Summary: Every JK Wrangler made from 2007-present (all 1.1 million of them) is a candidate for the heavy duty tailgate hinges. Whether or not the additional HD products are needed depends on many factors, which this document will cover. Based on those many factors, “it depends” is part of the answers to most questions; but if in doubt the MORryde Tailgate Reinforcement is very affordable insurance against tailgate structural damage.

Q: What's wrong with the factory tailgate hinges, and why should I replace them with the MORryde HD tailgate hinges?

A: All factory tailgate hinges will rust and wear, which causes the tailgate to rattle and sag. The weakest part of the factory hinge is the hinge bearing. At right is a photo of a factory hinge that's only a few years old. You can see the rust where the hinge pin passes through the hinge base - this hinge is already loose, and rattled when driving over bumps in the road because of the looseness. Part of the problem is that the factory hinge pin bearing is a steel-on-steel surface that isn't lubricated; that plus the rust starts the wear process and since the bearing surface is only the 3/16"-thick hinge base, once it starts to wear is goes pretty quickly.

The heavy duty hinges have a bearing surface that is the entire width of the hinge, less a little bit at the center where the zerk fitting is. The bearing is bronze, which holds lubricant well, and the zerk fitting is there to insert grease into the bearing. The hinge pin is stainless steel, which won't rust and is harder and therefore less resistant to wear than the factory steel hinge pin. And BTW in the unlikely event that wear does happen on the heavy duty hinge, the hinge pin is replaceable and so are the bronze bushings, both are items that can be found in a well-stocked hardware store.

In addition to the strength and wear reasons for replacing the factory hinges, the MORryde hinges are also designed for easy mounting of cargo accessories which will be covered later in this document.

Since it's only a matter of time before the factory hinges wear and need to be replaced anyway, we recommend replacing them while they're still good – that way the removed factory hinges can be sold on eBay or Craigslist and the proceeds can offset the price of the new hinges. If you wait until the factory hinges are worn, they're worthless.
Q: I want to run larger tires than stock, but I'm not sure if the tires I want will fit on the factory spare carrier.

A: The size of a spare tire you can mount on the factory spare carrier is limited by the distance between the spare mount and the top of the bumper – in most cases the largest tire that will fit on the factory setup is a 33”. Factory JK tires are generally 32”, so the factory setup doesn't allow for a much larger tire. If you plan to carry a spare larger than a 33”, you'll need to do something to accommodate the larger spare.

The MORryde HD/Large Spare Carrier has two mounting positions, and can carry up to a 37” spare in the lower mounting position and up to a 40” spare in the upper mounting position.

You should check the weight of your larger spare tire + wheel combination because the JK Owner's Manual is pretty specific on the weight limit for the stock tire carrier and tailgate: “If you have added aftermarket accessories to the spare tire mounted carrier, it cannot exceed a gross eight of 69 lbs (31.3 kg) including the weight of the spare tire.”

In some cases, a 6- or 8-ply LT-rated 33” spare on a factory rim may weigh more than 69 pounds, so even though it may physically fit on the factory setup, tailgate damage may occur. In this case, the MORryde tailgate reinforcement is good insurance against tailgate damage.

Q: What can happen if my spare exceeds the factory recommended weight limit?

A: In addition to accelerated wear of the tailgate hinges, many people report that the spot welds holding the tailgate sheet metal together are breaking under heavy loads. This happens because the heavier spare causes the tailgate to flex over bumps in the road, and this flexing puts uneven pressure on the welds – in many cases the stress is enough to break spot welds. The type of driving you do will affect this as well – high speed travel on washboard dirt roads will stress the tailgate more than slow speed around-town driving. What's needed to prevent weld breakage with heavy spares is something that prevents the tailgate from flexing and putting extreme stress on individual spot welds, like the MORryde Tailgate Reinforcement.

In some cases, people report that the cast magnesium factory spare carrier has cracked, although this is fairly rare because the factory carrier can really only fit a 33” tire. But even so, a heavy 8-ply LT-rated 33” spare on a Jeep driven at high speed on rough surfaces may stress the cast factory carrier to the point of breaking.

When putting a larger spare on with the MORryde HD/Large Spare carrier, be sure to know the weight of the new spare/wheel combination, and if it exceeds the factory recommended maxium weight, it's good insurance to install the MORryde Tailgate Reinforcement.
Q: I plan to run the factory tires on my Jeep until they're worn out, then I'll upgrade to larger tires. What's the best upgrade path for me?

A: The first thing you should upgrade are the factory tailgate hinges, because it's only a matter of time before they wear enough to cause tailgate rattling and sagging, even with the factory spare. Since you're running the factory sized spare for the time being, there's no need to upgrade to the HD/Large Spare Carrier until you switch to larger tires, but you might consider installing the MORryde Tailgate Reinforcement now if you plan to also carry cargo such as a full 5-gallon jerry can on your tailgate – that can cause the factory recommended weight limit for the tailgate to be exceeded.

Q: If I install one or more of the MORryde tailgate cargo accessories on my Jeep, will I need to add reinforcement to the tailgate?

A: The first thing to know is the weight of your spare tire/wheel combo. If it's close to the factory weight limit (69 pounds), depending on what accessories you add to the tailgate, you may want to “take out insurance” against tailgate damage by adding the MORryde Tailgate Reinforcement. But it depends on what you're adding – for example, the MORryde hinge-mounted HiLift Carrier doesn't put much stress on the tailgate even though HiLift jacks are fairly heavy. The reason for this is that the HiLift carrier bolts to the hinges, so most of the weight is borne directly on the hinges and doesn't put any extra force on the tailgate. Also, because the mount is close to the tub-side base of the hinges, any twisting leverage that the long shaft of the jack might exert is transferred to the tub mounts and not to the tailgate, and the tub mounts are strong enough to handle this load. The MORryde hinge-mounted Rotopax carrier is in the same category – most of the weight and stress is transferred through the hinges to the tub mounts, so it's not a problem in most cases.

The MORryde Excursion rack may exceed the factory recommended weight total depending on what you plan to carry on the rack – the heavier the load you plan to carry on the rack, the better idea it is to install the MORryde Tailgate Reinforcement. A fairly light cooler and a factory spare, for example, isn't likely to cause a problem. But a huge cooler with lots of ice and 64 full beverage cans is a candidate for some reinforcement as insurance. Similarly, a full 5-gallon metal jerry can on the MORryde spare-mount jerry can carrier is a good candidate for some extra tailgate reinforcement.

In all cases, though, the stress on the tailgate does depend on the road conditions and driving style – something that's not problem when carried occasionally on paved roads can be a problem when carried all the time and/or driven aggressively on rough off-road conditions or at high speeds over ordinary road obstacles such as potholes.

In any case, if in doubt, the MORryde Tailgate Reinforcement is very reasonably priced insurance against tailgate damage.