An American Icon, the Jeep Wrangler

There are few things across any spectrum that most anyone can look at and instantly associate as an American icon; two of those things are the AR15 rifle and the Jeep. Two products, uniquely American, that have become indispensable in some of the toughest places on earth. So what is it that these two icons actually share besides reputation? The ability to transform what is already a dependable base configuration into something even more capable.

Choosing the right parts and accessories for you stock AR is no different than that for your Jeep. To make both products more capable, it takes choosing the right parts and companies to get you there. This project Jeep Rubicon build will discuss just that, how to take an already very solid off road vehicle and turn it into something even better.

No matter what the goal is for your Jeep adventure, a trip into a remote shooting location or trekking out west into the rugged wilderness to set up a base camp for some monster muley hunting, the Jeep is the perfect vehicle. Just like trying to argue which AR15 rifle or part is the best, this project chose companies that have a solid reputation for quality, fit a unique role to address a specific need and represent the top players in the Jeep Wrangler JK aftermarket arena. There are many great products out there for the Jeep, these are but a few and I feel represent the best of breed.

**Rock Krawler**

I think if you take a look at the Jeep crowd, one of the very first things you see modified on the JK is the suspension; even dealerships offer lift kits and larger tires right from the showroom floor. So it only make sense to address one of the very first things that makes the Jeep more capable off road and that is a suspension kit. Rock Krawler Suspension is definitely a premier suspension manufacturer whose products are made in the U.S.A.

One of the reasons I feel that Rock Krawler has an edge over many other companies is their kits ability to be upgraded down the road as your needs and Jeep demands change. You are not stuck with “kit A” and then required to buy and install an entirely new suspension system because you want to run larger tires or have changing needs. The kit I chose was the 3.5” X Factor System which is a complete bolt on system. This kit comes with super beefy front and rear lower control arms. The control arms are made from solid alloy steel and will take a beating. The control arms are also outfitted with their proprietary Krawler Joints. These joints are made from forged, not cast, heat treated chromoly steel that are serviceable and rebuildable which allows for long life. These joints are key to the “high misalignment” that allows for such extreme articulation in the suspension. Plus with the materials used and tight tolerances they are very durable. Krawler Flex joints are also used and have the highest quality bushing material for a vibration and squeak free ride.

A progressive rate coil spring is used on all for corners. Rock Krawler choose a triple rate spring that retains a factory ride but allows for great off road performance. The springs are also preset to minimize any sag from adding weight to the vehicle. These three rates allows for smooth highway ride and excellent control off road. New, heavy duty front and rear track bars to keep the axles from any side to side shifting. These two components are usually upgrades in competitor’s kits. Extended sway bar links with heim joints and extended braided brake lines to account for the lifted height are included as well. All in all, this kit does just about everything you need without getting into the more intricate coilover systems. But, if you decide to upgrade to the Rock Krawler coilover kit, no problem because its all upgradable. Lastly, and something you might mot imagine in a part that is designed to get the hell beat out of it is Rock Krawler’s Abuse Proof Lifetime warranty.

**Method Race Wheels**

No Jeep can have a great suspension kit added without a set of quality wheels. Many people choose their aftermarket wheels for the look and flare to set their Jeep apart from the rest and that’s fine. I knew that there were a few requirements on this build when it came down to choosing the wheels. First was the weight of the wheel. I wanted the lightest wheel I could find (within my budget) to help keep the rolling mass to a minimum. Second, I wanted a beadlock system that would allow me to air down the tire for off road use without the worry of the tire bead coming off the rim.

Enter Method Race wheels and the 101 beadlock wheel. Method has been involved in the off road race scene for years. They have a background in performance racing wheels that’s has carried over into their consumer line. The 101 series is a lightweight, 32 pounds to be exact, aluminum wheel that is beefed up in areas that it needs to be and no more, which allows it to come in so light. Don’t worry, this doesn’t mean it’s fragile; this wheel is used by many in the racing circuit.

The beadlock feature is the outer ring secured by grade 8 zinc plated bolts and allows you to lower the air pressure to conform to the terrain without fear of popping the tire bead off the wheel. This allows you to create a wide footprint so that the tire can float across mud or conform to rocks for better traction. I partnered the Method wheel up with the proven BF Goodrich KM2 37x12.50x17 wheel. Suffice it to say, this tire has a tremendous reputation built from BF Goodrich’s racing heritage. It’s a mud-terrain tire that also has a low mass; the tire/wheel combo came in at around 100lbs per set. It rides greats on the road without that annoying hum or “singing” effect usually associated with mud tires and really hooks up nicely off road. It turned out to be a great combination.

**Currie Enterprises Antirock Sway Bar and Currectlync® Steering system**

As you will read shortly, there was a bit of weight added to the Jeep with some of the other components and this can effect the handling characteristics. Since we are covering suspension, I wanted to discuss the Currie Enterprises Antirock rear sway bar. This device gives the vehicle increased traction by balancing and distributing the weight and traction over all four tires. This helps keep the body from rolling as much when the suspension is articulating, essentially allowing the body to remain as level as possibly over bumps. It also helps control body roll when the center of gravity is raised and or weight is added to the top of the Jeep. Currie’s device doesn’t restrict travel in the suspension either.

The sway bar is made from 4340 chromoly steel that is heat treated. A UHMW bushing is used in the cross member along with quality heim joints on the connecting links. With roof racks and roof top tents, the Antirock system provides a safer, more stable ride and the adjustability is nice to have for changing environments.

The Currectlync heavy duty tie rod and rag link system eliminates any worries about the steering linkage handling abuse or the stress of bigger wheels and tires. Extreme off road angles are no problem. Built from 1 5/8” diameter 4130 chromoly heat treated steel, this system is a beast. The ties rod ends are greasable for longevity and can be easily replaced without removing the entire system. The tie rods ends usually wear pretty quickly with the factory parts and the entire system is fully adjustable to dial in everything for a straight ride. This component is a direct replacement and requires no modification just like the Antirock system. Currie is known for building the best axles on the market, but these two gems from Currie are something every Jeeper can benefit from.

**River Raider Off Road**

Kenny Hauk, the owner and founder of River Raider Off Road has taken to he Jeep community by storm in a very short period of time. River Raider was born out of necessity and passion, a story similar to that of Marty Daniel of Daniel Defense. Kenny found himself unemployed when the recession hit and turned his passion for jeeps into a booming business. When he discovered that parts he wanted for his Jeep weren’t up to par, he decided to start making them himself.

I knew I wanted a few things on this build and River Raider had them all. A flat fender conversion for larger tire clearance, rear rocker corner armor, skid plates and a front and rear bumper. The flat fenders are made from heavy gauge steel, 1.5” DOM tubing and are fully welded for strength. Attached to the subframe, they provide serious protection for the body as well as allowing for tire clearance when the suspension articulates. Stand on them or slide up against a tree, these fenders like everything else will take a beating.

The rear corner armor beefs up what is actually a fragile part of the Jeep body. It allows for peace of mind when sliding and bouncing up against boulders or trees. Plus the frenched in taillights look really great. I was also able to weld my GOBI roof rack strut tower braces to the heavy gauge steel armor. One of the items that is very popular from River Raider is their skid plate system. Covering the oil pan, transmission, transfer case and gas tank, you will never have to worry about a rock busting a critical component underneath. The system bolts on and provides seamless protection underneath. There is a simple detachable plate that allows access to change the oil as well. You can even upgrade to the UHMV panels that attach to the plates for easy sliding over rocks.

The front and rear bumpers are another component that many Jeep enthusiast swap out. Especially on the rear. Carrying a larger wheel and tire on the factory spare tire carrier creates problems because it wasn’t designed to handle the weight of bigger combo. The River Raider rock crawler rear bumper with tire carrier can handle up to a 40” tire with ease. Built from 3/16” steel, it’s designed for high clearance over rocks while still providing great protection. Through construction shackle attachment points provide super strong recovery points and the tire carrier operates with the Jeeps tailgate as one unit. The front bumper is also made form the same 3/16” steel and comes built as a “stubby” version. It also maintains high clearance approach angles and good protection. The winch sits nicely inside the bumper as well. All of the components were finished in an epoxy based coating for extreme durability. For up-armoring your jeep with functional features, River Raider builds what you need.

**Georgia Powder Coating**

For some of the components on the Jeep like the wheels and skid plates, I wanted a color change and needed a quality powder coating company. Georgia Powder Coating has been applying their trade for some of the biggest names in the motorcycle and private jet industry for years. What sets them apart is their prep and application processes that are very consistent and controlled. Each item is thoroughly prepped and cleaned and then sent through an automatic gun spraying system applying the product in a very uniform manner with no over spray or clumping. Any hard to reach areas are then addressed by hand one at a time.

Their large heating units then cure the powder coat through a computer controlled uniform heating and cooling process. This ensures that the finish is properly cured and without defect. Each part is inspected and carefully packaged for shipping. The attention to detail and consistency is why aircraft and automotive companies turn to Georgia Powder coating.

**GOBI rack system**

Seeing how I knew I wanted to be able to have additional storage and cargo capabilities on the Jeep, a rack system was a must and in my mind that meant a rack from GOBI. They build the best utility racks for the Jeep and have a ton of options, which is something I like. I chose the Stealth rack because of its sleek design. It can handle an 800lbs static load for roof top tents or cargo and carries a limit of 300lbs while driving. Bolt on ladders allow for super easy roof access and the removable roof insert lets Jeep owners use the factory freedom top. There’s no drilling required for installation either.

If you need to carry recovery tools, or fuel cans, or a spare tire no problem. Want to have custom light tabs attached like I did around the perimeter, they will build it as you need it. The rack can detach and tilt back on the rear struts to remove the tops with ease. Everything comes with a two layer epoxy coat for corrosion resistance. There are so many options that it would take an entire article just to cover it. Everything from light tabs, ladders, accessory attachments to internal wiring channels for clean looks, the GOBI rack is very well thought out.

This rack has set the standard for the Jeep community and this is evident by that fact that many other companies build products to work specifically with the GOBI product. Needless to say I am very happy with the rack. All of the lasers cut parts are perfectly welded and the thing just looks great. This piece is very well engineered.

**Baja Designs Lighting**

No Jeep is complete without a few lights. I’ll admit it, I like bright lights but that’s not why I chose Baja Designs. Baja Designs is a company with a serious off road racing heritage and is outfitted on the some of the top names in off road racing. One of the advantages of their products is the ability to set the light(s) up as you need. Most of Baja Designs lights come with multiple lens that allow you to configure the light as you see fit. You can choose from high-speed spot, wide driving/cornering, flood, combination, spot, wide cornering and driving combo. Sounds like a lot but they do a very good job of explaining how to build your lighting system.

With features like MoistureBlock waterproof technology you don’t need to worry about condensation or light failure from water. Proper thermal management for the high output LED’s is managed through their Copperdrive system to protect all of the circuitry. Did I mention lighting options? Even the color temperature of the LED’s is built to work with the human eye. If you have a rock smash a lens, no worries, swap it out for a new one instead of a new light. They truly get the science of lighting and the system I assembled is pretty damn impressive. Options are important and Baja Designs lighting has them.

**Genesis Off Road**

With all of the accessories on my JK, power management is very key and this is where Genesis Off Road comes in. Shane Smith saw a need for a better dual battery system for Jeeps while building a custom rig for a client. There was nothing out there that met the bill so Shane built it. The best part is that all of the scary wiring stuff has been done for you. The top plate or brains of the system is prewired. The two batteries work together through a smart isolator. One battery is for accessories while the other is for cranking. Grommets allow for clean wiring routes for lighting and such. High quality battery terminal connectors are soldered and crimped to flexible 2 gauge wires connecting the batteries. Wiring up accessories is clean and simple with post’s allowing for easy connection. It looks like a lot but it’s pretty simple and clever. Working with any group 34 battery, this system will keep you from being stranded. Essentially the system monitors both batteries and keeps you from killing them to the point that you can’t start the vehicle.

The optional G Screen monitors both batteries from inside the cab. This device shows the voltage on both batteries and functions to show if both batteries are connected or if the isolator has split them to save the cranking battery. It also functions as a boost switch from inside the cab. This boost allows you to link the two batteries together if the cranking battery ever gets too low to crank the Jeep. Push the button for three seconds, linking the two and then crank your Jeep. No More jumper cables in the snow or rain, all is conducted from inside the cab. A real great system for Jeep’s with accessories.

**SPOD**

So you really hate dealing with wiring up electrical components on your Jeep, me too. The SPOD saved the day. The SPOD is a power distribution system designed for off road vehicles. It mounts inside the cab above the rearview mirror inside an aluminum housing containing 6 rocker switches. There is also a 12 position (positive & negative) terminal block that mounts under the hood. The block is attached directly to the battery. The in-cab 6 panel switches plugs right into the terminal block with one prewired cable. All you do is run your positive and negative wires to the terminal block. Its super simple and keeps you from having to tap into the complicated CAN-BUS electrical system or figure out how to wire to the battery.

Features like ATO automotive fuses, 8 gauge power leads, integrated low voltage cut off to protect the cranking battery ensures that you can’t screw things up. This system is safe and protects your Jeep’s electrical system. If you have an onboard air compressor like I do, you can get the SPOD with an air gauge that shows tank pressure. I chose to have the G screen built into mine. The SPOD is one of those items that just makes life easier when it comes to owning a Jeep and simplifies the demands of wiring up accessories.

**ARB USA**

If you’ve been around the 4x4 arena at all, you recognize the name ARB. They are known most notably for their air lockers, or locking differentials. For this project they supplied something just as popular but a bit different. The Series III Simpson tent, Fridge freezer and their on-board high performance air compressor. Along with offering recovery gear and trail tools, the compressor, fridge and tent are useful items to make setting up and camp site and airing up tires or running air tools a cinch.

The tent sits atop the GOBI rack and unfolds in an instant for a comfortable two man sleeping system. Staying off the cold ground is a plus and having an instant campsite is really nice. The aluminum ladder extends to the ground making entry/exit a breeze. Heavy duty canvas material ensures years of use.

The on-board compressor is a heavy duty unit that tucks nicely under the front seat of the JK. With beadlocks, I am constantly airing up and down the tires and having the on-board compressor makes this very easy. This unit fills the market need for a compact sized yet high-volume compressed air source to suit the high volume airflow needs to include air tools.

The fridge/freezer is the ideal way to keep food fresh and cold on any 4x4 adventure. This unit is a true refrigerator/freezer and can run off 110v at home or 12v DC in your Jeep. The fridge/freezer is built like a tank with powder coated parts and is solar power and generator compatible.

Needless to say, there was a lot that went into this build and these companies represent just a few of the best of breed for the Jeep. Just like modifying your AR, choose the best products to fit your needs.