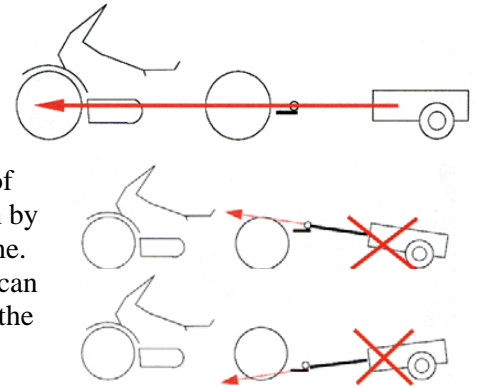


Tips on Towing a Trailer

Motorcycling with a trailer can be safe and enjoyable but requires additional understanding and knowledge on your part. Consider that you are pulling a 200-500 lb weight behind your bike. Pulling this weight is not the difficult part having this weight act against the bike is. Every time you try to brake, turn or accelerate the trailer will apply a force at the back of the bike in the direction it is moving. This can push out your rear tire, lift or lower the back of the bike or just try to push you forward as you are trying to stop. **Always allow extra room for stopping and emergency maneuvers.**

Setting Up Your Trailer

The first thing to consider is whether or not your trailer hitch and trailer will work together properly when braking. When you brake an imaginary line through the center of the wheels, should pass through the center of the ball and above the center of mass of the trailer. This provides a straight line of force when braking. To achieve this the trailer tongue should be sloped down by 2 degrees – when you brake the bike will lift and the trailer force will be in line. An improper hitch too high can cause rear wheel lift when braking. Too low can counteract the normal weight shift forward changing the normal dynamics of the motorcycle and increase the braking distance



2 safety chains must be used to secure your trailer to the bike. They should be crossed under the hitch to support the tongue should it come off the ball and should not be long enough to allow the trailer tongue to reach the rear tire, nor for the trailer tongue to dig into the ground. They should be long enough though to allow full side to side motion of the trailer during turns. Some provinces/states will not accept the single chain as provided with some trailers and you may not be allowed to continue until corrected.

Tongue weight should be about 10% to 15% of the trailers gross weight and the weight of the load in it. Measure the tongue weight at the ball, at it's operational height, using a bathroom or fish scale. Too little tongue weight will cause erratic trailer behavior, sway and wandering. Too much tongue weight may lighten the front wheel, over stress the bike suspension, cause increased wear and fatigue on the hitch components and further reduce handling and braking capabilities.

Careful loading of cargo will assist in having the proper tongue weight. Load the trailer so that the heaviest items are the lowest in the trailer. Balance the load between the front, middle and rear of the trailer. Recheck the tongue weight after you have changed the loading. Motion of the trailer can cause the contents to shift – pack the trailer in a manner that will reduce this possibility.

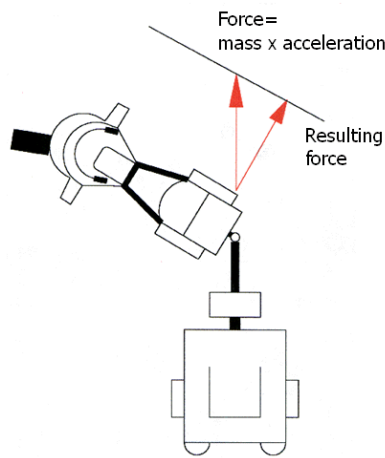
Check and set tire pressure when the tires are cold and according to the trailer manufacturers specifications. Too little inflation will increase rolling resistance and increase tire wear. Too much inflation may cause the trailer to bounce and affect handling. Check the tires regularly for signs of wear, cracking etc. and replace if needed.

Each time you take off with your bike & trailer test the coupler connection is secure by lifting up on the tongue. Over time the coupler can become loose enough to pull off the ball.

Before leaving do a T-CLOCS inspection of your bike and trailer paying special attention that all the lights are working – both on the bike and the trailer.

Tires and wheels ; **C**ontrols ; **L**ights ; **O**il ; **C**hassis ; **S**idestand

Motorcycle braking



Towing a trailer will increase your stopping distance! When loading your trailer remember that it is easier to pull 350 lb. behind a bike than to pull 500 lb. The extra weight increases the stopping distance dramatically since there are no brakes on most motorcycle trailers.

If the motorcycle and trailer are not in a straight line when you start to brake the trailer will exert a sideways force on the bike. The faster your speed and the harder you brake the greater the force that will be exerted.

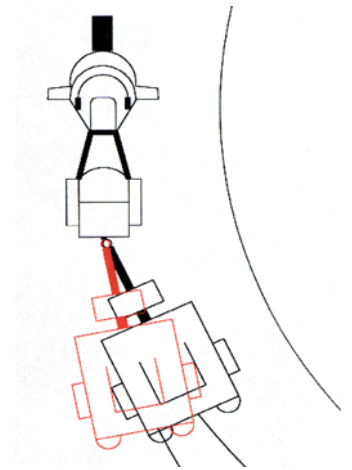
When braking in a corner always be sure to first straighten out the motorcycle and trailer before braking.

Always remember to ease out of a driveway or out of a sharp turn due to the additional side force that can result from your trailer if you choose to brake or accelerate hard.

Where does your trailer track ?

At low speeds, the trailer tracks slightly inside of the bike. Watch out for curbs. At higher speeds, the trailer tracks outside of the bike. Watch out that it doesn't cross the center line of the roadway.

Just like a tractor trailer the trailer behind your bike will not react as quickly as the bike to changes in direction. If you take the trailering course you will notice that unless you make exaggerated turns going down the slalom the bike will easily swerve around the cones and the trailer will just ride over them.



Insurance

Insurance may vary province to province and company to company so check with your insurance company, **before towing a trailer**, as to what you will need.

Normally when towing a trailer the motorcycles liability insurance extends out to the trailer and will provide protection for any liability due to damage done by the trailer while it is connected to the bike. Liability coverage is automatic while being towed but does not cover the trailer when it is disconnected from the bike (ie parked) nor does it cover the trailer for damage, loss etc. There is also a gray area of what happens if the trailer separates from the bike while traveling.

If you haven't already done so please consider taking a trailering course. GWRRA offers an excellent course that covers this material and much more and allows you to learn and practice your trailering skills in a safe environment.

Note: Portions of this document were taken from the Trailering Course overhead slides prepared by Bob Lorenz