5/8" washers to mount frame brackets to frame (fasteners are not included). Torque mounting nuts to 165-175 ft.lbs. If trailer main frame is made from rectangular hollow sections, reinforce it by adding clamp plates to the inboard side of frame so that it does not collapse under compression of bolts.
7. Weld axle seats to axles (along axle only), as shown in fig. 1. Use 1/4" fillet weld.
DO NOT weld U-bolts.
8. Remove clamps.

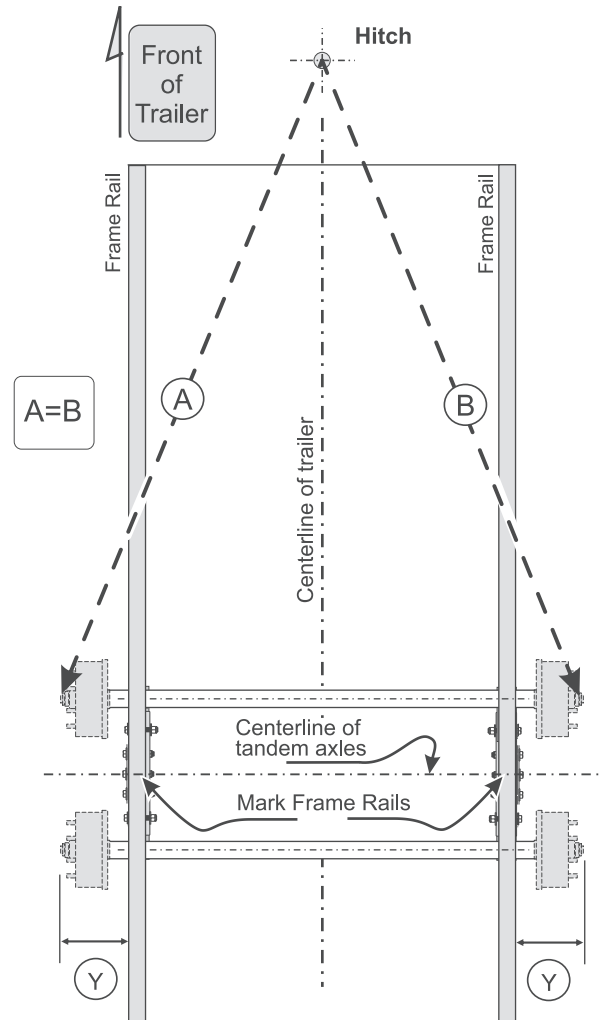


Fig. 2 Axle Alignment (View from the top)