



Rescue Winch Operations



Definition

Winch

A powerful machine with one or more drums on which to coil a rope, cable, or chain for a hauling or hoisting.



Definition

Rescue Winch

A machine mounted on the front or rear or both of a rescue vehicle which may become your favorite tool under the right circumstances.

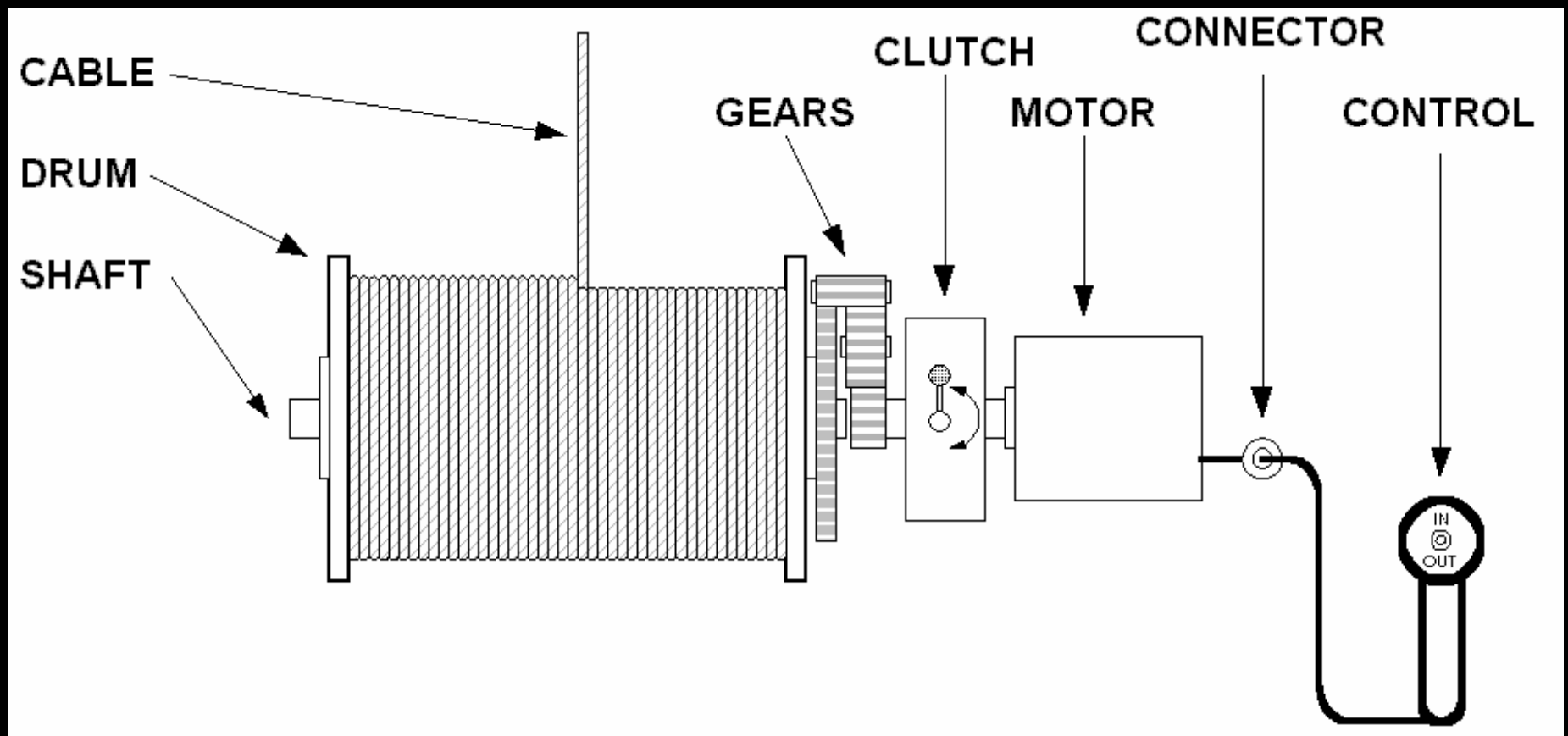


Uses

- **There are 452,592,138 uses for a winch.**
- **For Rescue**
 - **Stabilization**
 - **Extrication**



How Is It Made





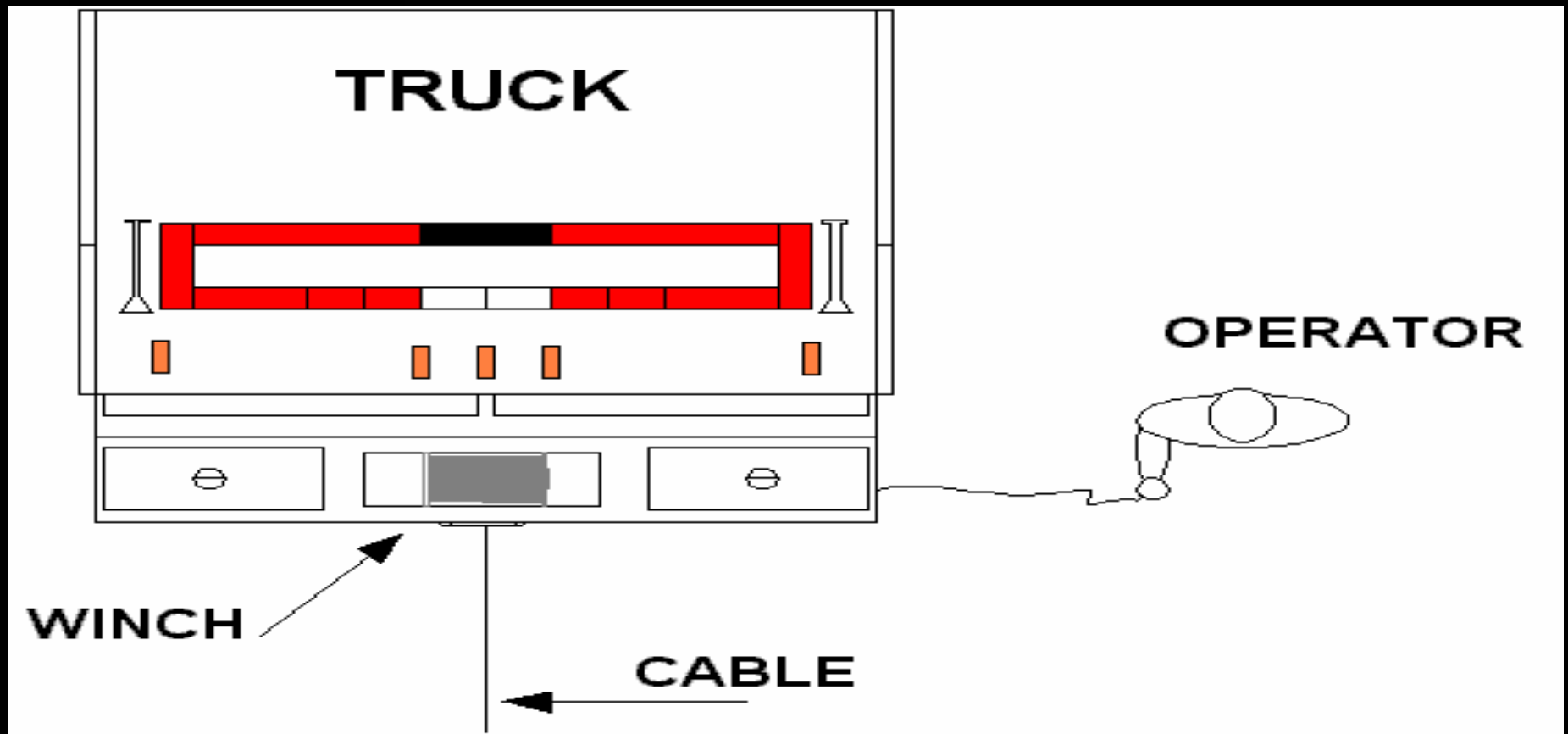
Safety

- Load Rating is 12000 pounds
- If you are even close to rating, you are doing it **WRONG.**
- How can you tell?
 - Vehicle Squats
 - Motor slows down



Safety

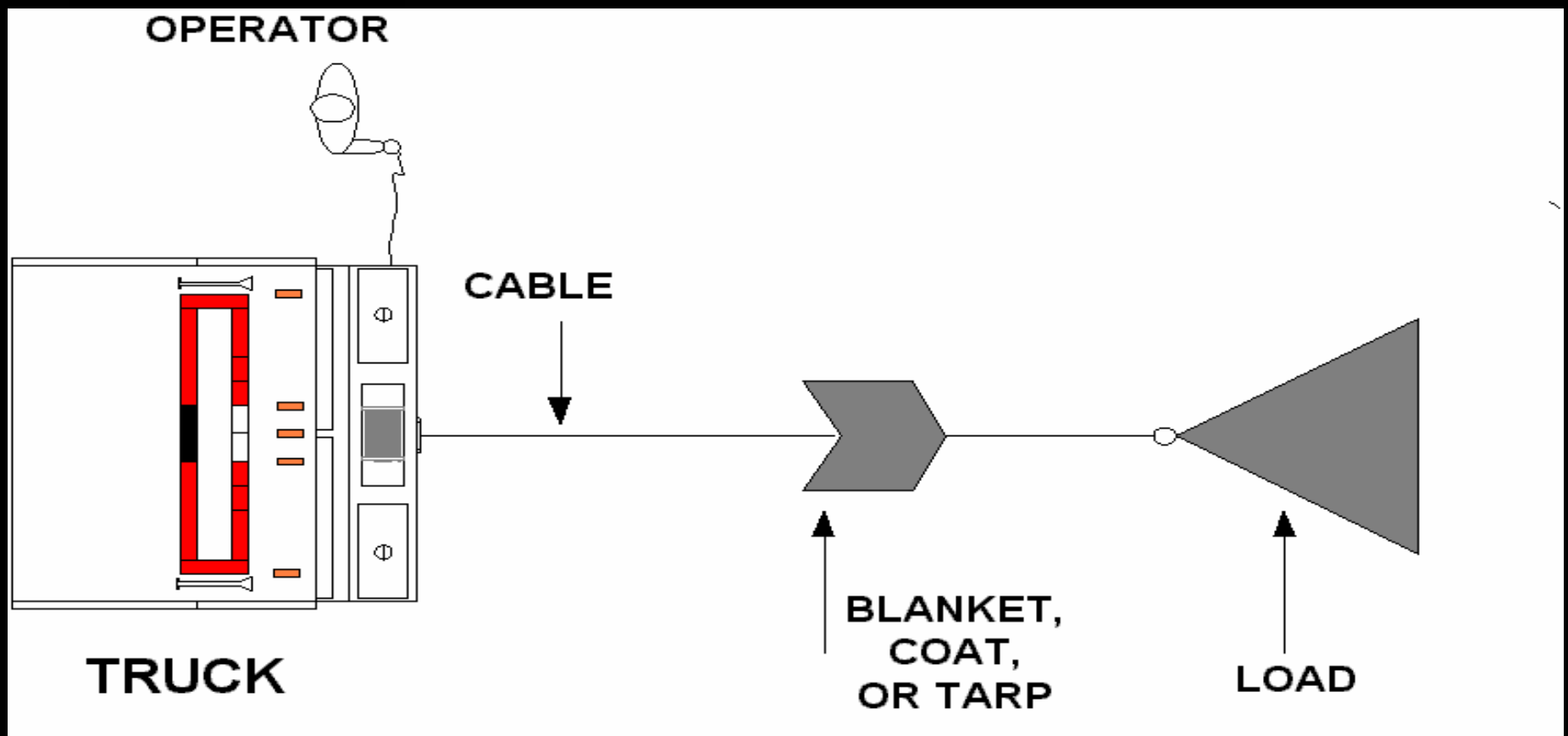
Where to Stand





Safety

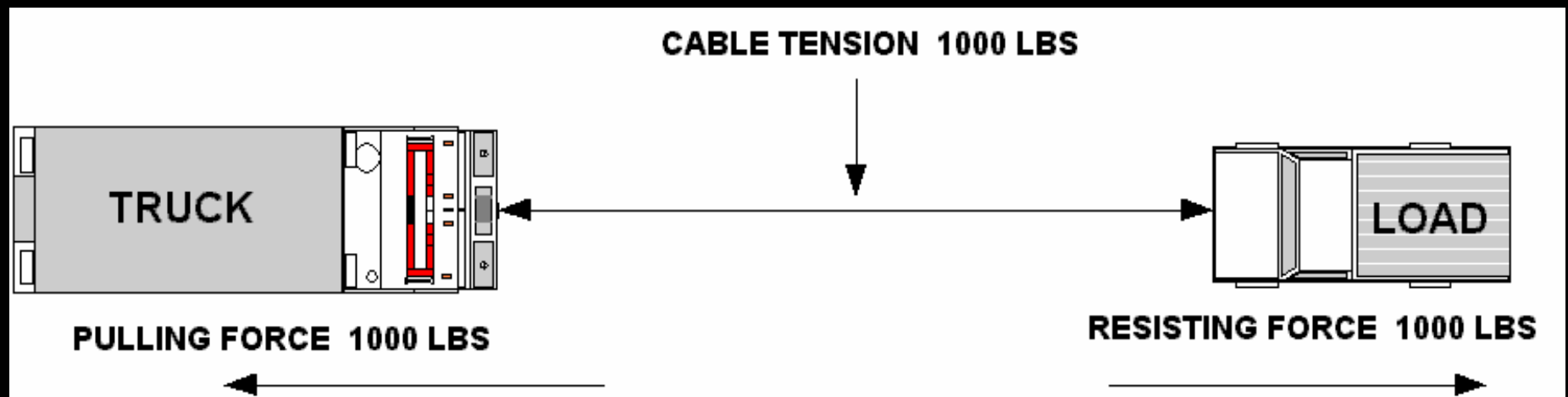
Protection Against Whip





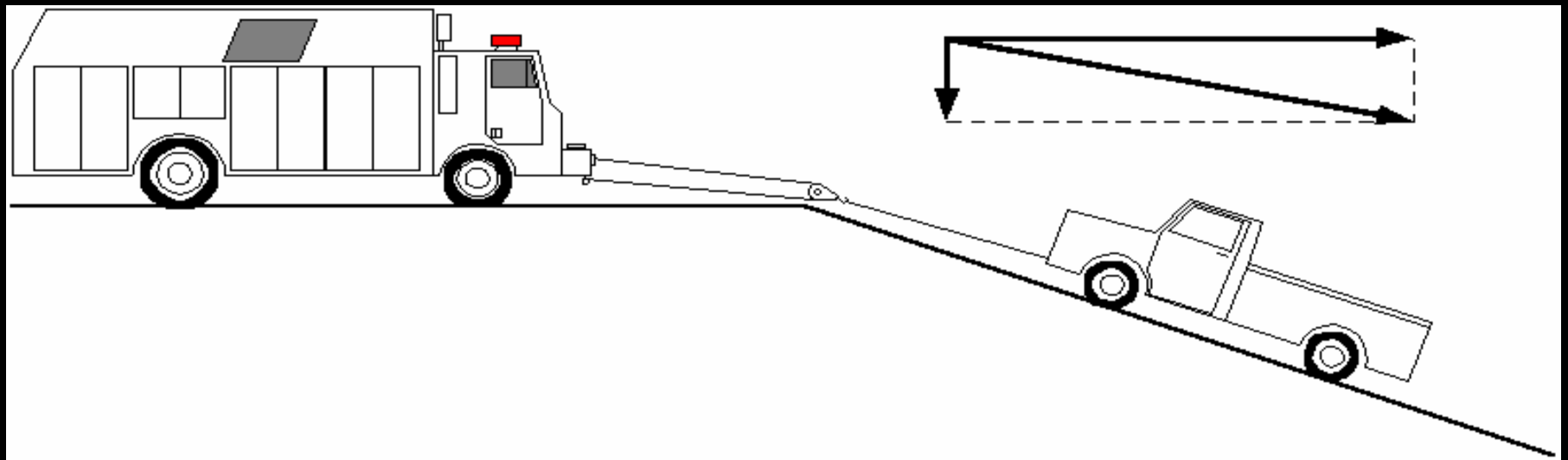
Forces

- The force in a cable is the same throughout its length.
- Forces will always balance or something will move



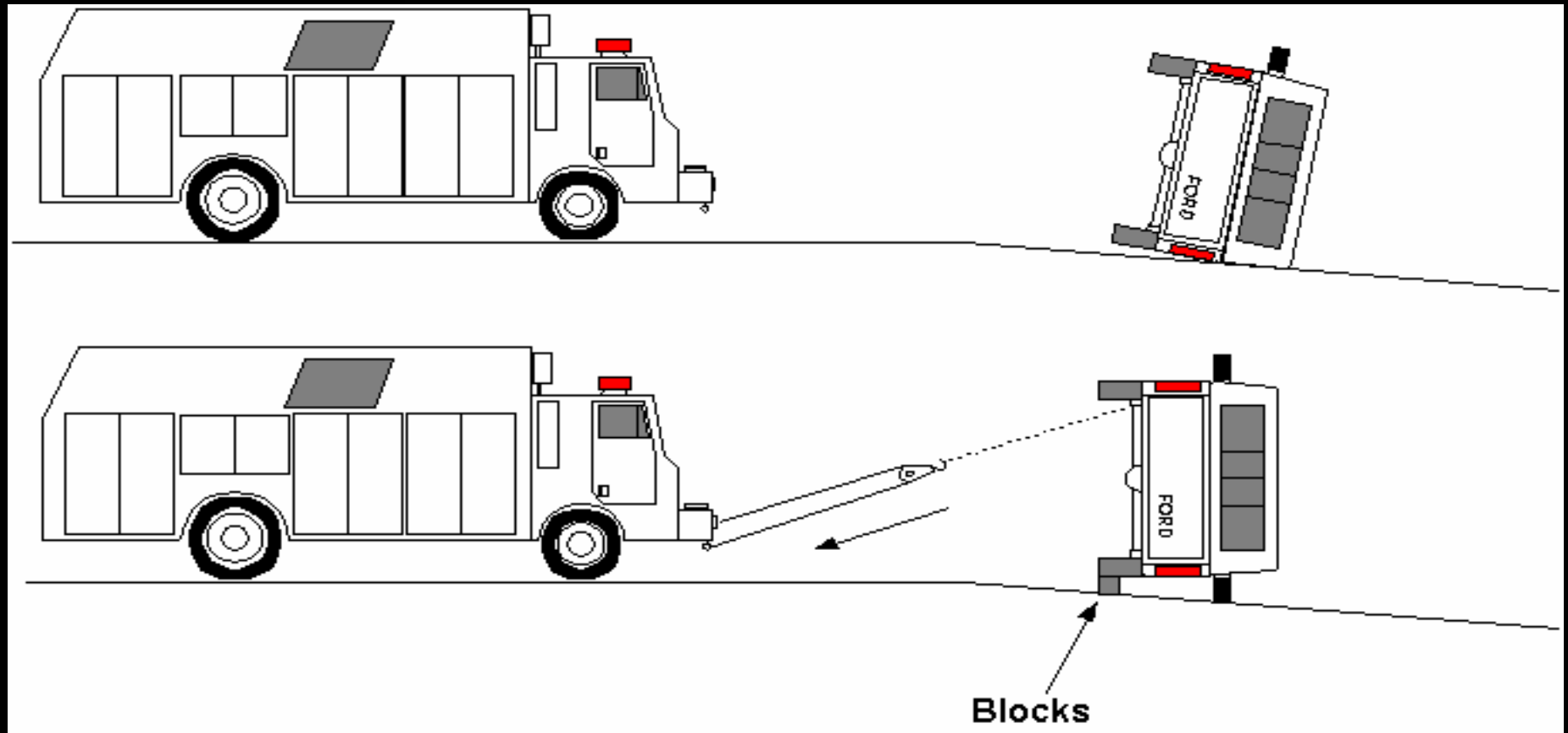


How Forces Act Stabilization





How Forces Act Stabilization



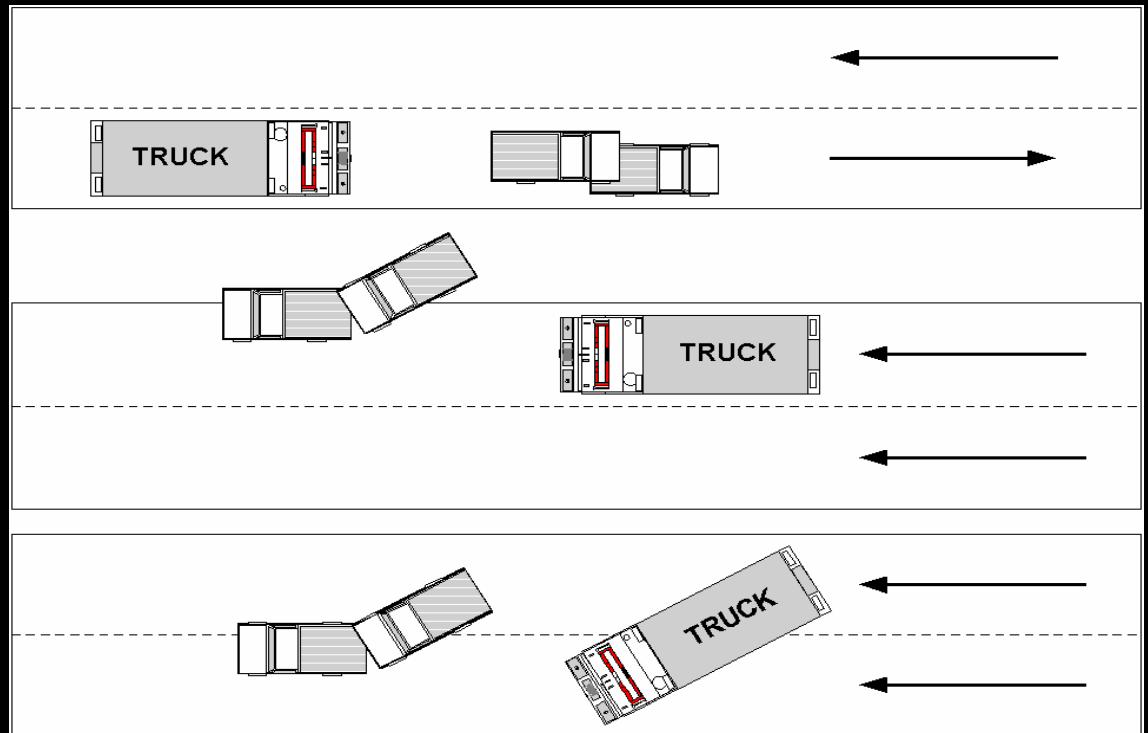


Truck Placement

•Protect the Scene

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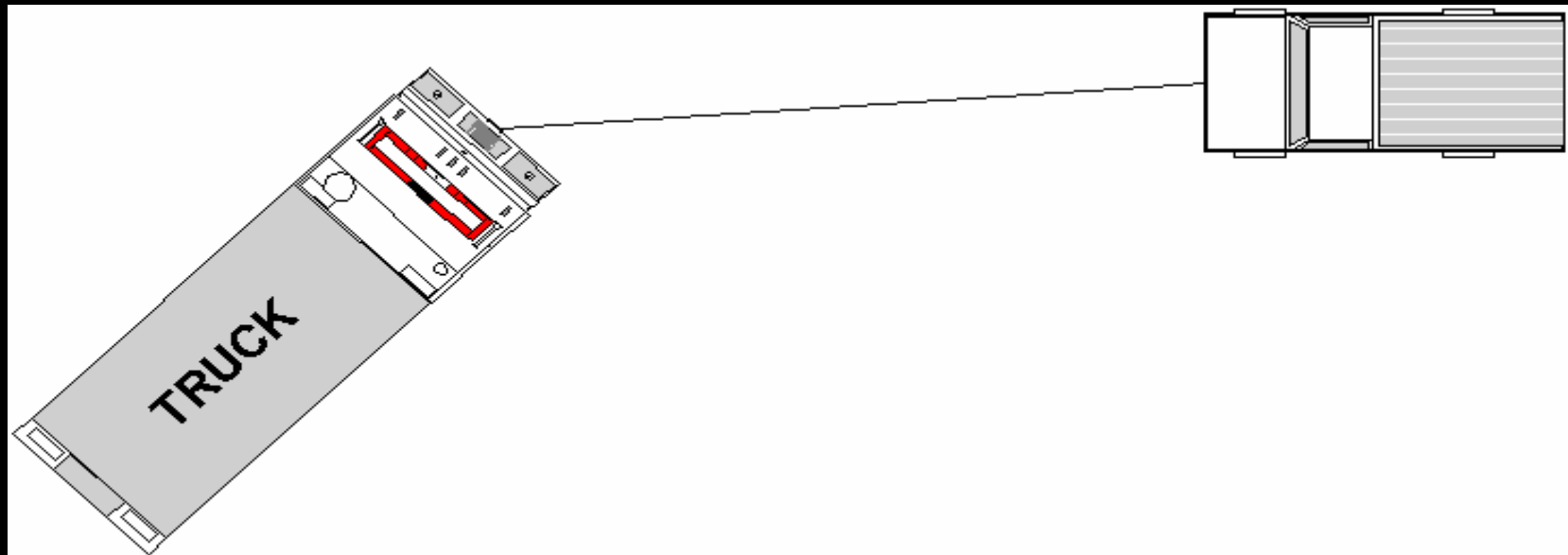
•Protect the Scene





Truck Placement

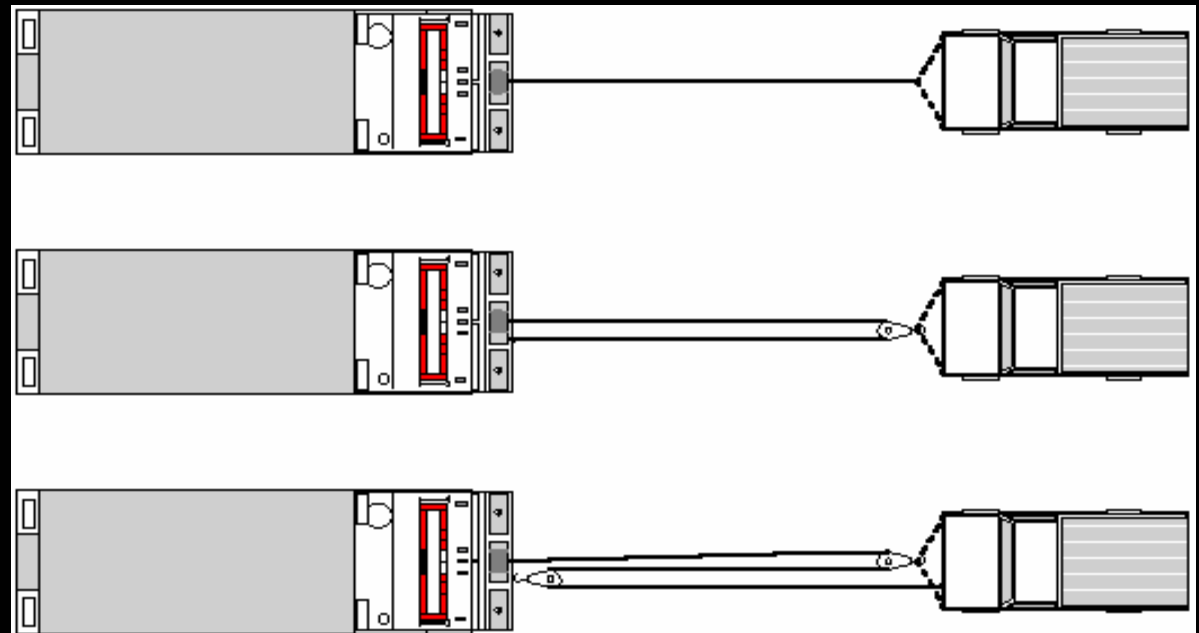
NO, ANGLE IS TOO SHARP!





Pulls

- **Single Line**
- **Double Line**
- **Complex**

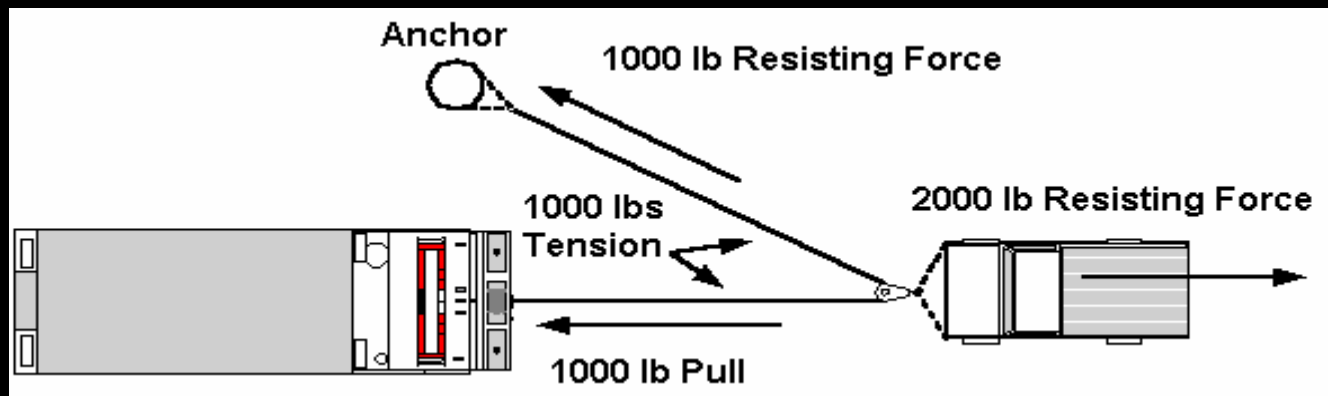




Double Line Pull

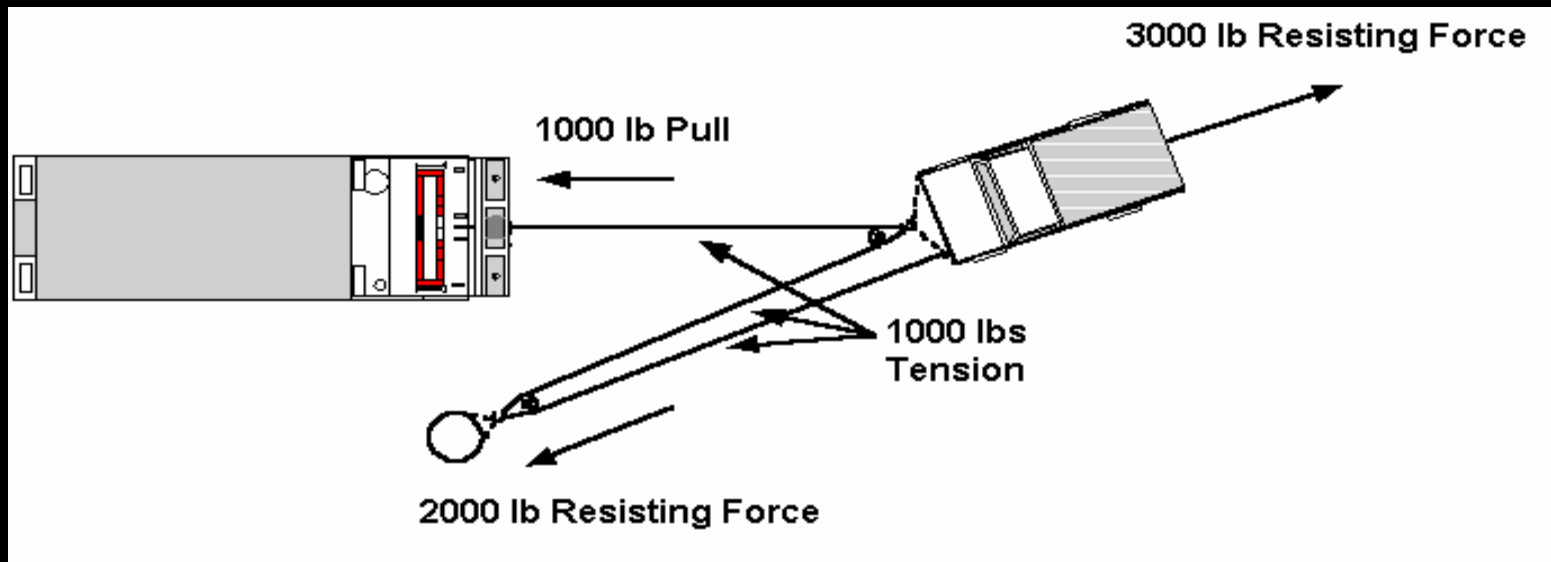
WHY?

- Double the Power - Lower Forces Involved
- Half the Speed - Twice the Control





Complex Pull





**Inspect the tool
you use before
you use it!**

Practice Safety First!

