



## Top 10 Common Towing and Trailing Errors

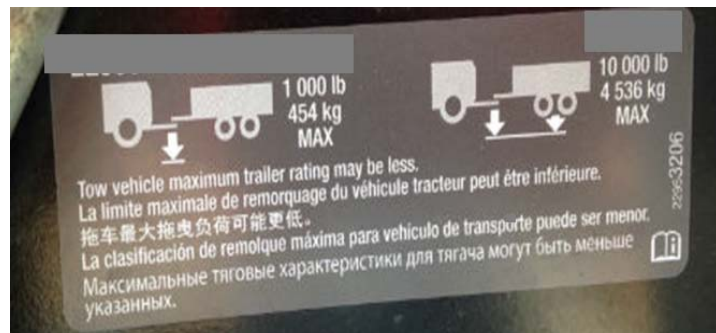
Paul Johnson | Fleet and Materials Manager



Common Towing and Trailing Errors

### #1 Truck Towing Capacity

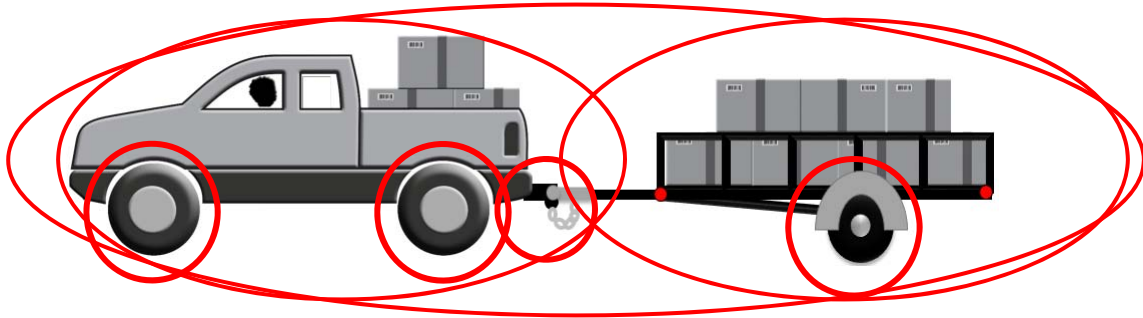
- Common Error: Assuming the rating on the hitch is how much the truck can tow.
- Solution: Hitch ratings must be compared to published vehicle limits.



Common Towing and Trailing Errors

## Maximum Towing Capacity and Other Cargo

- Common Error: Assuming the Max trailer weight is always OK to tow.
- Solution: Monitor other cargo weights.



Common Towing and Trailing Errors

## #2 Unknown Weights

- Common Error: If it fits, it ships.
- Solution: Weigh and Tag Equipment.

### EQUIPMENT WEIGHT

With Bucket: 6,415 lbs.

With Forks: 6,340 lbs.

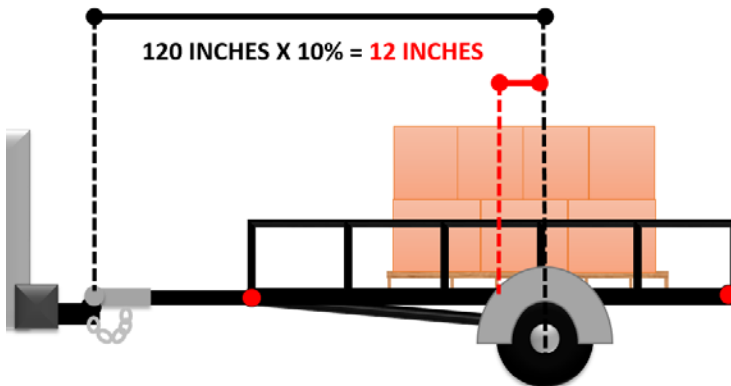


Common Towing and Trailing Errors

## #3 Load Balance

- Common Problem: Unbalanced Loads
- Solution: Calculate the Center of Balance

DISTANCE: CENTER OF COUPLER TO CENTER OF AXLE



## Trailer Incident



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## #4 Load Securement

- Common Problem: Insufficient load securement.
- Solution: Use 4 tie downs, each with a working load limit of  $\frac{1}{2}$  the weight of the cargo.



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## Worst Case Scenario



Common Towing and Trailing Errors

## #5 Mismatched Hitch Components

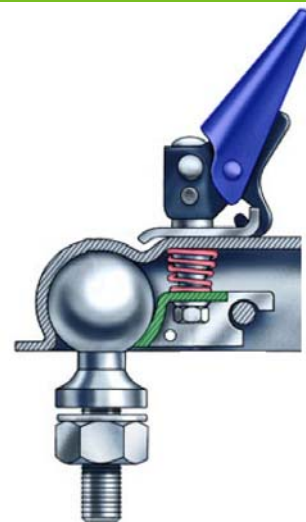
- Common Problem: Mismatched Hitches
- Solution: Standardize Hitches
  - < 5,000 lbs use 2" ball
  - > 5,000 lbs use Pintle Ring



Common Towing and Trailing Errors

## Bonus: Ball Coupler Issues

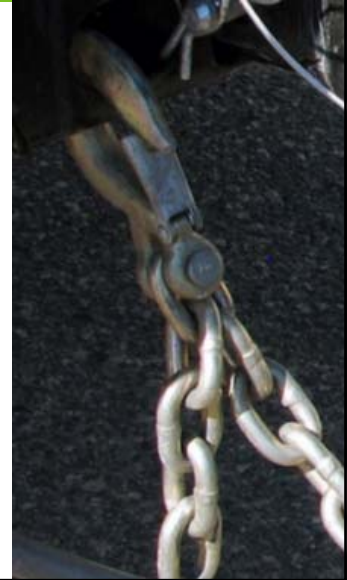
- Common Problem: Ball Coupler Not Fully Seated
- Solution: Visually Verify Hitch Connection



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## #6 Trailer Chains

- Common Problem: Chains Too Long, Worn, Spliced
- Solution: Inspect Often, and Use Adjustable Length Chains



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## #7 Trailer Brakes

- Common Problem: Breakaway cord connected to hitch.
- Solution: Connect cord to truck bumper.
- Trailer Brakes are required on all trailers with a GVWR over 3,000 lbs.



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## #8 DOT Inspection Stickers

- Common Issue: Expired or missing DOT inspection.
- Solution: Know the Law.
- MN Requires annual DOT inspection on all combinations over 26,000 lbs.



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## #9 Trailer Maintenance and Inspection

- Common Problem: Trailers not being inspected.
- Solution: Ensure daily and annual inspections are taking place. Budget for trailer maintenance and replacement.



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## #10 Driver Training

- Common Problem: Drivers are not trained on trailering procedures and rules.
- Solution: Train all operators, and empower to stop work if needed.



# Thank You!

**Paul Johnson**

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## Beyond Towing Capacity

- Truck Gross Vehicle Weight Rating (GVWR): Maximum allowable weight of loaded truck. Includes trailer tongue weight.
  - $GVWR - Actual\ Weight = Payload\ Capacity$
- Trailer Gross Vehicle Weight Rating (GVWR): Maximum allowable weight of loaded trailer.
- Gross Combined Weight Rating (GCWR): Maximum allowable weight of the truck and trailer combined.
- Tongue Weight Rating: Max allowed tongue weight for truck, hitch, coupler.
- Axle Weight Rating: Maximum allowable weight on any axle.

Common Towing and Trailering Errors