ZORESCO

Specialist Report

The consequences of operating overloaded vehicles

Light and medium duty commercial vehicles face the same liabilities as heavy duty trucks.

What is an overloaded vehicle?

An overloaded vehicle is one weighing more than its Gross Vehicle Weight Rating (GVWR), one with weight exceeding the Gross Axle Weight Rating (GAWR) above the front or rear axle or one with a combined weight exceeding its Gross Combined Weight Rating (GCWR) when towing a trailer.

These rating are found on the door jamb sticker, but some additional considerations must be taken into account.

The weight rating of the truck includes everything: the truck, the body, any permanently attached equipment, payload, fuel and even the driver and passengers.

This weight rating is determined by the weakest component in manufacturing, creating the safety threshold for the vehicle. This ensures that components such as the axles, suspension, tires or brakes are never overloaded.

When thinking about overloaded vehicles, most operators and fleet managers picture tractor trailers going through weigh stations, but light and medium duty commercial vehicles face the same liabilities as heavy duty trucks.

Risk and Liability

At a base level, the cost of an overloaded vehicle ticket is expensive, and can even lead to impounded vehicles.

Data collected by the Federal Motor Carrier Safety Administration shows that as vehicle weight increases, so do the number of crashes, both fatal and not.

If there were to be a crash, there can be civil and criminal consequences. Those repercussions can include not only the company, but also the fleet design team. In some instances, especially in those of a fatal crash, the vehicle owner can be held ultimately responsible.

Fleet managers and purchasers may not have as much control over a vehicle once it is on the road and in service as they would like, but training and education can help to protect the company from costly liability exposure.

Maintenance

Exceeding capacity adversely affects trucks and their components.

Increasing loads to dangerous levels, while seemingly efficient to cut down on trips, can actually lead to unplanned downtime from wear and tear. This can lead to loss of efficiency and increased maintenance costs, all while contributing to unnecessary costs and exposure to liability.

Control

Overloaded vehicles require more distance to stop. This has a large effect on performance and handling, and operators can easily misjudge these larger required distances.

Any downhill driving under these unsafe conditions only increases the risk of harm to operators and the public.

Steering, maneuverability and acceleration are also negatively impacted, again leading to increased liability exposure and a loss of efficiency.

Additional factors such as center of gravity and weight distribution also play a factor in the control of the vehicle.

Solutions

Ensuring vehicles do not operate overloaded, through internal standards and training is the best way to prevent these costly scenarios. By calculating and enforcing a reserve weight, you will never have an overloaded vehicle on the road.

Partnering with the truck equipment Specialists at Zoresco gives you access to tools to design safe, compliant vehicles. We can assist you in determining what payloads you can legally and safely carry based on the vehicle's weight ratings and provide resources to get your vehicle and payload weighed.

Additionally, Zoresco can provide the expertise needed when spec'ing trucks; taking into account engine size, horsepower, fuel and differential gear ratio to reduce these risks and liabilities.

Simply stop in our Turtle Creek location or contact Mike Crane to schedule an appointment with a Specialist by calling (412) 829-2120 or e-mailing mcrane@zoresco.com.