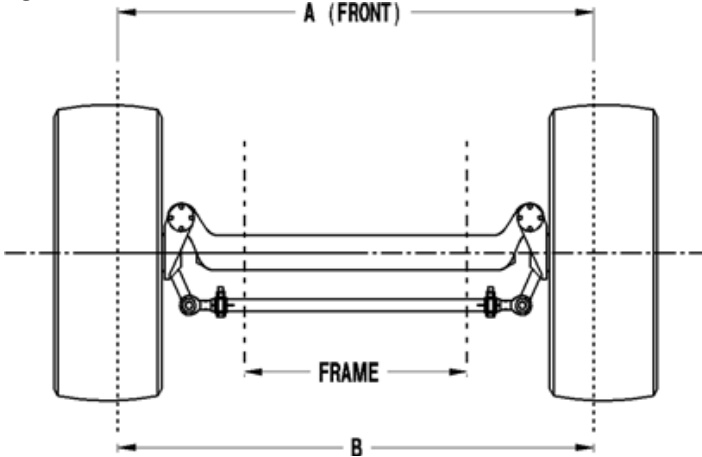


INSTALLATION INSTRUCTIONS

Toe-In & Toe-Out Adjustments for Self-Steering Axle

Figure 1



1. Tires must be of the same size, pressure, and tread pattern. Hubs, drums and brakes must be identical. All suspension bushings and parts must be in good mechanical order and correctly adjusted.
2. Mark a fine line on the tire tread all around the tire.
3. Measure between the scribed lines on tires in front and on the back, on axle center line. "A" is always measured in front, when axle/suspension is normally loaded. "B" is always measured behind the axle. TOE-IN: "A" is smaller than "B". TOE-OUT: "A" is larger than "B".

See "Toe-in/out" settings for your installation's correct toe setting (Fig. 2).

4. Adjust by rotating the tie-rod with axle unloaded. Tie-rod ends must be square with stud, and guide plate must be centered in U-bracket before tightening the clamps. Tighten all the clamp bolts and the tie-rod end nuts to **150/200 ft.-lbs.** of torque.
5. Check toe-in after each adjustment until the axle is within specification.

When to check your toe settings

1. Before releasing all new installations.
2. Whenever the vehicle experiences unusual vibration or when the axle is unstable.
3. When tires experience unusual edge wear.
4. Each time new tires are installed.
5. Each time the tractor steering is aligned.
6. Each time repairs are done to the axle.

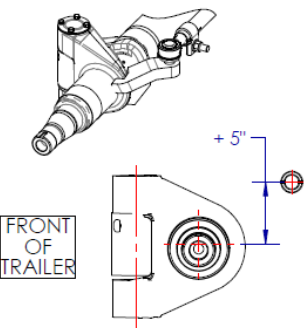
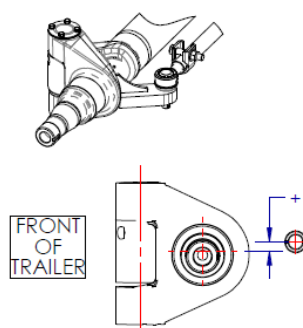
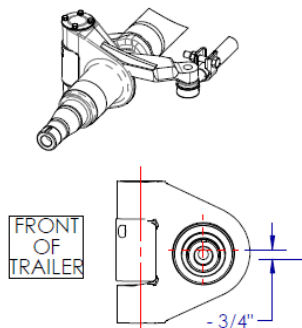
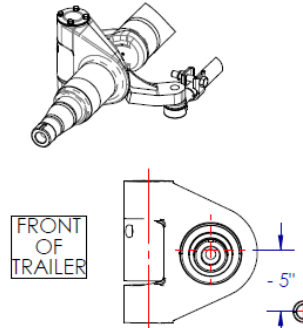
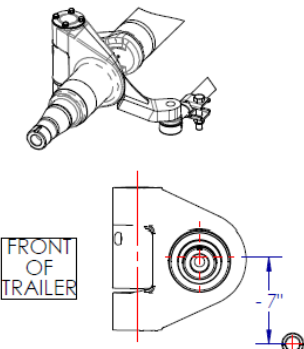
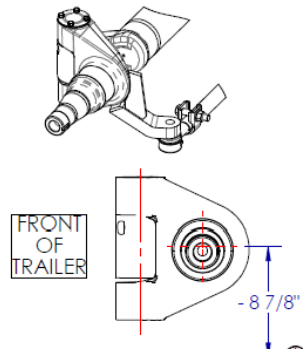
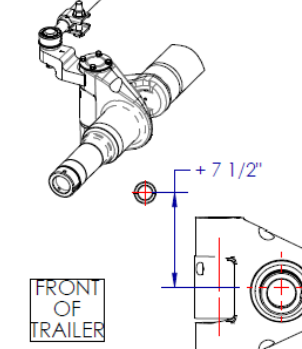
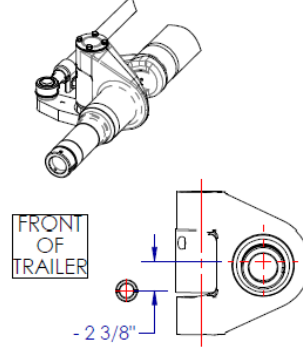
Toe-in/out settings

SSA Axles Toe-in/Toe-out changes from unloaded to loaded condition due to normal flexing of the axle and suspension components. Setting toe values will be affected by load and tie-rod height position.

When setting up on a **LOADED** trailer, all SSA axles should have a toe-in setting of $+1/16"$, $-0"$.

When setting up on an **UNLOADED** trailer, toe setting varies by tie-rod height and location. Please follow the guide below for your specific axle setup. It is recommended to verify your toe setting with a loaded trailer.

Figure 2 Toe-in/out settings for installation

 FRONT OF TRAILER	 FRONT OF TRAILER	 FRONT OF TRAILER	 FRONT OF TRAILER
+5" TIE-ROD HEIGHT TOE OUT: 1/4" to 5/16" TOE OUT ANGLE: 0.40°	+3/4" TIE-ROD HEIGHT TOE IN: 0" TOE IN ANGLE: 0°	- 3/4" TIE-ROD HEIGHT TOE IN: 1/8" to 3/16" TOE IN ANGLE: 0.22°	- 5" TIE-ROD HEIGHT TOE IN: 3/8" to 7/16" TOE IN ANGLE: 0.58°
 FRONT OF TRAILER	 FRONT OF TRAILER	 FRONT OF TRAILER	 FRONT OF TRAILER
- 7" TIE-ROD HEIGHT TOE IN: 1/2" to 9/16" TOE IN ANGLE: 0.76°	- 8 7/8" TIE-ROD HEIGHT TOE IN: 5/8" to 11/16" TOE IN ANGLE: 0.94°	+7 1/2" TIE-ROD HEIGHT TOE IN 1/2" to 9/16" TOE IN ANGLE: 0.76°	- 2 3/8" TIE-ROD HEIGHT TOE IN: 1/4" to 3/8" TOE IN ANGLE: 0.45°

FORWARD FACING TIE-ROD SSA