

BMMC Rider Training



Transporting Your Motorcycle

Going on a trip? Want to take your motorcycle but circumstances won't let you ride it there? With a trailer you can load up your motorcycle and head out fairly easily. Here are some tips for transporting your motorcycle safely:

I. Trailer

Trailers are easy to get a motorcycle onto because you don't have to lift it very high. But the problem with open trailers is the motorcycle will be sitting lower and be riding in the turbulent area behind your vehicle, pebbles and road debris will hit the motorcycle. Protect it with a plastic shield or cover the motorcycle to deflect these projectiles.

All passenger vehicles should be able to tow a trailer and single motorcycle without much strain, but check your manual for more information.

II. Motorcycle Trailer Tie-down Procedure

A proper motorcycle tie-down system has these major components:

- A means of securing the front wheel from moving forward or turning sideways.
- The means to attach the strap to the bike in a secure location without damaging the bike.
- A means of attaching the strap to the trailer.

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A. Motorcycle Rails and Wheel Chocks



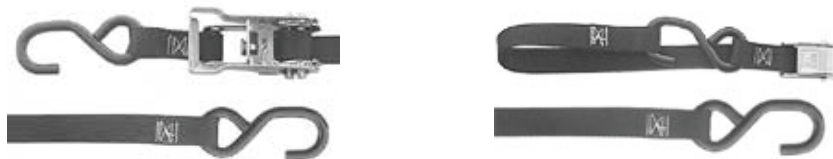
For any motorcycle tie-down system to be safe and secure, there must be a way of ensuring that the motorcycle, once tied down, will not move. The best means of accomplishing this is by preventing forward motion, preventing the front wheel from turning, and by using tie-down straps to pull the bike down on the suspension and forward against the chock.

B. Motorcycle Tie-down Straps

Most trailer facilities offer 1" wide straps rated at 2400 lbs. test and 800 lbs. working load. Most 1-1/2" wide straps are made to aircraft industry specs and are rated at 6600 lbs. test and 2250 lbs. working load (recommended). Tie-down strap with a soft tie loop provides a strong and flexible attachment at the motorcycle.



Tie-down straps are available with either ratchet (best) or cam/friction (good) buckles.



Ratchet tie-downs let you increase the tension on the motorcycle's suspension, which in turn will reduce shock loading the straps when the trailer hits a bump. Shock loading occurs when the motorcycle's suspension compresses to absorb the shock. The tie-down straps go slack and then are snapped tight as the suspension expands. To eliminate shock loading without requiring extreme compression of the front shock absorbers, a fork support is recommended.

Tie down the motorcycle to either the frame or a part solidly mounted to the frame of the bike. On most touring and sport bikes it's recommended using two sets of ratchet straps with soft loops to (1) surround the triple tree (where the fork tubes mount to the frame), and (2) to the handlebars (one set pulling the front tire directly into the chock and the second pulling forward and out to the side). On Harley Davidson motorcycles, the reversed forks require a different technique. Move to the front of the engine where the frame meets the crash bars (if so equipped, or where it would meet the crash bars if not) and repeat the tie-down mentioned above.

At the back of the bike, tie a soft loop around the passenger handgrips, the passenger foot pegs, or the rear frame of the bike itself. This will require a little bit of ex

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perimentation as your bike may have pipes or other parts that could interfere with the strap's run. Things to watch out for would include dull as well as sharp corners as chafe is a major cause of strap failure, and hot pipes or anything that might be damaged if a metal portion of the ratchet contacts a chromed part of the bike. Sometimes interference or contact can be avoided by reversing the strap, which would move where the ratchet sits in relation to the bike.



Finally attach the straps to eyebolts mounted in the frame or flooring. If your flooring is wood use locknuts and large washers to avoid loosening or even worse having the eyebolts pulled through the wood due to shock loading. Always check your tie-down points for tightness.

C. Motorcycle Tie-down Tips

- Tie-down straps should form a 45-degree angle between the bike and floor, consequently the lower on the bike that the tie-downs are, the closer to the bike the floor tie-downs can be and still be secure.
- When towing two or three motorcycles, it is recommended to use extension tie-down brackets to achieve this angle on the outside tie-downs.
- Do NOT tie down handlebars if they are rubber mounted or not firmly attached to the front end.
- Do NOT use rear bag guards to tie down the motorcycle. They will be pulled right off of the bike.
- Never put a cover on your motorcycle when towing it on an open trailer. Grit and tiny movements of the cover will "sand" the paint right off of your motorcycle.
- Don't go for the "cheapest" straps when securing your motorcycle. The price to repair your bike will be far greater than the money saved buying economy straps.

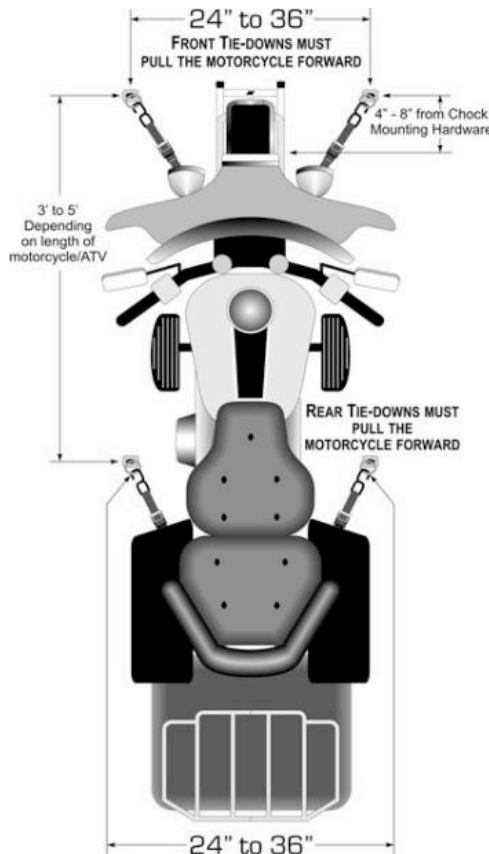


D. Step-By-Step Motorcycle Tie-down Procedure

1. Locate and attach front ratchet straps (2 sets) to the eyebolts on the trailer. Place back straps (1 set) in a position where they can be reached from the

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- seat of the motorcycle.
2. Start and warm up the motorcycle then ride or walk it onto the trailer.
 3. Find a place to attach the soft loops on both sides of the rear of the motorcycle, and while still on the bike, attach the rear tie-down straps and tighten until the bike is firmly in place (against the chock).
 4. Pull down and forward enough to slightly compress the rear suspension. The rear tie-downs are used mainly to keep the rear of the motorcycle from hopping or bouncing and from moving left or right in the trailer.



WARNING: Motorcycles using wheel chocks must be pulled forward with both front and rear tie-downs.

Do NOT strap the front wheel to the chock.

5. Attach the front tie-down straps so that the bike is firmly in place. Compress the front suspension no more than halfway.
6. When you are finished, the bike should be completely upright and straight. Shaking the bike should only cause trailer motion and very little bike movement.

Hope this helps.