



USRowing Safety Newsletter Spring 2023

Effective Date: March 22, 2023

Boat trailering is one of the more significant areas of risk in our sport. This document shares trailer safety best practices and procedures.

The information contained is not intended to replace compliance with federal, state, or local laws, nor to replace the best practices being followed that best meet a club's needs. Please adapt this information to your team's needs and equipment.

For questions or comments, please email Margot.Zalkind@usrowing.org

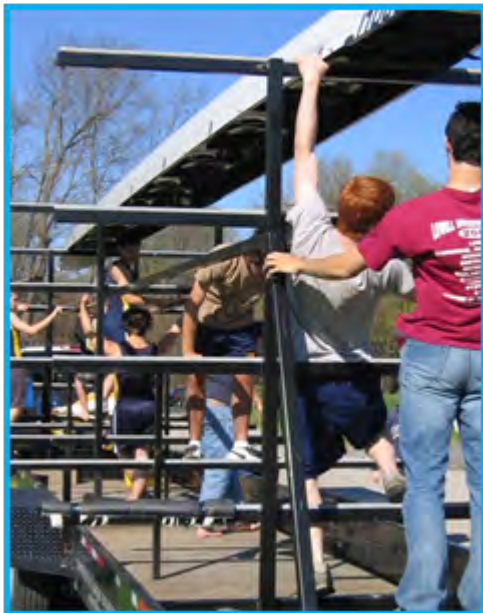
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Evaluate the truck, trailer, and driver

1. First, who will drive?
2. Are they experienced?
3. If not, how will they learn?
4. Getting an experienced mentor is a great way to start.
 - a. Ride along with them and ask that they tell you everything they are doing and seeing.
 - b. Watch the road, identify the dangers to your boats.
 - c. Then, try driving with mentor, in an empty parking lot.
5. Who loads, who helps, who plans and how are they trained?
6. These decisions are critical and will lead to a safe, stress-free trip.



Select a trailer with farsightedness

1. What equipment will you transport? (Size of boats, distances, how often you'll be travelling)
2. What do you expect for future program growth?
3. What Is your budget? Is It better to try to borrow a trailer?
4. Who will do transportation planning, driver recruitment, and driver training?

What is best and why? (Steel or Aluminum)

Steel:

- Stronger & able to handle load easier
- Easy to repair
- Can easily be configured to hold small, medium, and large boats.

Aluminum:

- Better fuel efficiency
- Quicker braking
- Quicker acceleration
- Easier maneuvering on roads
- Reduced stress on tow vehicle

Selecting a Tow Vehicle

Can your vehicle pull the trailer and all gear? Large trailers - 9000 lbs GVW+

(Some vans can manage the towing weight requirements but be careful because vans can have issues with boats' bows.)

Insurance

1. Make sure you know who/what is covered?
2. Boats, Truck, Trailer, Driver(s)?
3. Driver needs their own insurance, to cover liability.
4. If you are carrying boats for an individual or another organization, be sure they are insured.
5. Keep insurance documents in towing vehicle.

Lights

Make sure all lights on trailer and tow vehicle are working. Always test them before departing with a loaded trailer.

Registration

Have registration for trailer and towing vehicle with the driver whenever trailering.

Be sure any drivers' licenses are up to date.

Planning

Hold a loading (and strap tie-down) training session for all rowers, coaches - anyone loading

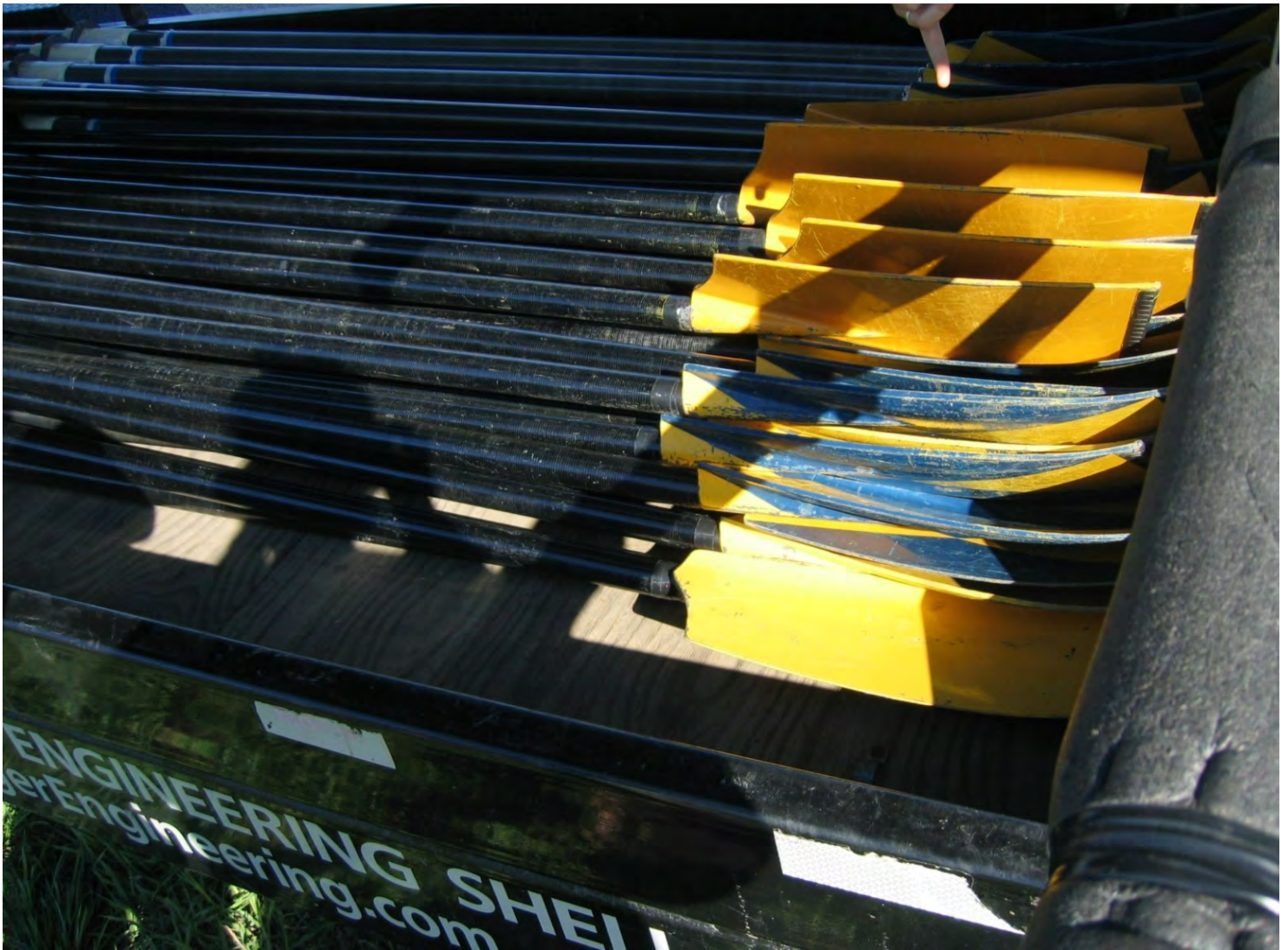
List all equipment you want to bring: ergs, slings, tools, tents, tables, grills, etc.

Target key people to help with specific tasks.

WRITE YOUR TRAILERING PLAN DOWN and post it.

Load Considerations

- Place weight at front of trailer.
- Know the tongue weight limitation
- Ribbed boats should be racked with a rib on a cross bar
- Do not load the boat where the rigger bolts will contact straps or other boats
- Place a red flag on each boat (12" to 18" sq.)



- Riggers and seats (identify which boat)
- Oars - Tie down

Proper Loading Prevents Damage

Loading Oars

Align blades so they do not scratch paint.

Secure them in place - A boat strap, ropes, or bungees will keep them from bouncing around or out of the trailer.

Where to Put What

Can shorter crews reach the boats?

Can they load an 8 on the top rack?

Consider race times.

Load all tool boxes and slings within reach.

Watch height of objects in bed.

Protect best boats.

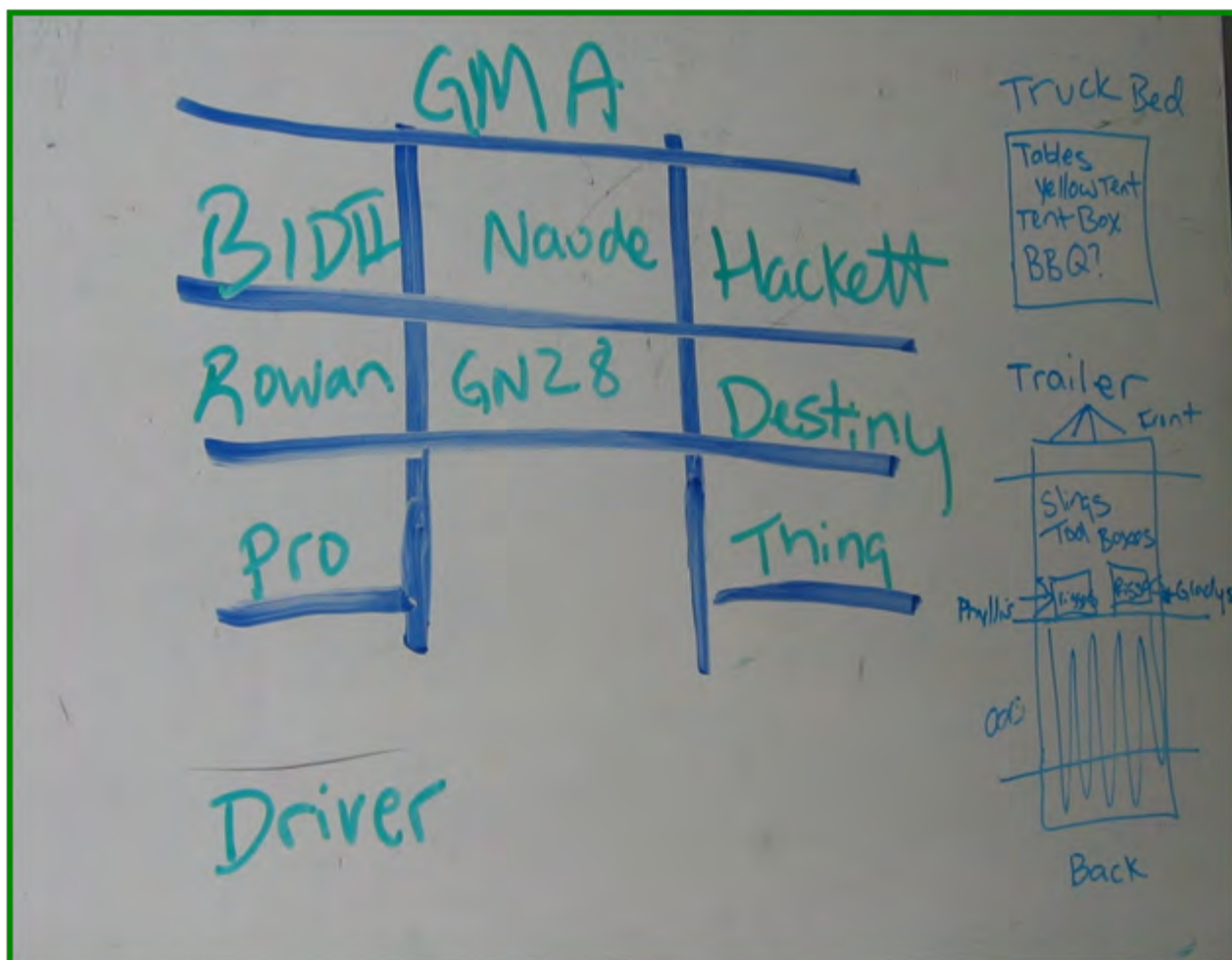
Secure everything in/on the trailer.

And, are any boats being dropped off or picked up on route? Make sure you can access them without unloading too many boats.

Assessing the load

Planning Before Loading

Spell it Out



Make sure everyone knows where each boat goes,
in case you are not available.

Weights are Critical

Boat & Oar Weights

Oars and Sculls:

6.5 lbs = Average weight of a sweep oar

65 lbs = One set of ten sweep oars

3.3 lbs = Average weight of a sculling oar

Average Boat Weights including Riggers:

8+ = 212 lbs

4+ = 112 lbs

4x = 115 lbs

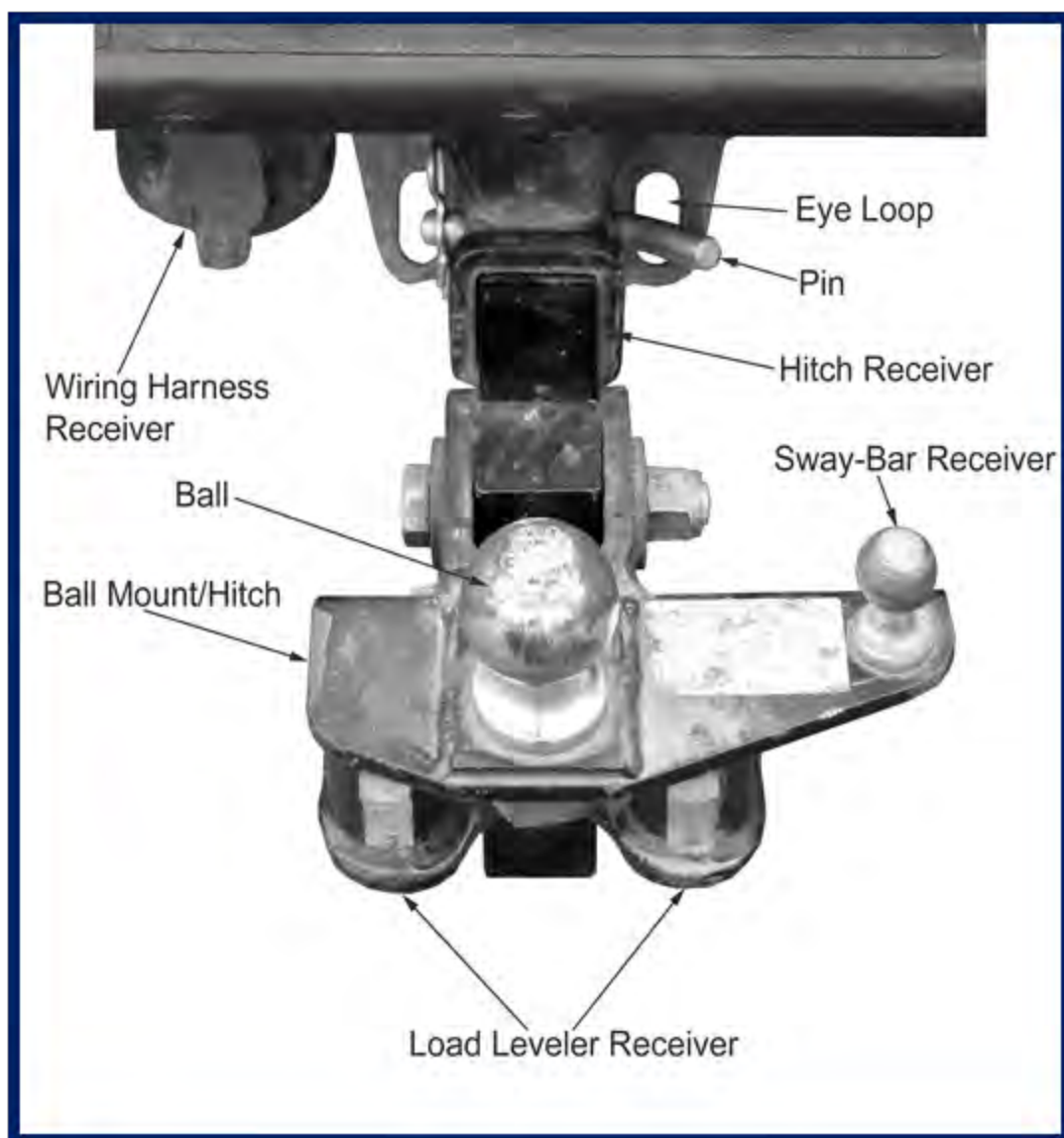
4- = 110 lbs

2x/- = 60 lbs

1x = 31 lbs

Hitches and Connections

Drop Hitch



Ball Hitch



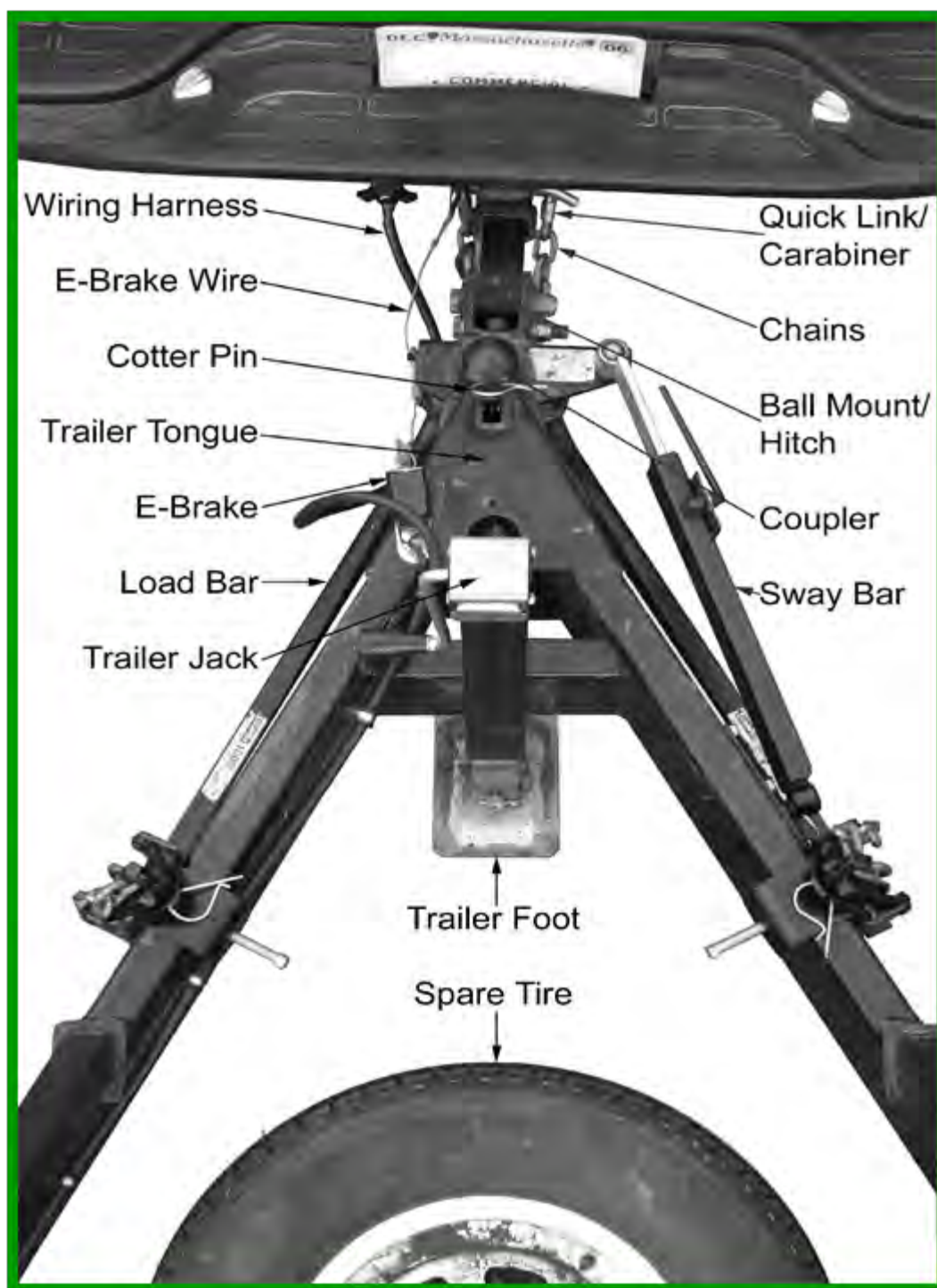
Load Bar and Sway Bar



The Light Bar

This extends the amount of loading space on your trailer, so there is less overhang.





Tires and Tire Care

Check ALL tires for:

Wear, nails, dry rot, proper inflation

After storage period

AND before you start your trip

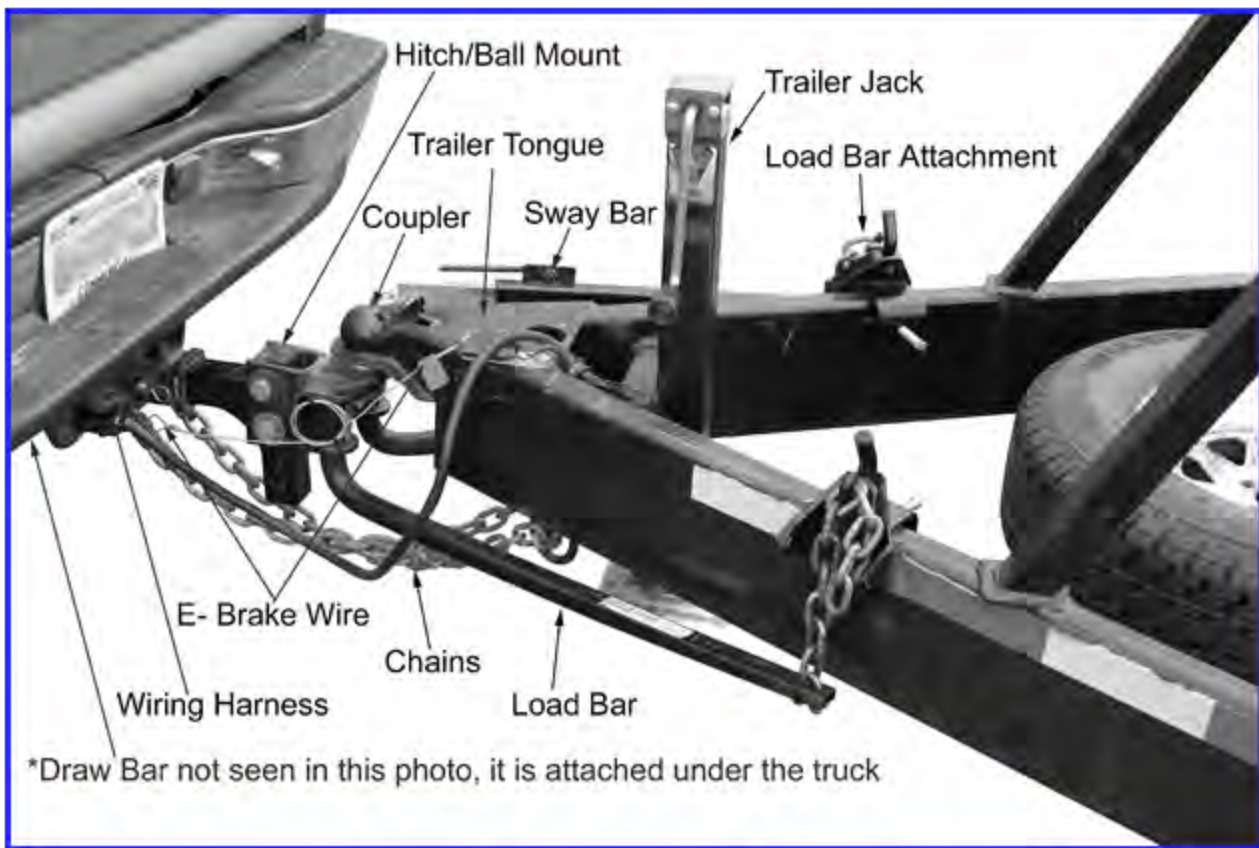
AND during your trip, at gas and other stops

AND once a year by a professional

Also, check brakes and bearings.

Hitching-Up Check List #1

1. Are ball and hitch same size?
2. Grease ball
3. Ensure trailer's coupler is high enough to clear vehicle ball
4. Back ball of vehicle under trailer
5. Open coupling on tongue of trailer for ball - lock open with pin
6. Adjust trailer hitch height to be level
7. Lower jack on trailer, seat hitch ball
8. firmly into coupling
9. Close and secure coupling
10. Insert safety hitch pin
11. Cross, attach, lock safety chains to truck



Cross Chains for Safety -This creates safety backup for a broken hitch.

Do not let chains drag on the ground or be too taut.



Hitching-Up Check List #2

1. Connect electrical harness
2. Attach emergency brake to vehicle
3. Attach load bars - This should be done with pressure still on jack stand
4. By completing this step first, there is no danger from stressing the bars, and proper loading can happen.

Hitching-Up Check List #3

1. Retract jack all the way up or pivot out of the way
2. Attach sway bar
3. Be sure all lights and brakes are functioning properly
4. Check on all boats and equipment on trailer and truck bed.
5. Remove wheel chocks and place them in the trailer.



Double check all tie downs

Use a spotter when pulling out of a congested area

Loading the Trailer

ONE trained person supervises all loading and unloading, preferably driver.

If an accident should happen, the driver is at fault, not parents or crew or the club.

The driver is responsible for final check before moving - at any point in the trip.

Hint: Tape strap ends to designate final OK.



Be Organized Before and After Racing





Know how high your loaded trailer is



Preparing to Travel

Has driver been mentored?

Loading: Distribute weight evenly, side to side

60% - 40% front to back

Heaviest objects over axles or in front

Room for the bows to swing in front

RED flags for each stern 12" to 18" long

Is padding on rack adequate? and secure?

Straps

Double straps on 4's & 8's

Do NOT wrap the "tail" of strap over buckle

Dry straps before storing

Keep straps in a DRY place - in the cab of truck (a good place for spares)

Always check straps for nicks, tears, mold

One strap = \$8 - One new 4+ = \$25,000

Driver Walk-Around

Check the following items:

1. All Lights
 - Brakes
 - Blinkers
 - Hazards
 - Light Bar
2. Wiggle Test, has anything gotten loose?
3. Tires
4. Straps, tight enough.
5. Flags, firmly attached.

Check everything at EVERY stop



Stay Sharp

1. Do NOT drive alone
2. Don't eat a heavy meal before long trip
3. Take a break every 2-3 hours
4. Keep it cool inside vehicle
5. Talk to passenger and keep hydrated
6. Do NOT play loud music
7. Keep eyes moving, check mirrors and road signs
8. Do not drive during hours you regularly sleep
9. Limit driving time per day

HAND SIGNALS

FOR
DIRECTING
VEHICLES

← TURNS →



Point one arm to indicate the direction to turn.



Bend monitoring arm repeatedly toward head to indicate continued turning.

DISTANCE TO STOPPING POINT



Face palms forward, with hands above head. Bring elbow forward and hands together.

FORWARD PROCEED SLOWLY BACKWARD



Always face palms in direction of desired travel.



Then bend both arms repeatedly toward head and chest, and then extend.

CLEAR TO LEAVE AREA



Point at the driver and gain eye contact.

STOP EMERGENCY STOP



Cross both arms above head.



Start with hands clasped over head. Extend downward repeatedly until vehicles stop.



Turn and extend arms in desired direction.



Driving

Agree on what to do if equipment damages other people's equipment.

For example: when a speaker falls out of its bracket and damages the boat below it, or foot stretchers, etc.

Know the causes of Sway

- Tongue weight - not enough

- Trailer hitch height

- Wind (and weather)

- Assess your conditions.

- Pull over if wind too strong, or better yet, assess before you travel.

- Pay attention to load distribution!

- If weight is not placed evenly from side to side and heaviest weight toward front, you will sway.

Climbing hills and other inclines can be difficult with your load, but remember too that descents are tricky.

The weight of your load can PUSH you downhill.

Be prepared for other vehicles' "wakes"

Ensure adequate tire pressure on tow vehicle and trailer

Other Hazards

- Gas Stations - Make sure you can exit the station, and watch for poles and overhangs. Send your spotter ahead.
- Bridges. Can have high cross winds.
- Trees, telephone poles . Watch your turns.
- Rest Areas

Bring pylons/cones so you can stake out your parking area.

You do not want to get boxed in.

- Cars, buses, trucks. Keep your distance.
- Overhangs
- Weather
 - Wind, Rain, Snow, Ice, Fog

Mind Your Bows... and Sterns

Legal Considerations

Know the rules of the road

Map your route ahead. Are trailers allowed?

Check for construction on your route

Know and comply with restrictions:

- Federal overhang regulations
- Lights & light bar
- CDL, Weigh stations
- Red stern flag size
- Driver's license(s)
- Registrations & insurance (truck & trailer)

Trailer Driver's Checklist

Consult our trailer driver's checklist to see what we recommend you bring for travel. You can find it here:

https://usrowing.org/documents/2023/10/20/Boat_Trailer_Checklist.pdf

Disclaimer: USRowing always recommends you learn and stay aware of Federal and state rules and regulations for trailer driving and drivers, especially regarding DOT and CDLs.

The material in this presentation and in the handouts represents our recommendations for best safe practices.