Weight Limits and Sliding Tandem Axle Adjustment

**The standard and allowable weight for a regular five-axle truck and semi-trailer on the Interstate system is as follows:  steer axles 12,000 lbs., drive axles 34,000 lbs. and the trailer tandems are 34,000lbs. This takes the truck to the max gross weight limit of 80,000 pounds. Spread-axle trailers can carry up to 20,000 lbs per axle (**dependenton distance between axles**) for a total of 40,000 lbs. These spread-axle trailers are not equipped with sliding capabilities and must remain under the 80,000 lbs. max gross weight limit.**

The positions of the axles are important for a professional [truck](http://www.ehow.com/how_2117901_slide-tandem-axles-semi-truck.html) driver to understand if he/she wants to safely and legally haul a load. Many semi trailers have sliding tandem axles that are mounted directly on the frame rails under the trailer. When the weight of the load being carried is unbalanced, some of it can be transferred to the truck/trailer by sliding the axles on the trailer. This important function can adjust the off-tracking of the trailer, affect the turning radius of the rig, and shift the balance of the weight between truck and trailer axles. The amount of weight that will be shifted is dependent on several factors to include; load weight and positioning of the load inside the trailer.

Sliding the tandem axles to the rear, shifts weight from the trailer tandem axles to the drive axles on the truck. Be sure to FIRST check the bridge length requirements to make sure you are not sliding the axles too far to the rear to meet the bridge law requirements. Sliding the tandem axles to the rear will also make tight turns more difficult to maneuver. More distance in a turn is needed due to the increased distance between the pivot point (kinpin /5th wheel) and the tandem axles.

Sliding the tandem axles forward, shifts weight from the drive axles on the truck to the tandem axles on the trailer. Sliding the tandem axles forward will also cause more of the trailer to hang over the axles. You must remember this when making turns that could cause the over-hang to swing to far, striking parked cars, poles, or other roadside obstacles.

Sliding the Tandem Axles

**Step 1;** Make sure the truck is properly coupled to the trailer. With the engine running and transmission neutral, **set the brakes for the truck only** and exit the cab.

**Step 2;** Locate the locking lever which is usually on the driver's side of the trailer and in front of the trailer's wheels. Lift and pull the lever's handle until it slips into the sideways slot on the lever guide. This will disengage the locking pins. Check to make sure all pins are retracted properly. For added safety **chock trailer front tandem tires** at this time.

**Step 3;** Return to the cab of the truck and **set the trailer brakes** by pulling out the red trailer air supply valve. **Release the truck's brakes** by pushing in the yellow parking brake valve. With the trailer brakes and tire chocks holding their wheels in place, the truck can now pull or push the trailer back and forth on the slide to make the needed adjustments.

**Step 4;** To move the tandems back, ease the truck forward in the lowest gear until the desired position is reached. To move the tandems forward, ease the truck into reverse gear until the desired position is reached.

**Step 5;** **Reset the truck's brakes** and go back to the trailer. Release the locking lever and place it into the locked position. Return to the cab of the truck.

**Step 6;** **Release the brakes on the truck only**. With the trailer brakes still set, gently tug or push against the trailer to seat the locking pins. If you listen carefully, you should hear the pins when they lock into place. **Set the brakes on the truck** and exit the cab.

**Step 7;** Return to inspect all pins to be sure they are firmly seated through the holes of the tandem axle slides. Make sure the locking lever has remained locked and is secured. **Remove the wheel chocks** at this time.