



Special Trailer Tires Vs Passenger Tires

There are distinct differences in the way passenger tires and trailer tires are designed, engineered, and constructed. There are also differences in the service requirements between the tires on your car or truck and those on your trailer.

Traction, or grip, is a key element in the design of passenger tires. Traction moves your car or truck down the road. Traction allows you to stop, turn and swerve, and traction also gives you the ability to tow your trailer. Another important consideration in passenger tire design is "ride". Ride, traction, and handling are all achieved in passenger tire designs by adding flex in the sidewall. By making the sidewall more flexible, tire engineers maximize tread contact with the road, thus increasing traction and allowing the driver to maintain better control over the vehicle.

Traction is only a factor on trailers equipped with brakes, during braking operations, because trailers are followers. In fact, sidewall flexing in a trailer application is a negative. Sidewall flexing on trailers carrying heavy loads; trailers with high vertical side loads (enclosed/travel trailers); or trailers with light tongue weights, is a primary cause of trailer sway. Automotive radial tires with their flexible sidewalls notably accentuate trailer sway problems. The stiffer sidewalls and higher operating pressures common with Special Trailer (ST) tires helps control and reduce the occurrence of trailer sway. Bottom line, trailers are more stable and pull better on tires designed specifically for trailer use.

Also consider that all Light Truck (LT) and Special Trailer (ST) tires are fully rated for trailer applications. This means the tires can carry their full sidewall weight rating when used on a trailer. When passenger tires are used on a trailer, the load capacity of tire must be de-rated by 10%. If the tire has a maximum load rating of 1900 lb., it may only be used in a trailer application up to 1710 lb. This means the GAWR rating on the trailer Certification Label must not exceed 3420 lbs. On a single axle trailer, or 2 times 1710 lbs.

For trailer use, it is important to match the tires to the application and payload. Since Special Trailer (ST) tires are constructed with more and heavier materials, they are tougher and more bruise resistant than typical passenger tires. This is a plus because trailer suspension systems are generally stiffer and less sophisticated than automotive suspension systems. A tire designed to operate in the more demanding trailer environment will provide end users a longer service life and withstand the added abuse tires on a trailer experience.

Bias ply Special Trailer tire technology has been moving trailers around America for nearly 30 years, and more recently, the ST Radial arrived on the scene providing the same durability and dependability in a radial trailer tire. For many trailer buyers, tire decisions are purely price based. The allure of an equal price and the word "radial" for that price draws some customers to the passenger tire. Taskmaster hopes this explanation of the differences will help you make a more informed decision on your next trailer tire purchase.



Safety point**What to do**

Tires
and trailer

Check pressure and look for signs of wear on both truck

Wheels

Check that all lug nuts are tight

Hitch

Use a check list to make sure all steps are complete.

Safety chains
frame (not bumper)

Make sure chains are crossed and hooked to vehicle

Breakaway
in. Service battery

Check cable length. Make sure coupler is fully plugged

TRAILER HOOK-UP SAFETY CHECK LIST

- 1. Coupler down and tight over hitch ball**
- 2. Pin in coupler and locked**
- 3. Chains crossed and hooked to vehicle frame (not bumper)**
- 4. Breakaway line hooked to truck**
- 5. Trailer leg up and locked in place**
- 6. Electrical plugged in and working**
- 7. Brake box tested and set for load**

Please check off all items you presently carry in your truck or trailer.

1. Spare halter
2. Spare lead rope
3. Tire gauge
4. Duck or electrical tape
5. W-D 40
6. Can of Fix-a-Flat
7. Emergency flares, cone or triangle
8. Trailer-aid jack
9. Jumper cables
10. Sharpe knife or Multi-tool
11. Wire Cutters
12. One or Two Flashlights with extra batteries
13. Trailer bottle jack
14. 100 ft of ½ inch rope
15. Cell Phone
16. Phone list – vet, and back up people listed
17. Spare tire
18. Wheel chocks
19. Cash
20. First-aid kit for horse
21. Bandages
22. Bute
23. Standing Wraps
24. Vet Wrap
25. Small Clean Cloth
26. Fly Mask
27. 4x4 gauze pads
28. First-aid for humans:
29. Bandages
30. Tensor Wrap
31. Neosporin cream
32. Benadryl tablets
33. Sterile telfa pads
34. Medical tape
35. Tylenol
36. Benadryl cream
37. Universal tire wrench
38. Spare Fuses



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Dealing with a Trailer Accident

by: Michael Ball, DVM

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Editor's Note: This excerpt is from Understanding Equine First Aid by Michael Ball, DVM. The book is available from www.ExclusivelyEquine.com.

Having an accident with a van or trailer carrying a horse is a nightmare. Always do everything in your power to prevent a vehicle accident with horses on board (or any time for that matter). If you are uncomfortable with the trailer rig or the size of a van, seek out the tutelage of an experienced driver. Put in practice time driving your truck and trailer combination before your first equine passenger goes along on a trip. Remember to pay attention to the weather conditions--especially if you are preparing for a long journey.

Probably one of the biggest mistakes people make is to drive the van or trailer like a car. Remember that with all the extra weight, everything is increased (i.e., stopping distance, the number of car lengths you should be behind the vehicle in front of you, turning ratios, etc.). Your reaction time must be good, but don't slam on the brakes if you can avoid it! Being safe means no map reading, no eating a fast food meal sprawled out across your lap, and NO calling on the cellular phone while you are driving. Remember, there is a 30% greater chance of being in an accident if you are driving and cell phoning at the same time. If you do not have a co-pilot to help with these things, pull over and stop before you pause to read the map, eat the snack, or make the call.

The extra weight of the trailer or van means the stopping distance could double. You should increase the space between your vehicle and the one you are following by one car-length for every speed increase of ten miles an hour. Be aware of approaching tractor-trailers; when they pass you the air currents will tend to push the vehicles apart. You should be ready to compensate for this. Try and watch what the cars are doing as far ahead as your line of sight will allow--if you see a brake light come on, decrease your speed--even if the vehicle immediately in front of you doesn't slow down right away. The driver of the car up front might not be as aware of what's going on as you are!).

Always watch for sharp curves and traffic getting on and off ramps--remember, any sudden moves you make will bounce your precious cargo around. If you do have to slow down fast, it generally is better to do it in a straight line rather than around a curve. In other words, if approaching a curve too fast, it is better to brake hard in a straight line and then enter the curve more gently than to brake hard while in the curve.

Also remember all the safety items. If your trailer has brakes make sure they work and are adjusted appropriately. Make sure that all the trailer lights are working and that there are enough of them on the back--this can help reduce the chance of a rear end collision. Also make sure that you have an approved fire extinguisher.

If an accident does occur, it will be very important to get aid as quickly as possible. The presence of a

cellular phone or a CB radio plays an important role here. Remember that not all parts of the countryside have cellular service, so a CB radio is a good back-up. Pay attention to the road signs and know what cell phone number will get you directly to the state police. Truckers and other road warriors use CB channel 19 while many emergency agencies and the state police often monitor CB channel 9. Make sure that whoever you end up talking to knows that you have (or might have) injured horses and that a veterinarian is also requested.

Immediately after the accident, if the trailer or van is upright and the horses can be safely accessed, you will want to evaluate them and apply any first aid that might be required. Be extremely careful opening any door on the vehicle (even the little tack compartment or escape doors designed for people, not horses). If a horse has broken loose from its ties during the accident, it could be free in the trailer and if it is panicked enough, it will attempt to jump out of any escape route possible. You DO NOT want to unload the horses on the highway. There have been many sad reports where a frightened horse has survived the first accident, only to break loose from its handler and run into oncoming traffic, causing both horse and human fatalities. If there is no danger of fire from a ruptured gas tank, wait to unload the horses until the police arrive and can supervise and stop traffic if it is necessary to unload a horse.

Hopefully, if the situation involves a fire, you will have a fire extinguisher and enough people will stop to assist so there will be no need to unload on the side of the highway until it is safe to do so.

If the trailer or van is overturned, you should NOT attempt to rescue any trapped horses until safety crews appear on the scene to provide help and advice. The inside of a vehicle with a trapped horse is an extremely dangerous place. In addition, the emergency crews should have the appropriate equipment to "extract" the horse safely.

Depending on the animals' injuries, the safest way (for the people and the horses) to extract them might be for a veterinarian to place them under anesthesia for the removal process. If possible, a veterinarian should work with the police and rescue personnel to develop a plan of action. Oddly enough, many horses lay down rather quietly while trapped, only struggling intermittently, while their rescue is organized. Remember, the most important things are to get emergency help immediately and not make the situation more dangerous by making rash errors of judgment.

Readers are cautioned to seek the advice of a qualified veterinarian before proceeding with any diagnosis, treatment, or therapy.



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Before you ever have a flat, it is crucial to familiarize yourself with your car. Dig the car manual out from under the stash of ketchup packets, napkins and tampons in the glove compartment and read the instructions to change a tire. Locate your spare, jack, and tire tool and make sure access is not obstructed. Let's keep that trunk cleaned out so you can get to these items quickly and easily. Work the jack and find the correct placement according to your manual. I also recommend adding to the trunk work gloves, a pair of wheel chocks and a 2 or 3-foot metal pipe that will fit snugly over the end of your tire tool. By the way, if you're concerned about protecting your clothes from the filthy, dirty tire, you can add disposable paper coveralls found at a paint store.

At the point you think you might have a flat, drive to where the ground is "level and firm" and you can safely pull several feet off the side of the road. Put your car into park, engage the parking break, and put on your hazard lights.

Get out your equipment: spare, jack, tire tool, pipe, wheel chocks, and gloves. Put on coveralls and gloves if you have them. Place the wheel chocks on both sides of the tire diagonally opposite from the flat. For example, if your rear driver-side tire is flat, secure the front passenger-side tire, and vice versa.

I learned this one the hard way ... take off the hubcap and loosen lug nuts "before" jacking up the car, duh! If your car is raised, the tire will spin when you try to loosen the nuts. Shops use pneumatic tools that tighten nuts and make them difficult to remove by hand, but by adding a pipe over the end of the tire tool for leverage, any girl can work those nuts off. Remember the handy phrase: Rightie tightie, lefty loosey. Loosen the nuts, skipping every other one until you've worked your way around the wheel.

Now it is time to jack up the car. Your car manual shows the proper positioning of the jack. You'll be surprised how easy it is to lift the car ... jacks employ either a screw or a lever mechanism that makes the job almost effortless for even the girliest girls. Raise the car enough to get the flat off and accommodate the spare tire.

Completely remove the lug nuts and store in a safe place, then remove the flat.

Put the spare tire on with the air valve facing out and screw on the lug nuts, again alternating until you've finished the wheel.

Lower the car and re-tighten the lug nuts using your pipe for leverage.

Put your tools, hubcap and the flat in your trunk. If the flat is too heavy to get in your trunk, you may have to drag it further off the road and come back for it later with help. You will need the rim, so don't forget where you leave the tire!