Safely Trailering Your Boat

(from: The Online Fisherman.com by the USCG Auxiliary, Ruskin, FL)

Bad Trailering is never a good idea. Read these comments to learn the right way.



Ever spend some time at the boat ramp? It can evoke all the emotions of the theatre. Pathos, humor, drama, action, and possible entries to the "Worlds funniest video's" thrown in for good measure. Why do many people make the boat ramp a day's entertainment at rock bottom prices? Because many boaters just don't practice, don't plan, and don't expect the unexpected.

Practice

To do something well, you need to practice. Pick a large parking lot and set-up cones or empty plastic garbage pails and practice backing into a spot. This spot could be a parking spot or the side of a boat ramp. In either case, you need to be able to control your vehicle and trailer to make an effortless entry into the ramp, and then releasing your boat.

Planning

Plan each step of your boat launch before you leave your driveway. Do you have new crew, someone who hasn't been boating with you? If so, spend some time with them so they know exactly what will happen at the boat ramp, and what will be required of them. It is a great idea to perform this in an out of the way place (not on the ramp itself), so your tires and bearings cool down before entering the water. Make sure you've prepared the boat before you head down the ramp, by removing the tie-downs, placing lines in the appropriate places, and double-checking your sea-cock and drain plug. Make sure everyone knows exactly where they will walk the boat, and remember to secure the boat to the dock, so it doesn't float away.

Safety

Every step of the way, during planning, during practice, and especially during execution, you need to be ever mindful of safety. Remember the safety chain (making sure it's either secured when trailering or unsecured at the bottom of the launch ramp). Don't let anyone get behind the boat and trailer or between the boat and the dock. Before you leave home, make sure you check your tires, and hubs/bearings. Make sure they are greased, filled and in good working condition. Also, make sure to check your lights and your brakes. Remember, a safe trip is the best trip.

Courtesy and Common Sense

It never hurts to be courteous to your fellow boaters. These people are a great resource while you and your boat are in the water or at the ramp. You've heard of road rage? There is also ramp rage. Don't hog the ramp. Don't hog the parking lot. Don't tie up the wash station. If everyone shows a little courtesy, the process of unloading and loading of all the boats will go smoothly and safely. Last and certainly not least, use common sense. Don't use your hands and feet, or life jackets, to fend the boat off from the dock, use high quality fenders instead. Keep your cool, even if someone cuts in line. Any confrontations aren't worth the trouble.

To learn more about trailering and boating safety, why not take a boating safety course? For more information about safe boating courses, contact the <u>United States Coast Guard Auxiliary Flotilla 45-01 in Madison</u>. You can even participate in a Free Vessel Safety Check while you prepare to go out on the water for a day of fun and sun!

This section of the article is provided from the people at Boat Express: By Boats Express, Clearwater, Florida

When you are pulling a trailer, one thing is undisputed. Trailer towing is a special situation which places demands on your driving skills, and on your tow vehicle. We have included a few basic tips that you should know in order to transport your boat and trailer safely, comfortably and without abusing the towing vehicle.

1. Weight Distribution.

- -For optimum handling, the trailer must be properly loaded and balanced.
- -Keep the center of gravity (CG) low for best handling.
- -Approximately 60% of the boat's weight should be positioned on the front half of the trailer and 40% in the rear (within limits of tongue weight capacity).
- -The boat should also be balanced from side to side. If the vessel has side mounted fuel or water tanks and only one side is filled, then this will lend the rig to maneuver poorly. Proper balancing will also prolong the life of your trailers tires.
- -The boat should be firmly secured with at lease two ratchet type straps, attached from the trailer to the stern eyes and one ratchet type strap from the trailer (to the rear), to the bow eye to keep the boat from shifting forward. The bow eye should also be attached to the trailer's winch which is mounted forward of the bow.

2. Before Starting.

- -Before hooking up to the trailer, make sure your tow vehicle is full of oil and fuel.

 Remember, it is a lot easier to fuel your tow vehicle at a gas station without a boat and trailer attached. You should also make sure the vehicle has plenty of water in the radiator and fluid in the transmission. Towing a large load can often times heat up a motor and strain a transmission. If you haven't already done so, look into installing a transmission cooler on your tow vehicle.
- -Check the tow vehicle's tires for proper inflation. If you have a dual wheeled vehicle make sure there aren't any "hidden" flats.
- -Connect the safety chains, and if equipped, attach the safety brake chain.
- -Before starting out on a trip, practice turning, stopping and backing up your trailer in an area away from traffic. Make sure your mirrors give you ample vision around both sides of the boat and trailer and if not, look into getting modified mirrors for your tow vehicle.
- -Check the trailer's turn signal, running and brake lights.
- -Check the trailer's tires and make sure the lug nuts are tightened. A partially flat trailer tire will heat up and eventually disintegrate. And, losing a wheel can prove to be disastrous, especially if the loose wheel strikes another vehicle.
- -Double check that the boat is secured properly to the trailer.
- -Check the reservoir on the trailer's surge brakes.
- -Check the trailer's connection to the hitch to make sure it is fastened properly and latched. A pin, such as a cotter pin or a bolt should be placed through the latch itself to prevent it from coming loose or being undone by vandals while the vehicle is parked.
- -Check to make sure the trailer ball on your tow vehicle matches the coupler on your trailer. The three major sizes of trailer balls are: 1-7/8", 2", and 2-5/16". Make sure the ball is fastened properly to the tow vehicle and that the mounting will handle the capacity equal to or grater than the weight of the trailer and boat. If you have a receiver type hitch, make sure the insert (the bar the ball attaches to) is secured with a retaining pin and that it has a locking clevis pin on it.

3. Backing.

- -Back slowly with someone outside the rear of the trailer to guide you.
- -Place one hand at the bottom of the steering wheel and move it in the direction you want the trailer to go.
- -Make small steering inputs....slight movements of the steering wheel result in a greater movement at the rear of the trailer.
- -Use your mirrors. Always watch both sides of the trailer.

4. Braking.

- -Allow considerably more distance for stopping with a boat and trailer attached.
- -If you have a manual brake controller, "lead" with the trailer brakes first, if possible. To correct trailer side-sway, touch the manual trailer brakes with out activating the tow vehicles brakes.
- -Be sure to steer as straight as possible when stopping a rig. Turning while making a radical stop can cause the tow vehicles rear end to be pushed forward of the front...this is called "jackknifing".

5. Downgrades and upgrades.

-Downshifting assists braking on downgrades and provides added power at the drive wheels for climbing hills.

6. Parking with a trailer.

- -Whenever possible, vehicles with trailers should not park on a grade. However, if it is necessary, place wheel chocks under the trailer's wheels as follows:
 - a. Apply the foot service brakes and hold.
 - b. Have another person place the wheel chocks under the trailer wheels on the downgrade side.
 - c. Once the wheel chocks are in place, release the foot service brakes, making sure that the chocks are holding the tow vehicle and trailer.
 - d. Apply the parking brake.
 - e. Shift the transmission and make sure it is latched there. If your tow vehicle has a manual transmission, put the gearshift lever in reverse.

Note: With 4-wheel drive, make sure the transfer case is not in neutral.

- To start again.
 - 1. Apply the foot service brake and hold.
 - 2. Shift the transmission into park on automatic transmissions and neutral on manual transmissions.
 - 3. Shift the transmission into gear and release the parking brake.
 - 4. Release the foot brakes and move the tow vehicle uphill to free the wheel chocks.
 - 5. Apply the foot service brakes and hold while another person retrieves the chocks.

7. Acceleration and passing.

- -The added weight of the trailer can dramatically decrease the acceleration of the towing vehicle. Exercise caution.
- -If you must pass a slower vehicle, be sure to allow extra distance......remember, you also have the added length of the trailer which must clear the other vehicle before you can pull back into the lane.
- -Make your pass on level terrain with plenty of clearance.
- -If necessary, downshift for improved acceleration.

8. Driving with and automatic overdrive transmission.

- -With certain automatic overdrive transmissions, towing, especially in hilly areas with heavier boats, may result in excessive shifting between overdrive and the next lowest gear.
- -If this occurs, it is recommended that the overdrive gear be locked out to eliminate the condition and provide steadier performance.

Note: See the tow vehicle's owner's manual for more information.

- When there is no excessive shifting, use the overdrive gear for optimum fuel economy.
- -Overdrive also may be locked out to obtain braking on downgrades.

- 9. Driving with speed control.
 - When driving uphill with a large boat, significant speed drops may occur.
 - A speed drop of more than 8 to 14 miles per hour will automatically cancel the speed control device.
 - Temporally resume manual control through the vehicle's accelerator pedal until the terrain levels off.

10. On the Road.

- -After about 50 miles, stop in a protected area and double check:
 - 1. Trailer hitch attachment.
 - 2. Lights and electrical connections.
 - 3. Trailer wheel lug nuts for tightness.
 - 4. Engine oil.....check regularly throughout the trip.
- If a flat occurs on the tow vehicle, do not use a small "donut" type spare tire as this will drastically reduce the maneuverability of the rig.

11. Launching the boat.

- -Evaluate the pitch and length of the ramp as compared to the length of the boat and trailer.
- -Line the boat and tow vehicle up with the ramp in a straight line.
- -Prepare a bow and stern line for easy retrieval and make sure any plugs are installed prior to launching.
- -Back down the ramp slowly, using someone at the back of the boat to guide you. Make sure the wheels don't drop off the end of the ramp.
- -Submerge the trailer only as much as necessary to float the boat or roll it off, depending on which type of trailer you have. Keep in mind that if you have a multiple axle trailer, if you back one or more of the axles over the edge of a drop off, the remaining axles will be supporting the weight of the boat, unless, of course, the boat is supported by its own buoyancy.
- -When the boat is clear of the trailer, make sure there is nothing still attached, such as the bow strap or cable, then slowly pull the trailer from the water.

12. Retrieving the boat.

- -Evaluate the pitch and length of the ramp as compared to the length of the boat and Trailer
- -Line the tow vehicle and trailer up with the ramp and back down the ramp slowly
- -Submerge the trailer only as much as necessary to float the or roll the boat on, depending on which type of trailer you have. Keep in mind that if you have a multiple axle trailer, if you back one or more of the axles over the edge of a drop off, the remaining axles will be supporting the weight of the boat, unless, of course, the boat is supported by its own buoyancy.
- -Gently drive the boat onto the trailer as recommended by the manufacturer using the trailer's winch as directed by the type of trailer you own.
- Once the boat is straight on the trailer, double check to make sure the bow is latched to the winch and all lines are free from the undercarriage of the trailer.

- Gently pull the trailered boat forward, making sure not to spin the vehicles tires. Once the tires start spinning traction has been lost and it will be almost impossible to remove the trailer from the ramp. If the wheels start spinning, try to add more weight to the rear of the tow vehicle. Be careful about having people climb onto the bumper of a tow vehicle as this could create an accident.
- If the tires continue to spin, gently apply the parking brake while simultaneously applying power, a little at a time until the wheels grab the ramp surface, and the rig moves forward.

13. Parking the trailered boat.

- -Once the trailered boat is ready to be parked, make sure you pick an area which is well lit and free from falling debris, like tree leaves and other things which can clutter up you boat.
- -After situating the trailered boat in the spot where you want it, place chocks at the front and rear of all the tires.
- -Carefully disconnect the trailer coupling from the hitch, and unplug all connections.

14. Long term maintenance.

- -After each use, the trailer's brakes should be flushed with fresh water, regardless of whether you submerged it in fresh or salt water.
- -Use a petroleum based solution to wipe the tires and prevent dryrot.
- -Periodically grease the axle hubs, making sure not to overfill grease retaining hubs. This could blow out the "o" ring seals and promote premature failure.