What is the proper way to align my trailer?

AXLE ALIGNMENT

Proper axle alignment is a vital part of trailer maintenance. Failure to maintain proper alignment may cause tire scrubbing and suspension component strain. Your trailer’s alignment should be checked regularly and the axles realigned when required to prevent unnecessary tire wear.

1. To properly align the suspensions make sure the trailer is unloaded. Free the suspension of any “binds” by first pushing the trailer backwards and then pulling it forward a sufficient distance. Check axle alignment with the trailer on a level surface with the trailer level both side to side and front to back, with tires properly inflated, trailer securely restrained, trailer brakes (service & parking) released and with the trailer ride height valve properly set (if an air ride).
2. Check each dual tire set. Tires of each set must be matched to a maximum of 1/8” tire radius. Air pressure must be the same in all tires.
3. Using a steel measuring tape, measure from the center point on the bottom of the king pin to identical locations on each end of the front axle using a consistent amount of pressure on the tape measure.
4. If these measurements differ by more than 1/16”, adjust one end of the front axle forward or rearward until identical measurements are obtained on both ends.
5. After the front axle is aligned and secured, measure from the end of the front axle to the end of the rear axle on each side.
6. If these measurements differ by more than 1/16”, adjust one end of the rear axle forward or rearward until identical measurements are obtained on both ends.

Spring suspensions are equipped with screw adjusted torque arms located on the driver’s left side of the trailer. Adjustment of the alignment is accomplished by turning the torque arm in or out, depending on the adjustment required.

1. Loosen the radius rod clamp bolts.
2. Move the left end of the axle forward (shorten the alignment measurement) by turning the torque arm to make it shorter.
3. Check the alignment measurements. Repeat the adjustment in Step #2 as necessary.
4. When the axle is correctly aligned, tighten the radius rod clamp bolts to 130 ft. lbs. oiled or 170 ft. lbs. dry.

Note: Check the clamp bolt torque within the first 50 to 100 miles of operation following alignment.

Air ride suspensions are equipped with mechanisms to allow the movement of one end of the axle forward or rearward for the purpose of aligning the trailer axles.

Inspect the hanger pivot bushings as well as all other suspension components before adjusting the alignment.

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The Neway RL-230, RL-250 and RLU-228 suspensions use a bolt at the suspension pivot connection with an eccentric collar to allow for adjustment for axle alignment.

1. Loosen the 1 1/8" pivot bolt lock nut on the inside of the suspension hanger.
2. Rotate the bolt head clockwise to move the axle forward (to shorten the alignment measurement) or rotate bolt head counter clockwise to move the axle rearward (to lengthen measurement).
3. Snug the hanger bolts to 200 ft. lbs. and check the alignment measurements. Loosen the nut and repeat the adjustments in Step #2 if necessary.
4. When the axle is correctly aligned, re-torque the lock nut on the pivot to 550 ft. lbs.

The Neway CB2300 & CBX23 suspension with the Quick Align feature uses a bolt on the front the suspension hanger to allow for adjustment for axle alignment.

1. Using a hand wrench, rotate the Quick Align bolt clockwise to shorten the alignment measurement or counter clockwise to lengthen the alignment measurement.