## A Crescent Wrench and a Creeper

## Tips for Maintenance of an Off Road Rig

By Del Albright

Nothing slows down the fun like a mechanical failure, no matter your choice of off-road recreation. Fixing stuff on the trail can be fun; but usually it's a pain and is never done as well as it would have been in the shop. The best solution is to prevent the breakdowns! It's all about preventative maintenance if you want to maximize your fun and minimize the down time. Here are some tips.

When it comes to 4x4's, (Jeeps, trucks, toys, buggies, etc.), it's as simple as a crescent wrench and a creeper. It may sound a bit simplistic, but it's about getting under the rig and touching and checking for lose, broken, about to break or leaking stuff! Find it before it's a problem. For side by sides, ATV's, snowmobiles, etc., it's more about the touching and looking, but the idea is the same.

Use a simple large Crescent wrench to check all important nuts. If they appear to be loose, use the Crescent or get out the right tool; but get it tight! If something is supposed to be torqued to specs, use a torque wrench and do it right. The handle of the Crescent can be used to pry and nudge things like long arm connections and Heim/flex joints. If you have unusual movement, figure out why and fix it.

For smaller "toys" that you can't get under, something as simple as cleaning and touching the parts and connections can help you find lose or worn parts. Be sure to look for welds about to give up the ghost also. I like to clean my toys to the point of ensuring I touch about everything important, or at least give it a good eye-balling.

An online parts seller friend of mine, Mike Monahan, known as Parts Mike (<a href="http://www.partsmike.com">http://www.partsmike.com</a>) says that in his experience it is steering components that fail the most often on 4x4's. "Stock steering linkage and parts are not engineered to withstand the stress of bigger build ups and tires," says Parts Mike, "and the best solution is to buy the right stuff and improve what the factory gave you."

Mike also told me, "Most four-wheelers do not pack the front wheel bearings as often as they should and failures are common on the trail." Jeff Hayer of Motorsport Fabrication Services (MFS) says that one of the worst things he sees is back-yard fab work that fails miserably on the trail under stressful conditions. "If you're going to weld on your own rig," Jeff says, "learn to do

it right or have a certified welder do your work. It's not worth the chance when it comes to rig safety."

Some off-road shops like MFS (<a href="http://www.mfs-ca.com">http://www.mfs-ca.com</a>) will give your rig a pre-trail and post-trail inspection to let you know what might need fixing or is about to break. In my thinking, this is cheap insurance for a better trip next time. Besides, who wants to be the guy holding up a trail ride for a break that could have been prevented with some simple crescent wrench and creeper time before the event?

Another off-roading friend and sponsor of mine, Scott Becker of Rubicon Express, explained how we all love powder coating on our parts. It looks better than raw metal because it doesn't rust, gives a pretty finish and can last a long time. "Learning to spot a failing or damaged weld under powder coating takes skill and practice," Scott says, "you can do it with close inspections." He adds that "moisture will sometimes work its way through cracks or scrapes in the powder coating. Rust showing on the outside of a weld that is power coated is a good indicator of a damaged weld."

Pre and post inspections of your rig, especially underneath, can prevent a lot of down time on the trail. You and your buddies will be happier with a good maintenance program. Get it done' and get it done as simply as a creeper and a crescent wrench.

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