

Towing Your Trailer

Two of the most common causes of accidents and loss of control while trailering are:

- Driving too fast for conditions
- Not adjusting to changes in handling

The greatest chance for loss of control in trailers, once you are on the road, occurs from driving too fast and not adjusting to handling changes created by the trailer being connected to the tow vehicle. Driving fast increases the amount of kinetic energy you have stored, which increases stopping distance (as the square of the speed) and increases crash severity if an accident were to occur.

It also reduces trailer sway stability, reduces the time you have to react (events occur faster) and increases the heat build-up in your tires, which increases the possibility of a blowout.

While towing a trailer may seem intimidating for first-time combination vehicle drivers, you will need to rely on the same driving techniques you incorporate with your own vehicle. These skills include such things as driving at moderate speeds, following at a safe distance, anticipating stops (brake early) and avoiding sudden steering and braking. However, if you encounter problems (such as the ones described below), remember "Gas OFF, Brake OFF, Steer STRAIGHT and WAIT."

Some problem conditions that may occur when towing are described as follows:

- Accidentally Departing the Roadway

Departing the roadway at highway speeds can be one of the most dangerous maneuvers to make if you are not prepared. If you should find yourself off the designated roadway, take your foot off the accelerator; do not apply the brakes; wait until your speed is significantly reduced and then re-enter the roadway when it is clear. Do not attempt to quickly steer back onto the roadway; you are likely to induce a violent trailer sway.

- Tire Blow Outs

A blown tire will not typically cause instability in your CV. However, if you should experience this condition, follow the instruction above - foot off the accelerator, do not apply the brakes and wait until your speed is reduced to exit the roadway.

- Trailer Sway

Continual trailer sway should never occur with a properly designed, loaded and adjusted CV. However, transient lateral (side) disturbances caused by the aerodynamics of passing vehicles or wind gusts may produce a sway of your

trailer. Remember to follow the advice above for maintaining control -gas off, brake off and steer straight ahead until your speed is reduced. Do not attempt to control sway by turning the steering wheel; you will only make the situation worse. If you have a brake controller, gently apply the trailer brakes ONLY. This will cause the CV to straighten out and stabilize the sway.

When towing your trailer, you will experience decreased acceleration, increased stopping distance and increased turning radius. You must swing a little wider when turning to keep from hitting curbs, vehicles or anything else on your inside corner.

For any given speed, your stopping distance can easily double with the additional load of your trailer. Many factors contribute to stopping distance: tow vehicle weight, trailer and load weight, braking system on tow vehicle and trailer, the weather, road conditions and driver reaction time. Give yourself plenty of distance behind vehicles and be prepared to start stopping early at intersections and stop signals. The following table reflects estimated total stopping distance with a combination vehicle. It includes your reaction time, tow vehicle only stopping distance and stopping distance with a trailer not equipped with brakes and of the same weight as the tow vehicle.

Avoid sudden stops and starts that can lead to skidding, sliding or jackknifing. Always use caution when passing. You will need greater distance to pass due to decreased acceleration and the resulting increased length. Watch for wind or excessive draft off of vehicles you are passing. This can cause your trailer to start swaying or whipping. If swaying occurs, the driver must quickly assess the situation and take the action previously described. These steps are reiterated in the following table.

DO

Take your foot off the accelerator and reduce your speed gradually.

Hold the steering wheel as steady as possible.

If your trailer has electric brakes, apply the trailer brakes alone, without using the tow vehicle's brakes.

DON'T

Don't hit your brake pedal hard. A jackknife situation will likely result.

Don't try to steer out of the sway condition. Sudden or violent steering will make it worse.

Don't speed up. Sway increases as you go faster.

Don't continue towing a trailer that tends to sway. You may lose control during an emergency maneuver or if the conditions listed above occur.

While towing your trailer, check your rearview mirrors frequently to observe the trailer and traffic. Ensure you are aware of your trailer height, especially when approaching overpasses, roofed areas or wooded areas. Use lower gears when going up or down hills. Downshift to assist with braking on downgrades and to add power for climbing hills. To avoid brakes overheating on long down grades, apply the brakes at intervals to keep your desired speed.

This information was provided by The Trailer Handbook: A Guide to Understanding Trailers & Towing Safety. For more information visit the National Association of Trailer Manufacturers (NATM) website: www.natm.com.