

## Winching 101 - Part 5

How much winch should you get? One rule of thumb is to buy a winch with a capacity of about 1 ½ times the loaded weight of your truck. The other rule of thumb is to buy the biggest one you can afford. A good tradeoff between these is probably in the 8,000- or 9,000-lb. range for most vehicles. A winch in this range will usually be big enough to pull you out of whatever you're stuck in, or will pull the other guy out. If it won't, there's always the option of using your snatch block to double the pulling power. Owners of bigger trucks might want to consider a 10-, 12- or even a 15-thousand-pound winch, but keep in mind that bigger winches place added burdens on the truck's electrical system. Also, bigger winches have thicker but shorter ropes.

No matter how you mount your winch, make sure the attachment system can handle the load. If you're mounting it permanently to your rig (as I did), you want to mount it so that the rope is as closely in line with the center of the frame as possible. This reduces torsional stresses to a minimum. You also want to attach the winch mount to the frame as strongly as you can. There are many reputable companies that make winch bumpers or other kinds of winch mounts for your rig. I recommend them (I started with a Con-Ferr winch bumper for my Jeep) because of all the research and engineering that has gone into making them reliable, strong, and safe.

If you are using a receiver-mounted winch, make sure that your receiver is fastened securely to your truck's frame. On a straight-ahead pull, you probably won't have any trouble, but on a sideways pull the winch will put a lot of twist into the receiver. If the system isn't built right, it could possibly bend or even twist off during the winching.

Now that your winch is attached to your vehicle, how do you attach it to something else? In other words, where do you put your hook? There are three basic objects to hook to: trees, rocks, and other vehicles. For trees, you want to use your tree-saver strap around the trunk as close to the ground as possible, to minimize the leverage placed on the tree roots. Then use the clevis to hold the strap ends together, and hook your cable to the clevis. For rocks, a chain might be a better idea than a strap, because a rock could fray or cut the strap. Use the hooks on the chain to make a loop, and then hook your cable to the chain.

To hook to another truck, look for the most secure location you can. Unless there is absolutely no other choice, do not – repeat, do NOT – hook to a bumper. Bumpers are not attached securely enough to handle the load of a winch, and can be pulled off. Likewise, don't hook to an axle if you can avoid it. U-bolts, or track bars, or whatever holds your axle to the truck were not designed to handle multi-ton pulling forces.

If you're winching something else, and you need to keep your rig from moving, you can again hook it to a tree, a rock, or another truck. However, in this situation you need to think about a stretched or broken frame. Consider: Your winch is on the front of your truck, and it's pulling something toward it with, say, 7,000 pounds of force. Well, that same 7,000 pounds of force is pulling your truck toward the other object. If your truck can't move because it's anchored, your frame has to withstand that 7,000 pounds. Or suppose you need to double-up on your cable, and your winch is near stalling. With an 8,000-pound winch, that means you could have up to 16,000 pounds of force pulling at your frame. Clean frames in good condition have been known to stretch or break under those circumstances. To avoid that scenario, run your recovery strap under your truck and hook it to the winch end of your frame. That lets the force be handled by the strap instead of the frame. (NOTE: This is a case of "Do as I say, not as I do.")

Joan Beck, a Bullhead 4-Wheeler, recently sent me an article from their newsletter called "Thumbthing Went Wrong." (Thank you, Joan!) The author got careless once (it only takes once!) and lost part of his thumb when it got caught in the winch cable. Be careful! The author recommends taking the following steps every time you use your winch:

1. Secure the hook somewhere other than the rollers

2. Leave at least 6 inches of slack between the hook and the rollers
3. Put the winch clutch in neutral (or disengage it)
4. Pull out the cable you need
5. Hook up the control cable

The next time you're near your rig, mentally walk through the steps you take when you use it. Ask yourself if what you are doing is the safest way to do it, or if you could be safer. If you practice safety when you're not in a hurry, it'll be easier to do things safely in a stressful situation because the safe actions will be familiar.

In the remaining article or two, I plan to cover a typical winching sequence and cleanup afterwards. If you have ideas, suggestions, or questions, please let me know. Call 298-5641 or email [gonzodave@yahoo.com](mailto:gonzodave@yahoo.com). I'm also planning a "Winching 101" run, for which suggestions are welcome.

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