



WINTER DRIVING

GET READY FOR WINTER

Preventing Jackknives



What is a truck jackknife? The term “jackknife” comes from a pocketknife folding configuration. The collision term “semi-truck jackknife” refers to a truck accident where a truck with two separate parts (a cab and a trailer) folds in on itself at the point of separation. The cab and trailer swivel where they are linked together, at the fifth wheel, forming a 90+-degree angle of an “L” or “V” shape.

What causes a truck to jackknife?

In most cases, it comes down to a loss of traction. Traction has to do with how well a wheel's tires grip the road.

Slick roads and improper braking causes tires to skid along the pavement instead of rolling.

Slamming on the brakes could have an adverse effect, causing brakes to lock and leaving the skidding wheel without enough traction to stop.

If the tractor or the trailer wheels lock, the loss of traction will allow the rig to swing sideways out of control into a tractor jackknife or a trailer jackknife.

Types of surfaces

Wet, snow packed, and icy roads significantly increase stopping distance. Truck speed must be reduced for safe operation and control for surrounding conditions.

Bridges will freeze before the road will, especially when temperatures drop to 32 degrees F or below.

Slight melting will make ice wet. Wet ice is much more slippery than ice that is not wet.

Black ice is a thin layer that is clear enough that you can see the road underneath it. It makes the road look wet. Any time the temp. is below freezing, and the road looks wet, be alert for black ice.

Methods for preventing semi-truck jackknife situations

1. Heavier loads provide more traction, light loads are high risk for jackknifing.
2. Maintain an appropriate speed for existing conditions (road conditions, traffic, precipitation)
3. Even brake pressure must be applied, but stop short of locking down the brakes.
4. Give yourself increased following distance, more distance = more time to make decisions.
5. Avoid having to brake or even decelerate on a curve.
6. Keep both tractor and trailer properly maintained by doing a thorough pre-trip inspections daily.
7. Modern anti-lock braking systems automatically adjust the braking force to prevent wheel lockup.

