WEST BEND®

Driving Safety Throughout the Industry

Fifth Wheel Pin Pulling

Drivers are likely to injure their backs, shoulders, or hands by pulling the fifth wheel pin. Pulling the pin generally requires anywhere between 37 and 77 pounds of force, with an average of 50 pounds. The condition of the fifth wheel, as well as the slope and terrain under the cab and trailer wheels can also create a binding condition that requires even more force to pull the pin.

Pulling a fifth wheel pin in the traditional way requires the driver to reach in about two feet in-between the top of the tires and bottom of the trailer to grasp and pull the release handle. This makes the driver bend forward at the waist, twist their back, and pull with only one hand. This posture greatly reduces the amount of pulling force one can create, and it places the body in a position where it's much more likely to get hurt pulling the pin. Most release handles are only four inches long and three-eighths inch in diameter, which is small for many people's hands, doesn't provide a good grip, and contributes to hand strain injuries when pulling.

To make fifth wheel pin pulling safer:

- Equip your cab(s) with an electric or pneumatically powered fifth wheel release to eliminate the need to manually pull the release lever. This is the safest way to release the pin.
- Use a pin-pulling tool that uses *both* hands to pull the fifth wheel pin. Using the tool allows you to face the fifth wheel pin squarely and promotes a stable power stance, allowing you to pull with more force while at the same time reducing the potential for injuring your back, shoulders, or hands.
- Ensure the fifth wheel is properly maintained and the moving parts move freely. This should be a part of the scheduled preventive maintenance of the trailer.
- Park the tractor-trailer on as level a surface as possible.
- Ensure you have adequate space to pull the pin. A confined space won't allow you to pull the pin correctly with the tool.

Wear ASTM slip-rated footwear rated at .50 or better, as OSHA recommends, to provide the most friction between your shoes and the ground so you have good footing. This will prevent slipping while also providing the ability to generate force. Refer to LC1011: Sample Footwear Policy and LC1007: Footwear and Transportation for additional information on best practices for footwear.