LOADING



TRAILERS MUST BE LOADED HEAVIER IN FRONT.

Load cargo so that about 60 percent of the trailer weight is in the front half of the trailer. Keep the center of gravity low, with heavy items (including books) on the floor of the trailer, not packed on top of other items. Keep the center of gravity forward (about 10 percent of the loaded trailer weight on the tow-car hitch). The heavier the trailer and cargo, the greater the weight that must be carried on the tow-car hitch. Pack everything closely and firmly, and secure any partial loads with ropes and packing material.

If the trailer is not loaded heavier in front, but is balanced over the trailer wheels or heavy in the rear half of the trailer, the trailer will lose its stability and the towing vehicle-trailer combination will be dangerously unstable and difficult to control. FAILURE TO LOAD THE TRAILER HEAVIER IN THE FRONT IS A LEADING CAUSE OF CAR-TRAILER MISHAPS.

Match Car and Trailer Weights

When towing a trailer not equipped with brakes, the loaded trailer should not weigh more than the unloaded tow vehicle. When towing a trailer equipped with brakes, the trailer weight may exceed the car's weight, depending upon the trailer design and the trailer manufacturer's recommendations. Excessive trailer weight can lead to stress on the automobile.

To find out the empty weight of a particular car, check the owner's manual, registration papers or new-car dealer.

Contraband

It is against the law to carry people in the back of any trailer. Passengers in the trailer risk injury due to shifting cargo, exhaust gases and lack of protection in a collision.

Flammables such as gasoline or paint thinner should never be transported. An empty or partially full container is just as dangerous as a full one. Flammables may explode or ignite because of vehicle movement, road vibrations or cargo shifting.

Automobile Loading



The automobile manufacturer's recommended maximum passenger/cargo load is reduced by the trailer tongue weight carried on the car hitch. This extra weight can be compensated for by decreasing the load carried inside the trunk and rear seat areas.

Do not put heavy things in your car trunk or rear seat area – use this area for bulky, lighter items only. If the car's rear springs are depressed so much that the car does not handle well or the headlights aim up and away from the road ahead, try the following solutions.

1. Reduce load in trunk and rear seat areas.

2. Install overload rear springs.

3. Install heavy duty rear springs and shocks.

Never try to take weight off the car by loading the trailer heavy in the rear.

INSPECTION



Walk Around

Before driving and at each fuel stop, walk around the car and trailer, stopping to check hitch and coupler tightness, safety chains attachment, lights and tire pressures. Can you see out the side-view mirrors? Do the brakes operate properly? If, while driving, you hear an unusual noise or suspect trouble, stop at a safe place completely off the highway and identify and correct the problem.



Reduce Speed

All vehicle-trailer combinations have a speed beyond which you won't have enough control in an emergency. THE MAXIMUM RECOMMENDED SPEED FOR MOST PASSENGER CAR-TRAILER COMBINATIONS IS 55 MPH. As driving conditions get worse, you must reduce the maximum recommended speed even more.

The posted speed limit is usually the same for trucks and car-trailer combinations. Observe these speed limits especially if they are less than 55 mph. Excessive speed is one of the leading causes of car-trailer crashes.

Driving 55 mph also saves you gas money and is good for the environment because it increases fuel efficiency and reduces CO_2 emissions. For every 10 miles above 55 mph, fuel efficiency is reduced by approximately 3-5 miles per gallon and CO_2 emissions are increased by approximately 15 percent.

Stopping

A car-trailer combination is heavier than a car alone and requires more distance to stop. Allow about 325 feet (about a four-second gap) between yourself and the vehicle ahead of you when driving at 55 mph. When driving in rain, snow or fog, etc., use at least a five-second gap.





When going up hills, shift to lower gears so that the motor is not lugging and can turn over easily. When going downhill, reduce speed and shift into lower gears before starting down. A good rule of thumb is to go down the hill in the same gear you had to use to go up the hill.

Vehicle stability decreases when you go downhill, so be sure to slow down. Remember: don't speed up, **slow down before you go down**.

Passing

Your car-trailer combination is heavier and longer than your car alone, requiring more time and distance to pass. Have plenty of clear highway ahead, and never pass on hills or curves.

Turns and Corners

When making turns while towing a trailer, remember that the trailer does not follow directly behind the car. The trailer will turn in a shorter arc (turning radius) than the tow vehicle.

When making a right turn, the car should be kept near the left edge of your lane, but not over the line. Go slightly past the curb line with the front of the car, and then turn sharply into the right-hand lane. The trailer will be cutting a shorter arc, but will not go over the curb if you make the turn properly. Do the same thing in the opposite direction when turning left.

Never Operate an Unstable Car-Trailer Combination

Instability (swaying or whipping) of a car-trailer combination at low speeds usually increases at higher speeds. If this happens, steer straight and reduce speed immediately but gradually; **do not apply the brakes**. Never increase speed. Stop as soon as you can safely get completely off the highway.

Check the cargo first to be sure that the trailer is loaded heavier in front and according to the trailer manufacturer's recommendations. Reload if necessary. Next, make sure that the car's trunk is not overloaded with cargo. Then check the car's suspension alignment. Next, check for low tire pressures on both the car and the trailer. Finally, be sure that you were not traveling at an excessive speed.

Let's Back Up

Try this easy way to help control the trailer when backing up. Keep your hand at the bottom of the steering wheel. Look over your shoulder through the rear window. To move the trailer left, move your hand to left. To move to the right, move your hand to the right. If the trailer starts to jackknife – STOP – pull ahead to straighten out; then start again.

"PRO" DRIVING TIPS

Many vehicle crashes occur at night – with a tired driver – driving above the recommended speed – on a downgrade, wet road or curve.

- Don't attempt to drive "straight through." Be rested.
- Slow down for downgrades, wet roads or curves.
- Teenage night drivers have twice the fatality rate as day drivers, so avoid driving at night.

Safe Trailering



Developed by U-Haul International, Inc. www.uhaul.com In cooperation with The American Driver and Traffic Safety Education Association (ADTSEA) www.adtsea.org

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STUDENT GUIDE





LOAD HEAVIER IN FRONT **HITCH TIGHT**

- CHAINS ATTACHED
- LIGHTS WORKING
- TIRE PRESSURES OK
- **REDUCE SPEED**
- THINK AHEAD
- STOP OFTEN FOR REST
- **M**INSPECT OFTEN
- **IDAD SECURE**
- WEAR YOUR SEAT BELT

THE MOST IMPORTANT PART ... YOU



Your judgment and common sense are key to a safe trailering experience. Will you use this good judgment to obey all traffic laws? Will you read and follow the suggestions in this booklet on how to load, inspect, and drive your car-trailer combination?

If your answers are "yes," then we thank you for your excellent attitude and welcome you to a pleasant and safe experience. But you must always remember that driver error is the single most important cause of crashes involving car-trailer combinations.

YOUR TOW VEHICLE



Suspension

The tow vehicle rear springs should be strong enough to support the added weight of the trailer as well as keep your car level. If rear springs are weak, they should be replaced. Defective shocks, springs, tires or alignment can negatively affect vehicle stability.

Tires

Air pressure in the **rear tires** of some tow vehicles may be increased to handle the additional weight of the trailer. Inflate rear tires about 6 psi above normal pressure (normal is usually 30 to 35 psi) but do not exceed the pressure limit stamped on tires.

Pressure should be normal in the front tires.

Trailer tires should be inflated to the pressure recommended by the manufacturer.



Your car-trailer combination will give the smoothest ride at these recommended tire pressures. Incorrect tire pressure can cause poor stability, an uneven ride and poor gas mileage. Check pressure when tires are cold, as pressure will increase with heat when traveling. Do not bleed off (release) this increased pressure.

Mirrors

State (provincial) laws require that automobiles towing trailers be equipped with mirrors on both sides. Inadequate side mirrors restrict what you can see behind you. Adequate side mirrors make it easier to see what's behind you, but they should not be positioned to create blind spots to the front or side.

The Connecting System – Hitch, Ball and Coupler

The hookup is an important step that must be carefully done each time you tow a trailer. Be sure you understand how to correctly attach the coupler to the hitch-ball, connect the safety chains and plug in the lights. If you are unsure about the specific requirements, seek advice from a trailer professional.

A good general rule is: When you begin to hook up a trailer, don't pause or stop to do something else - always finish the process first. Then, check the coupler-to-ball connection by looking or feeling under the coupler socket to be sure the coupler and hitch-ball are mated properly.

There are many different size hitch-balls (diameter), couplers, hitch-strength ratings and other capacities. This information is labeled on each part and must be checked to verify that all parts are right for the specific trailer hookup.



