Proper Location of the Fifth Wheel

The fifth wheel should be properly located for the following reasons:

1. Proper load distribution;
2. Vehicle steering;
3. Avoiding damage to the tractor/sleeper;
4. Avoiding damage to the trailer/landing legs.

It is Fontaine’s recommendation that the fifth wheel should always be located in front of the rear axle or bogie centerline of the rear tandem.

Although one should see their salesperson when spec’ing a tractor, here are some key measurements needed to help determine the location of the fifth wheel

1. The optimum kingpin load for the tractor. This will tell you where the fifth wheel should be positioned on the tractor when it is coupled to the trailer. You then have to determine the amount of room needed so that the front of the trailer doesn’t contact the rear of the cab and also to make sure that the tires, mud flaps, or frame does not contact the landing legs.

2. Calculate the amount of room needed to allow the trailer to swing at the foremost setting of the fifth wheel without contacting the tractor, sleeper, or attachments to the cab. Remember to take into consideration the distance from the center of the kingpin to the front of the trailer as they may vary.

2. Calculate the distance needed to allow the trailer to swing the rear most setting of the fifth wheel without the tires, mud flaps, or frame contacting the landing legs. Remember to take into consideration the distance from the center of the kingpin to the front of the trailer as they may vary.