



uspension: Done wrong, it not only feels sloppy but also endangers the rider; done right, it transforms a motorcycle into a remarkably more responsive and safer machine. If your bike's suspension is terrible or less than optimum, a

significant suspension upgrade can make a radical difference—often turning a mediocre ride into a keeper.

I don't use the word "remarkable" loosely. Although it's less often the case these days, some newer bikes still come with "suicidal," mushy suspension systems. In older bikes or newer machines with aging suspensions, upgrades will make all the difference.

Adventure riders accustomed to bikes designed (and typically modified) purely for function should have a suspension upgrade at the top of their to-do lists. Indeed, some of the most frequent failures we hear about from overlanders involve fork issues or busted and unrepairable rear mono shocks. When planning a long-range trip, especially to

distant lands, it only makes sense to eliminate the potential for such problems (or to have a repair plan in place if something fails) before leaving our shores.

Speaking of which, although our **ADVMoto**/LFAR\* DR 650 Project Bike's suspension had been satisfactorily reworked during its first series of modifications [ref. **ADVMoto** March 2015 edition], I wanted to take it up a notch. The bike is being readied for a multi-year RTW journey, and in the process I've moved it from Los Angeles to **ADVMoto's** HQ in Virginia. The ride across country proved advantageous in that *Cogent Dynamics (CD)*, located in Fletcher, NC (just outside of Asheville), was more or less along the way. And stopping by gave me a chance to meet the owners, Rick and Joyce Tannenbaum, in their natural habitat.

I was introduced to the Tannenbaums a couple of years ago at AIME. Back then we discussed the project bike and its goals, before an invitation was extended to see what kind of suspension improvements were possible. Keep in mind that the ADVMoto/LFAR DR 650 is intended to be a mule. It has to carry a fair amount of gear, be both pavement and



Cogent's RTW Service Kit is small and light (about six oz.) and costs only \$75. Small enough to be wedged into almost any place in your kit.

Cogent's Warranty: Shocks are field-serviceable and factoryrebuildable. Send in every two years or 20K miles, whichever comes first. Pay shipping both ways along with a set fee of \$75 and CD will do all the service work and bring the shock back to new condition. If you go over the due date/miles the parts are

dirt friendly, and hold up to diverse planetary conditions and elements. And, I specifically don't want a race-tuned machine that will require constant wrenching. One of Cogent's specialties is producing rugged long range suspension systems that are fully field-serviceable. To be sure, that's not the norm.

There's a surprising amount of knowledge available regarding suspension that could be a huge benefit to overlanders. And, after Rick's thorough and relevant explanations, I'd never leave North America to wander the Third World without a 100% serviceable suspension system, including paying particular attention to service intervals. Most of us are fairly ignorant about this stuff, and that means suspension component failures are relatively common. They're expensive and time-consuming to repair in the field, especially in foreign lands where wait times for parts can be a month or more, plus a drain on the finances obtaining or fabricating parts, paying import taxes, etc. However, serviceable suspension components, and innovations like CD's RTW Service Kits, are a game changer.

Cogent is the real deal, with a handful of dedicated staff, highly specialized equipment (some of which they've developed themselves), and a whole lot of T.L.C. Now in about their tenth year, Cogent sells and services high-end OEM brands in addition to developing their own line of motorcycle suspension products. Although they cover virtually all makes and models, there's an almost cult following in the "underdog" segment of adventure bikes—the Kawasaki KLR 650, and Suzuki DL/DR 650 models. They're 100% hands-on; almost every part of the CD product line is made in the U.S. if not right there at their shop. And while they sell certain bike-specific products through outlets like our pals at ProCycle (ProCycle.us), and Happy Trails Motorcycle Products (Happy-Trail.com), the emphasis is on in-house and customer direct.

The upgrade process took about a day. But what intrigued me was how much hands-on work goes on at CD. After an in-depth discussion around topics like the purpose of the bike, how much weight and where would be carried, the expected types of terrain, and serviceability issues, Rick used his experience to diagnose the ideal setup—custom building and assembling what I would need right there! It was all impressive, and very downhome. Working with Rick and his staff was pure pleasure.

What's it like to ride after the upgrade? Well, let's just say that I'm so pleased that my attention is now completely off any more suspension tweaks. Off road, there's no unnecessary bouncing, swaying or bottoming out. The bike now has a high-end feel and is one heck of a lot more fun, especially in loose and bumpy terrain.

I love these down-to-earth, made in the U.S. specialty shops because they're built purely on passion—driven by innovators who are doing a better job, really listening to us, and coming up with superior solutions. A description that perfectly describes Rick and Joyce and their labor of love.

## MotoCD.com

\*LFAR is an acronym for "Lost for a Reason," a charity many ADVers support that's run by Ron and Dawn Grace to benefit Navajo reservation families. LostforaReason.org





## BEFORE AND AFTER COMPARISON

by Mallory Paige

Though it got me to Alaska and back, "Rufio," my KLR 650 hack, sagged noticeably low—struggling against the added weight of a dog, overland gear and sidecar. The worn stock KLR 650 suspension had long ago lost the ability to rebound and respond, to properly handle any bumps in the road. It was time for an upgrade.

Rolling into Cogent Dynamics' North Carolina shop I didn't know what to expect. I imagined it would be the standard choose a part, remove it from the box, and install. I figured it would improve my ride, but not be particularly exciting. Boy, was I wrong!

I quickly learned that more than anything the folks at Cogent are seriously excited about motorcycles and this enthusiasm makes working with them fun and personalized.

First, we rolled the rig onto the scales—taking bets on the loaded weight. Next, we discussed my riding style, typical gear load and goals. With that information they were ready to custom build the suspension. Then on installation day, the team was even nice enough to let me follow them around asking questions and turning a wrench whenever possible. With Cogent DDCs, fork springs, fresh oil and a shiny new Moab Shock in place, it was time for the test ride.

A suspension upgrade is often an awesome experience, and perhaps the best performance and safety investment you can make. It's not uncommon to hear, "No more mushy feel" or "Handles like it's on rails!"

Over the last couple weeks my dog Baylor and I bounced down national forest backroads, weaved through an explosion of color on the Blue Ridge Parkway, cruised to the Outer Banks and logged more than 1,000 miles. And my only regret is that I didn't do this upgrade months ago! The bike rides great, feels more capable of managing the sidecar and has gained a few precious inches ground clearance.

With more than 40 states, Canada, and Mexico left to visit, we'll continue putting Cogent suspension to the test and do our best to live by their mantra motorcycles are fun!