# TIPS FOR BUYING YOUR FIRST TRAILER

Buying a trailer is hard.

Buying the RIGHT trailer is even harder...





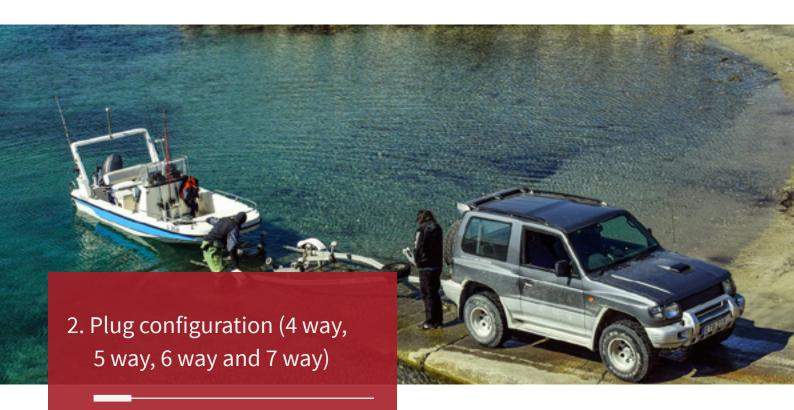


Here are 8 Things to Consider
When Buying Your Next Trailer

### 1. Vehicle Capacity

One item where there is confusion, especially for first time towers, is towing capacity. There are two things to look at when purchasing a trailer. First, check your vehicles weight capacity for towing. There is a difference in towing weight capacity, and trailer tongue

capacity. You may have the towing power capacity for the trailer that you are considering purchasing, however what the hitch/tongue can hold are different amounts. You may need to purchase a weight distribution hitch which we will discuss later.



These would be the amount of prongs in your receiver plug that the trailer will plug into. If you are purchasing a trailer that is equipped with electric brakes, you will need to be sure you have the proper plug to accommodate this. There are adapters that allow a conversion ie: 4 way to 5 way, 5 way to 7 way etc. However, you need to make sure your tow vehicle is wired properly to power brakes, battery etc. Best to check with the dealer to be sure.

### 3. Hitch Ball Size

While it is obviously important to make sure you uses the correct hitch ball to match the trailer coupler, the ball size does not mean that you can tow it if it fits. You must be aware of your vehicle towing capabilities.

### 4. Weight Distribution

If you are purchasing a heavier trailer and you have some "squat" (dipping of trailer tongue and rear of tow vehicle) once your trailer and vehicle are connected to tow, you more than likely need to purchase a weight distribution hitch. This enables you to tow a heavier trailer

and take the weight off of the hitch and also eliminate "squat". This is something any trailer dealer or service department will assist with before you tow. It is not only safer but a requirement to safely tow without any issues in exceeding manufacturer standards.

# 5. Do You Need a Brake Control?

Many of the lighter weight trailers (4000lbs and under) are not equipped with electric brakes, so you would have no need for brake controller. There are however a number of the newer lightweight campers and trailers that are being manufactured with electric brakes, as there are more and more people towing with smaller vehicles that want to have trailer brakes.

If this is the case, or if you purchase any trailer with electric brakes, you must have a brake controller to activate the trailer brakes. Your vehicle is not enough to stop your vehicle and your new trailer.

# 6. What Kind of Brake Control Do I Need?

There are a variety of electric brake controls on the market, and just like cell phones, there are many different features depending on preference. Some vehicles are already made with a brake control integrated into the dash, while will be equipped with a harness under the dash to plug into and mount the brake control into the dash somewhere accessible to the driver. Other brake controls can be mounted directly on the trailer, this eliminating any invasive wiring to the tow vehicle or anything in the dash.

- \*\*\*Most boat trailers and some other cargo and utility trailers (like rentals) may have hydraulic surge brakes and have no need for an electric brake control.
- \*\* Caution: Leased Vehicles. There may be warranty issues if you have any invasive wiring modifications to your vehicle. Be aware of this and choose a brake control that will not void warranties if this is the case.



### 7. Do I Need Sway Bars?

Sway bars are usually an option if you are using a weight distribution hitch as they are usually sold together or given you the option to purchase. Sway bars are used to decrease trailer sway. Sway is caused when passing vehicles or just driving in windy conditions and are usually

used on campers and larger trailers. They are a good purchase if you have ever driven without them, you will definitely see once you have them. They are easily mounted on your trailer/weight distribution hitch, and just make for a safer more enjoyable trailering experience.

### 8. Do I Need Sway Control?

In addition to the trailer sway bars, there are a number of products on the market that can assist with the elimination of sway control. I would suggest to ask your dealer their recommendation in your particular situation. There are also a number of ways to apply the trailer brakes while towing without applying the vehicle brakes. This creates tension between

the tow vehicle and the trailer allowing the trailer to pull back while the tow vehicle accelerates or pulls forward, straightening the vehicle and trailer eliminating sway. Most electric brake controls have an option to use this override. When all else fails, always ask your dealer or service department as they are experienced on safe towing.

## Additional info Q&A

- What should you be looking for in towing capacity?
- Towing capacity is the weight that your vehicle is capable of towing. The manufacturer sets a weight limit on how much weight your vehicle can tow. This is indicated in the user manual or guide. If your vehicle has a hitch that has been added after it was manufactured, then there will still be an indication in the manual. If in question, consult a dealer.
- What plug configuration should I be looking for?
- Depending on the vehicle and how it is equipped it will come with a 4 way flat, 5, 6 or 7 way plug. The plug indicates capability. For example a 4 way flat (has four female holes to accommodate a 4 pin flat trailer plug) this would just be for turn signals, running lights ground and brake lights. A 5 way will usually add an additional wire for another function. Typically 5 way is used on trailers equipped with hydraulic or surge brakes (The extra wire taps into the back up lights to disengage braking while operating in reverse. 6 way adds 2 extra pins typically used for electric brakes and a hot lead (12 volt) usually seen on horse trailers, brake wire for electric brakes, 7 way round connectors are most common for RVs and other larger trailers and there are 2 types. One has flat pins referred to as blades (the most common), the other has round pins (rare). They handle all the above functions plus add a line for back up lights and battery charging. This will be typically seen in the SUV and truck market equipped to tow from the manufacturer
- Q How do I need what hitch ball size I need?
- A Check the top of the trailer coupler for an indicator of what size ball the hitch will accommodate. It is usually stamped on the coupler an also indicated in the owner's manual or trailer decal. It is imperative that you use the exact size or you risk your trailer coming "unhitched" from the tow vehicle.

- How to tell what plug configuration is good for me?
- Your trailer will indicate what kind of plug your vehicle is equipped to tow. There are a variety of adapters to go from one configuration to another, however it is important to know that if there are only 4 leads coming from the tow vehicle end (lights, turn signals, ground and brakes) that if you use an adapter to accommodate a trailer with a 7 way plug there will be no power, or brake lines powered up to the trailer. This is where advice from a dealer is useful.
- What is "good" weight distribution and how to tell the difference?
- Weight distribution is needed typically if your trailer weight is more than 50% of your tow vehicle weight. There are a variety of weight distribution hitches available to assist with this. Weight distribution helps reduce the amount of downward force applied to the rear axle of the vehicle, eliminate rear vehicle sag (rear end pushed down and lifting front of tow vehicle/headlights facing upward) and improve steering and control while towing.
- What types of brakes are there?
- There are two categories of trailer brakes. Electric, which are controlled by a brake control (brain) typically mounted inside the tow vehicle (however there are a couple of controllers that do not need to be inside the tow vehicle). The 2nd category is hydraulic, or surge brakes.

These are activated by a special trailer coupler with no control from the tow vehicle and no user interface. These are normally found on rental utility trailer and boat trailers.

### Good vs bad trailer brakes?

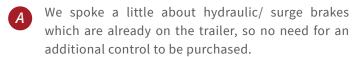
The best brakes are whatever stop your trailer when you need them, however there are debates on both categories on which is best. If you are purchasing a trailer you more than likely will not have much choice in the matter. Here are some features. Electric brakes require a brake control (or brain) to communicate to the brakes in order for the brakes to work. Now you make the decision on what type of brake control to purchase, and where and how it is installed. You can increase and decrease braking force manually as well as apply trailer brakes in the event of emergency of to help control trailer sway.

Hydraulic or Surge brakes are trailer contained and therefor any vehicle can tow the trailer and have the brakes work. The coupler on the trailer relies on the force of the trailer pushing forward to the tow vehicle when the tow vehicle slows down, like a plunger that activates the brakes. There is no override or control of how much braking is applied.

### What are sway bars?

A Sway bars are bars that are applied to the trailer/ trailer tongue used to reduce trailer sway when towing in gusty winds, passing vehicles, and just on long highway hauls in general. They are usually used on heavier travel trailers and toy haulers and are bars that stabilize side to side movement of the trailer while towing. Your local dealer can help fit the trailer you have with these. They can be easily connected and disconnected at any time. They only take a couple minutes to add and you can adjust the tension on them based on preference.

### What kind of brake controls are there?



As for electric brake controls, there is a long list. There are 2 basic types of systems that are packaged in a variety of options for installation. They are "proportional", and "ramp and time". Proportional senses how the vehicle is slowing and applies trailer braking at the same ratio as the tow vehicle brakes (if you are braking slow and smooth, so will the trailer, and if you slam the brakes on, the trailer will follow with the same force. This provides the least amount of wear on both the vehicle as well as trailer brakes, and ease of towing for the user.

Ramp and time apply trailer brakes with a preset amount of force determined by the driver, rather than automatic. There is also a delay in the time it takes for the trailer to apply full braking force.

Both types of controllers are purchased aftermarket based on the users preference. They are commonly wired into the tow vehicle and mounted in the dash. Some vehicles have a harness already under the dash for plug and play, however other vehicles may require hard wiring be done to accommodate. This can create warranty issues as well as other wiring challenges in the tow vehicle. Until recently these "knee knocker" units (called that because they are usually mounted in the dash) were the norm. Now there are some alternatives to these dash mounted units, where the entire electric brake control is mounted on the trailer itself. \*Autowbrake