Hauling your Bike Safely- Steve Warmath

We all love to ride, right? No mystery there. However, there may be an occasion when you decide to transport your bike to a destination and ride out from there. For whatever the reason; weather, distance, logistics, it is important to know how to securely tie down your bike for the trip.

The Trailer: The first thing is to ensure the trailer used has a secure perch for hooks. The exact location(s) of such perches will become clear, there are more than one acceptable position for these, but generally one set near the front, and one set on the rear. For the front and the rear, use one on each side on the outboard of the trailer.

Commonly used trailers are enclosed trailers, open garden trailers or flat-bed trailers with wooden beds. Loading the bike on a trailer is also a concern. Some trailers, such as enclosed and garden trailers, usually have a rear gate that doubles as a loading ramp. Some trailers can be tilted; others lift the bike from a flat position. If a ramp is needed, a 2 x 8 will work because trailers usually are not very high. Caution should be used if the bed of a pick-up truck is going to be used. In that case, there should be at least two, preferably three people working together to get the bike up that high. There are metal ramps that can be used, but the length of the ramp has to be tempered by the height of the truck. For example, a standard small truck such as an S-10 or Explorer can use a 6 foot ramp, but an F150 or CK1500 may require a seven or eight foot ramp.

The Bike: Depending on model, let's assume with fuel and oil your bike is going to weigh in at 600 to 700 lbs. A trailer should have a minimum GVWR (the weight of the trailer plus the weight of the pay load) of at least 1,000 lbs. That assumes a trailer that weighs in at 250 lbs (i.e. garden trailer)., the tongue weight would be around 100 to 150 lbs. Check your wheel base length to make sure it will fit, particularly if hauling in a pick-up. The center of gravity of the bike should be forward of the axel to ensure a positive tongue weight on the tow hitch. (See photo above).

The Straps: There are varying methods and ways to tie down a bike. Each person must secure the bike to his or her satisfaction but a minimum is necessary. There are two weights used to select a strap: 1) the working strength, and 2) the tensile or breaking rating. This method uses five straps, only four of which are actually working to hold the bike. The straps are web types, the most common and affordable, any K-Mart or Wal-Mart will have them in the automotive section.

Once the bike is secure on a platform, it will be subject to the forces of turns on the road, stops, and starts. All movements of the tow vehicle and the trailer will put stress in various directions on the bike, but primarily on the straps used to hold it down. No matter what the method, everyone will begin with two straps on the handle bars. Bikes may successfully be hauled with only two straps on the handle bars, although, it is not recommended.

I like handle bar straps that wrap around the bars, vice tying the straps directly on the handle bars. If you use these, they can be obtained from most motorcycle shops. Follow the directions and avoid binding cables, either electrical, mechanical or hydraulic. The straps have a loop on both ends, feed one end through the loop on the other end and around the handlebar at the bend. The angle of the strap will make it settle at this point In this example, the main tie down straps should be a minimum of 600 lbs. breaking strength, and 300 lbs. working strength.

Ratchet tightening systems are preferable. Periodic checks of friction clamps will reveal, however, that the clamps will slip with age. These straps should be about six feet long. If a fifth strap is to be used as a safety strap, it should be 1500 lbs. breaking strength that will give about a 900 lbs. working strength. This strap, if used, should only have a ratchet clamp. Straps will all have heavy hooks on the ends, but sure to select ones with a rubber or vinyl coating on the metal, ensure that the hook tip folds back to a parallel position with the shank that is attached to strap. Less than this will allow the strap to work off the hook in heavy turns.

Tying the bike down: Attach the straps up front first. If doing this alone, attempt to sit on the bike while tightening the straps. This can be done, but it is easier with someone else sitting on the bike. The front straps should be tightened to compress the front forks no more than half the travel of the shocks, a little less is OK, but about half way is the max. Full compression will damage the shocks. The idea is to have the springs in the shocks provide a tension force on the straps but still allow travel to compensate for turns and bouncing. Once the front straps are on, the bike will be stable, raise the kick stand and ensure the bike is in first gear.

If the trailer does not have a channel or wheel chock for the front wheel, blocking the wheel with some 4x4s may be a consideration. A block for the front wheel will prevent left to right movement of the tire contact point. If the trailer does not have a rigid front wall for the front tire to rest against, something such as a 4x4 block should be secured to the trailer. Make sure that the block is attached so that the straps will angle forward slightly from the bike to trailer attachment point. Failure to ensure this will allow the bike to move backward. Attaching horizontally can be done but the rear attachment become more important if a front angle cannot be achieved. This block is to keep the front of the bike moving during deceleration of the tow vehicle. Secure any loose ends of the straps. Using the remaining two short straps, attach the hooks to a solid part of the frame or swing arm if possible. This set of straps is intended to stabilize the bike left to right and prevent the rear wheel from hopping around from road bumps. They also tend to serve as a back up to the front strap by providing some upward stability to the bike. The important thing here is to get the rear end secured to the trailer. The angle on the rear straps will depend on where they can be attached to the bike and trailer body. **Do not use hard bag decorative rails as rear attachment points.**

The longer safety strap that should be about 12 to 15 feet long and is attached to the same two securing position as the front straps and is then run through the frame at the rear swing arm joint and tightened. This strap will hold the bike if either of the front straps breaks or loosens and buys some time enough for you to stop and fix the problem.

Once the bike is secured and you are moving, STOP within 20 miles of travel and check the straps. While traveling, STOP and check the straps every 100 miles or so. One more point about hauling in a truck: the bike is unwieldy in a truck bed and will alter your braking and handling. You should slow down on curves, especially tight ones. You also should check braking when you begin to get the feel of the distance needed to stop and don't follow vehicles too closely.

And by the way, if you ask your wife/ girlfriend to help you unload your bike by backing it out of the front wheel chock, make sure the "tranny" is in neutral. It makes it a lot easier and prevents you from getting "**the look**" when you disclose why it is so hard to back it out. :0[

"Be careful out there….it's a jungle." **Happy New Year 2014!** *Steve*