

TCT MAGAZINE

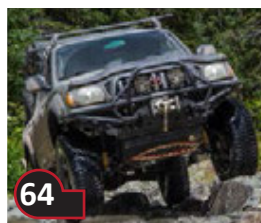
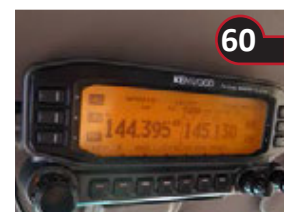
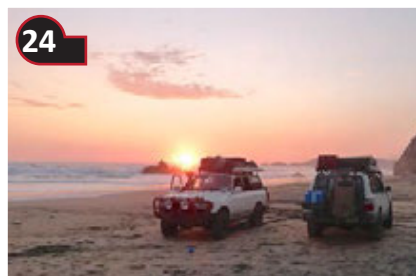
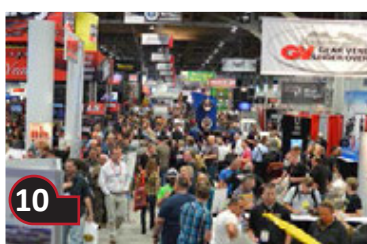


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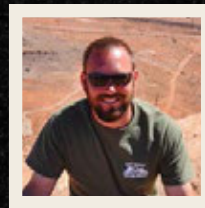
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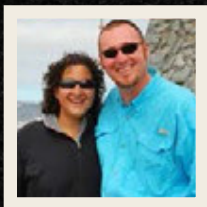
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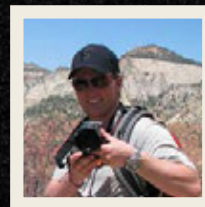
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FROM THE PUBLISHER

Welcome to the all new Toyota Cruisers & Trucks Magazine! Elation doesn't even begin to describe my feelings for this inaugural issue of TCT. Our team really has hit a home run, and the only problem with this issue is that we ran out of room for the amazing content our editors, contributors, and fans submitted.

It was during the 6 hour drive from Ouray back to Colorado Springs back in 2006 that the idea of an online magazine began. Angie and I had just finished attending the first FJ Summit and knew we loved FJ Cruisers and the growing community surrounding them. We started FJC Magazine as a way to help build and share that community, and our goal with TCT Magazine hasn't strayed.

Of course, the Toyota 4x4, off-road, and overland community is much larger than the subset of FJC and Tacoma enthusiasts, so some things had to change.

We have a great team of 6 Managing Editors, several associate editors, and a handful of contributors to help put this publication together. Our software is now cutting edge so soon we'll be able to publish a fully-interactive digital publication on all major tablet & smartphone platforms. Of course our expenses for travel, coverage, and production have risen as well.

Luckily we've been able to keep the digital PDF version of TCT Magazine a freely available download. It's our pleasure to do so, and even though it's not the most profitable option, I'm dedicated to the free sharing of this information.

If you're so inclined, please visit our site and learn about our printed subscription option. We really want to be able to bring printed subscriptions to life, but we have a minimum number of 1,500 print subscribers before we can do so. At that number we will not make one penny of profit, but it's an important step in the evolution of our 'little' magazine.

Until next time, Tread Lightly, Stay the Trail, and HAVE FUN!

Shane



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New & Noteworthy

ArkPak Battery Box

If you're interested in a battery power solution for your Toyota Cruiser, Truck, or SUV, or a solution for emergency or trailer use, the Australian made ArkPak Battery Box has finally hit the US shores!

The ArkPak is a 12V battery charger, a portable power source, a battery management system, a jump-starter and a dual battery system all rolled into one. It delivers both 12V and 120V power via a built in 150 watt inverter and 6 amp battery charger. Depending on the battery you add to the system, you can get up to 3 days of 120V power or 7 days of 12V power (depending on usage of course).

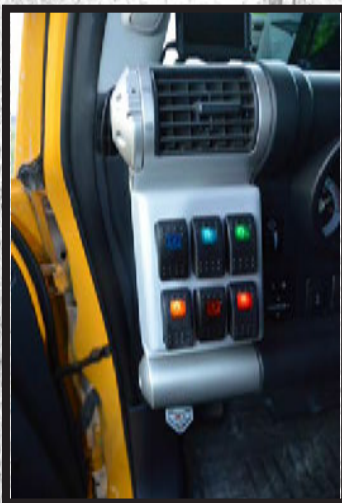
Simply add the battery of your choice (the higher capacity the better) and a suitable charging solution and you're good to go. The system can be charged from your vehicle, from a 12V home charger, or via solar panels. We're looking at using an ArkPak based system to build an emergency solar generator for under \$1000. It's normally priced over \$500 for a kit that includes the ArkPak, a 12V DC Charger, and mounting bracket, but ArkPak USA has discounted it to \$399 for the time being.

We contacted ArkPak about this article and they even offered our readers a special deal: use the code TCT5014 to save \$50 off the price. Here's the catch: that code is only good from Jan 6th through the 14th, so if you want one now is the time to get going!

SOURCE: arkportablepower.com



FJ Cruiser sPOD



FINALLY! The sPOD is available in an FJ Cruiser flavor! We saw the prototype of this perfect little switch and relay system during CruiserFest last September, and it really fills a need! In addition to their award winning super-easy-to-wire sPOD fuse block, the FJ Cruiser version is available with a fully plug & play switch bank for up to 6 switches.

If you'd rather use the stock FJ switch block, simply wire the sPOD to your switches. There's also a 2nd Gen Tacoma version available as well. Other Toyota options are currently in the works.



SOURCE: 4x4spod.com

3DRobotics IRIS Quadcopter



We've been looking at quad copters for a few years to help with our unique video capture requirements. Until very recently they've been expensive, very challenging to build, and not user friendly. In the last year a few options have come to market that promise ease of use and a low entry level cost, and the IRIS from 3DRobotics is one of them.

This Quad comes fully assembled and ready to fly, so you just add your compatible GoPro camera and you're off & flying. They also have kits that include a GoPro Hero 3 and fully articulating gimble to give you the best video shots possible.

The absolute best feature of the IRIS though is it's auto-pilot functions, specifically the Follow Me feature. When paired with a compatible transmitter, the IRIS will follow you (more importantly your vehicle) at a desired altitude and distance automatically. No flying needed! While the 15 minute estimated flight time isn't perfect, we see a big future for quads like this in the off-road video world.

SOURCE: 3DRobotics.com

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"Snowflake"

Redline Land Cruisers

Custom FJ-45 Build



Earlier this year Redline Land Cruisers completed an amazing FJ-45 custom build, and we're excited to reveal this classic Land Cruiser to the world.

Snowflake is the name Justin gave to this substantial project, which is very interesting considering the Toyota-original "Free Born Red" main color. We had the opportunity to spend some time with Snowflake before she made her way home to Southern Colorado. This truly is a very special build.

Starting with a custom frame, Redline sourced a custom extended length cab aluminum FJ-45 pickup aluminum body from Aqualu and added factory Toyota steel for the bib, hood, doors, and bezel. The bed is also custom aluminum. As I mentioned the main color is OEM Free Born Red with Cygnus white for the bezel, OEM wheels, and roof.

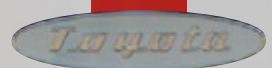
The LC sits on factory disc-brake wheels and new OEM hubcaps, with 33 X 10.5 15" Toyo Mud Terrain shoes. Redline built a custom steering shaft and Ididit column mated to a AGR 4-turn power



steering box to ensure easy drivability. For suspension, they used a standard Old Man Emu 2.5" lift kit to make sure the truck has adequate clearance for tires and any trails the owner wants to explore. The axles are stock FJ-45 with ARB air lockers on the front and rear, with a NV4500 Manual 5 speed and Orion transfer case with 4-to-1 low range. The customer wanted plenty of power so Redline dropped a Ramjet 350 into Snowflake that produces 350hp and 350 ft/lbs of torque.

While the mechanicals of this truck are impressive, my favorite part about this build is the attention to detail on the interior. Some purists may want all-original interior bits, while others want to go ultra-modern. Redline has a perfect formula for building custom interiors that matches classic form with modern function.

Justin sourced electric heated seats from a 2006 4Runner, but re-covered them in leather with red stitching to tie everything together. The custom center console hides all heat and A/C components and includes custom knobs hand-made at the shop. The 'modern hot rod' concept is carried to the dash with a mix of classic gauges and a





modern Nav/XM/Bluetooth audio system. The speakers are hidden under the seats to allow for plenty of great tunes without impacting the interior aesthetic.



The bed includes a fold and tumble rear seat for carrying the kids, and is lined for easy cleaning. The build includes a custom rear soft top and custom Redline bows. This setup mimics early factory soft tops for the 25–40 series Land Cruiser, and is completely removable. The sides and rear also unzip and roll-up to create an open cabin feel for rear passengers. The rear tire is mounted vertical in homage to early FJ-25 series, but inside the bed for a clean exterior.

Everything about Snowflake screams modern classic. This truck has the form and function of a classic Land Cruiser, and the fit and finish of a truly custom build. While this FJ-45 is now home and out of sight, Redline continues to knock out amazing restorations as well as modern builds. We're excited they're so close to TCT Magazine World HQ! 🇺🇸



TOYOTA RACING DEVELOPMENT

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The Best of **SEMA**

By Bob Holliday & Jonathan Harris



Toyota had a large presence both inside and outside of the convention center this year. An amazing sidewalk mural was on display outside of the Toyota booth while jaw dropping builds were on display inside. www.toyota.com



Cutaway Creations, a company that is more than happy to cut a perfectly good vehicle in half had a slightly more modest, yet still highly impressive TRD NASCAR cutaway on display. www.cutawaycreations.com





We like the clean lines of ICI's new Magnum front and rear bumpers for 2007-13 Tundra. With integrated 1" tow rings, light bar hoop, auxiliary lighting cutouts and winch mounting capabilities, the front bumper is a complete bolt on solution. We really liked the auxiliary lighting provisions in the rear bumper as well. www.icionline.com

Metaltech had their Tundra on display out front. Proudly showing a bunch of exotics the way. www.metaltech4x4.com



It's always great to see a 40 on the floor! Outback Proven came with a couple beautiful off-road rigs to complement their deep product line. www.outbackproven.com



The final ULTIMATE Edition FJ Cruiser in a unique "Heritage Blue" color. Beyond the upgraded features such as remote-reservoir shocks and new wheels, this FJC includes a white bezel & Toyota emblem. We can't wait to drive one when they hit dealerships in February. www.toyota.com/fjcruiser



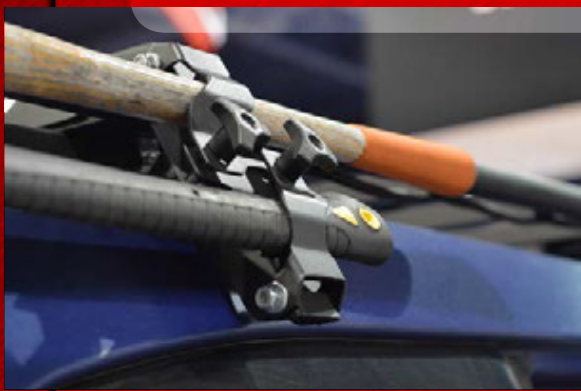
Clay and the crew were also on hand in Vegas showing off their "office" www.xoverland.com



Warrior Products has a sleek new platform rack for the FJC on display. When installed, the rack reduces the overall height of the truck giving it both a great profile but a heavy duty storage space. Many accessories are available including a slick mount for two hand tools. Also on display was their new, simplified plate bumper. www.warriorproducts.com



Jonathan's favorite expedition tow rig: The 2013 Earthroamer LT-S. The S is for Stretch, giving occupants 2 feet of extra legroom. Based on Ford's F-550 chassis and boasting a towing capacity of well over 10,000lbs, we think this Earthroamer would make the perfect tow rig for your favorite Toy. www.earthroamer.com



Robby Gordon, Jeremy "Twitch" Stenberg, BJ Baldwin, and Kyle Leduc put on a show for the SEMA crowds Thursday night.



This Hilux on display at the Pro-Comp booth was one of many international rigs in Las Vegas for SEMA. www.procompusa.com



Factor55's newest product, the FlatLink. Designed to be a slimmer shackle than their popular ProLink, it looks like it will do the job nicely at less than 1.75" thick when stowed. www.factor55.com



One of A.R.E.'s customers provided her propane powered Toyota Tundra for display at the A.R.E. booth. They also had their new Work Cover on display, available for 2nd Gen Tacomas. www.4are.com

In the Toyo Tires Treadpass display, Toyo had a beautifully built 2013 Tacoma towering over the impressive sports car lineup. www.toyotires.com

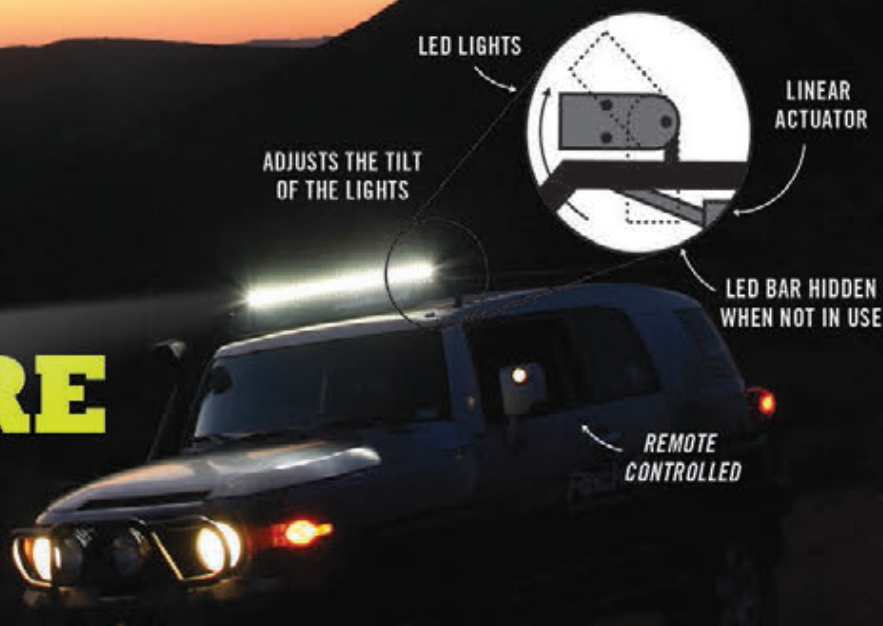


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Fox's new line of performance shocks is available with externally adjustable high and low speed compression, allowing the end user to fine tune the ride to their needs while in the field. Available for multiple platforms and applications. www.ridefox.com

Volant Cool Air Intakes was on hand showing off their line of intake systems and taking time to meet with consumers for new ways to expand their product lines. www.volant.com



Ironman was out in force at SEMA this year. Showing off a new bumper, their award winning portable toilet & Ice Cube fridge, as well as their Monster 9500lb winch. It's always great to see a 70 series on the floor as well! www.ironman4x4.com



The Best of SEMA 2013



Addictive Desert Design had their FJ Cruiser on hand to show they can build more than Raptor armor and accessories. www.addictivedesertdesigns.com

Finally putting a drawer solution into the hands of the FJC owner or anyone who just wants a wider drawer, ARB is releasing this wide series of Outback Solutions drawers. A fit kit will be available soon for FJC owners to complete a super clean, super durable installation. Jonathan has been abusing the standard width variant of these drawers for the past two years and they take everything he can throw at them. www.arbusa.com



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**4
Runner**

2014 4Runner Trail Edition Review

By Phillip Jones

2014 Toyota 4Runner Trail Edition 4x4

Base Price: \$35,725

Price as Tested: \$37,808

Engine: 4.0L V6

Horsepower: 270 HP @5600 rpm

Torque: 278 lb.-ft

Transmission: 5-speed ECT-i automatic

Curb Weight: 4,750 lbs.

Towing Capacity: 4,700 lbs.

After climbing into the 2014 Trail Edition 4Runner and sliding onto the seat, it takes a minute to soak in the rather lavish interior. Starting the engine brings the colorful gauges and a mid-console screen to life. Gripping the steering wheel is a treat. A glance across the dash and console assemblies and one quickly realizes that Toyota has upped the ante with interior treatment. Toyota has brought elegance to off-roading in ways that were previously experienced only in the upscale Lexus models.



The cockpit ergonomics are well designed for a comfortable and user-friendly driving experience.

With competitors bringing an end to body-on-frame SUVs in an effort to offer increased comfort and reduce fuel consumption, Toyota's challenge is to disguise the rugged truck as a desirable daily driver and family vehicle. Toyota did a superb job of achieving a smooth and quiet ride. Acceleration is powerful enough to jockey past minivans. Cornering is deceptively well executed. The 4Runner is

Toyota's challenge is to disguise the rugged truck as a desirable daily driver and family vehicle.



tall, so the expectation is heavy body lean when cornering aggressively, yet the 4Runner maintains a sporty feel in turns. Throttle response is immediate and deliberate. Engine noise at full throttle isn't annoying. Quick braking is solid and secure. Gear changes are easy to anticipate and performed as quick as one expects in a modern truck.

Seat comfort is ideal for long trips. Armrests are strategically placed. Visibility is excellent. Window control buttons are at the top of the door sill, which means they are positioned at a higher point than traditional placement. Despite the nontraditional location for the reach of the hand, they are easier to view, allowing the driver to keep eyes on the road.

The attractive gauge layout is illuminated by the impressive Optitron instrument panel. An information display for multiple functions resides between the speedometer and tachometer. Automatic dual-zone climate-control is standard on the Limited, leaving the SR5 and Trail with manually controlled air conditioning system.

Ergonomically, the large button controls are easy to access with large enough backlit fonts for most people to read. Temperature control buttons are small, but airflow modes are on separate buttons, providing for instant direction response. Readouts are displayed in a bright bluish-green font against a black background. Thus, the digital LED display for temperature, airflow mode, and fan speed is much easier to read than previous generations of black font against an orange background.

Toyota deems the new face-lift as more aggressive, but of course opinions vary. It's as if Toyota was hoping the look may increase the chances of the 4Runner getting into a movie where large combat robots transform into vehicles. Despite the new face-lift geometry not having an approval



consensus, there are pleasing aesthetics on the Trail Edition. The Trail/Sport Edition hood scoop tradition continues as one of the distinctive features. The front and rear bumpers are adorned with



The Optitron instrument panel is nicely illuminated.



The center console features large buttons and a touch-screen for easy audio controls.





Only the Trail Edition gets a direct 4WD shifter.

Off-road controls are located in an accessible upper-console only on the Trail Edition.



a new contrasting silver panel, and smoked optics are placed over the headlights, which are now projector beam. New for 2014 are four exterior colors: Super White; Attitude Black Metallic; Barcelona Red Metallic; and Nautical Blue Metallic.

The Trail Edition comes with off-road features that make it truly unique, such as the overhead console for the off-road controls—a welcomed convenience as it eliminates the need to glance behind the steering wheel in search of a button. Crawl Control handles acceleration and braking, leaving the driver to focus on steering. Hill Start Assist Control (HAC) prevents the truck from rolling backwards on a steep incline. Available for the Trail Edition is the optional KDSS suspension with ability to disconnect the stabilizer bars for improved suspension flex. Electronic rear locker is standard on the Trail Edition, as well as a direct transfer case shifter, providing assurance to enabling 4WD. An optional rear cargo slide provides convenient accessibility.



This cushy steering wheel with convenient control buttons makes for a pleasurable driving experience.

SR5 and Trail models come with soft door trim, a cushy leather-wrapped steering wheel, and a leather covered shifter. New for 2014 is the standard eight-way adjustable driver's seat for both the SR5 and the Trail (passenger gets 4-way). Go with the Trail Premium Package and the seats are upgraded to SofTex®-trimmed heated front seats. Premium grade includes Entune™ Premium Audio with Navigation and App Suite, power tilt/slide moonroof, power passenger seats, electrochromatic mirror, Homelink® Garage Door Opener, and 120V AC in the cargo area.



Rear cargo area includes a 120V electrical outlet.



Roomy cargo area can be expanded with the easy collapsing of the 2nd row seats.

The Entune™ Audio Plus system features an Apps Suite containing travel and entertainment apps, as well as a search engine. All are visible on the 6.1-inch, which is adequate in size and also displays the backup camera. The data services come with three years of complimentary access. Bluetooth and voice recognition allow for smooth integration with smartphones.

Toyota claims that 90% of 4Runners sold in the last 10 years are still on the road. With previous generations of the 4Runner, trail ability, reliability, and ruggedness were top priorities. Interior features, however, seemed to be less important. Obtaining feature-rich interiors and dash componentry was exclusive to Lexus SUVs. For 2014, it is evident that Toyota elevated the importance of the interior. If you are in need of an off-road SUV with the latest mobile and online conveniences, comforts for long distance travel, and an enjoyable daily driver that will outlast other SUVs on the road—this SUV will not only meet those needs, but it will be an absolute joy to drive.

Thanks to **TRDParts4U** at Toyota of Dallas for providing TCT Magazine with a 2014 Trail Edition 4Runner for this test drive. 🇺🇸



The reverse camera provides an excellent view for safe reversing.



USB and auxiliary ports are examples of the modern conveniences in the 2014 4Runner.

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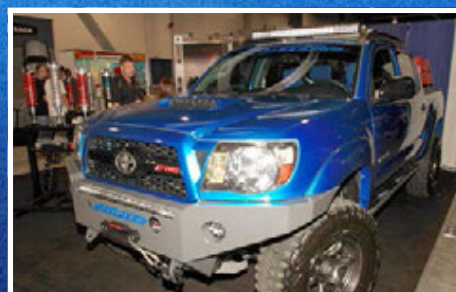
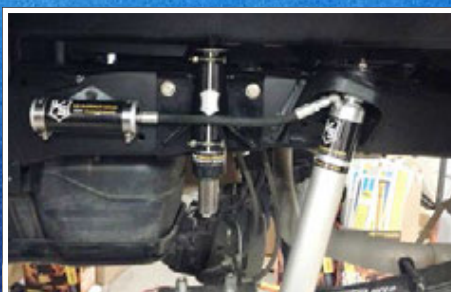
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TOYTEC'S SEMA Tacoma V6 SR5

TRD



You may have seen the Toytec Tacoma before, but never in full SEMA setup. For their second year at the big SEMA show in Las Vegas, Toytec enhanced their already very well built Tacoma with a few additional features.

The 2009 TRD Double cab 4x4 already had a TRD Supercharger, AFE Air intake, and Flowmaster dual exhaust

to enhance performance, but for the show Doug and the crew added new Toytec BOSS lift with Toytec BOSS rear springs and rear Icon reservoir shocks and bump stops. A new custom color-keyed aluminum front bumper with Rigid 30-inch SR LED light bar and XRC 8000 lb. winch replaced the stock plastic, and an aluminum skid plate was added. Lighting was enhanced even more with PIAA LED driving lights and a Rigid 40-inch double

row light bar with custom roof rack mounts, and an HID conversion kit for the headlights.

Toytec sliders and a new Toytec rear aluminum bumper were also added, along with Rigid Lights and a high clearance receiver hitch with LED license plate lighting. They also added a custom light weight aluminum bolt-in bed rack with Rotopax, Highlift and TRED mounts.



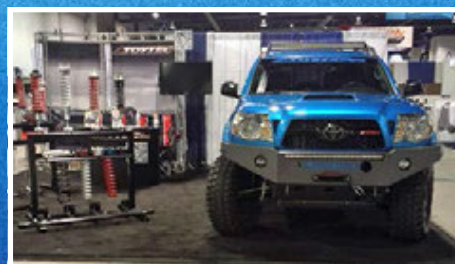


This gorgeous taco rides on Konig wheels from FN wheels and Goodyear MTR 305-70-16 Tires. Even though it's a TRD, it has a color matched Sport hood with sport grille as well. Inside, they installed a Pioneer AVICZ150BH in-dash receiver with 7-inch WVGA touchscreen, HD Radio, SiriusXM,



built-in traffic tuner, and AppRadio mode for iPhone and select Android phones. Weathertech floor liners and Covercraft seat covers round out the interior and make this one sweet ride!

While many of the parts on this SEMA build were prototypes, we're



told Toytec is planning to produce bumpers, sliders, and other great products in addition to their legendary lift kits. Visit www.toyteclifts.com for information on current and future products. 🇺🇸



FORUM | REVIEWS | LOGISTICS



THE ROCK

SEMA 2013 Build

By Don Lamb • Photos by Cee Fish



Some of you may know me from my other build, Wikid. I still own her and she is resting happily in my driveway, until I decide what direction I will take her.

Last fall I had no intentions of buying a new FJ, but then the new colors were announced. I saw a few pictures of the 2013 Trail Teams and thought the color was interesting. After I found a few pictures of it I decided I needed to see one in person, especially since it seems color and computers can vary quite a bit.

I contacted Camelback Toyota to see when one showed up, then got the call and drove down to see one. I still wasn't planning on purchasing but after I saw it, that all changed. December 12, 2013, I took delivery of my new 2013 Cement TT edition. It didn't have the upgraded stereo, but that was actually a good thing, since it would be taken out almost immediately.

With this build, I made a pretty firm plan from the beginning. Since I had already gone through years of upgrades—spending money more than once—I wanted to use my previous knowledge to do it right the first time. The other important thing is that I decided I wanted to keep the rear seats in, so some of my stereo equipment needed to change. Some things that made this possible included acquiring an Alpine PDX V9 5-channel amp that replaced two large bulky amps and gave me the ability to mount it under the driver's seat. After delivery I drove her that

week and by the weekend, the interior was gutted so I could begin the upgrade process.

Until I decided which suspension components I ultimately wanted, I moved all of my previous stuff over from Wikid. One major thing I focused on was my lighting for this build. After several months of planning and buying, I was able to pre-wire a new Baja Rack with the Spotlight system to have 360 degree coverage. I also gave it the ability to be removed in 20 minutes without having to disconnect anything but the watertight plugs.

Fast forward to October of this year—after sending Baja Designs (my main sponsor) some cool poser pictures and some unavoidable circumstances on their part (a Raptor build that seemed to burn up), Baja Designs asked if they could use my FJ in their SEMA booth. What other answer than “yes” would have been imaginable?

With a little advice from some previous SEMA entrants, I jotted down my ultimate FJ wish list and started to make contacts with vendors that could fill that list. Since time was short, I needed to move quickly. After many emails and phone calls, items from the list began to show up at my front door. It was a mad rush to get everything installed and working well, but with cooperation from several fine companies, my dream build was being put together. There were a few companies that needed to work together in order for all of this to happen. Demello Off-Road did a custom version of their Rally bumper to accommodate specific lighting Baja Designs wanted to show, which also involved Superwinch. Everything was completed almost at the 11th hour and after a trip to Demello Off-road it was installed (they have since gotten requests to make this bumper again). After Talking with Icon Vehicle Dynamics, I decided that Icon should be what keeps my truck on the trail performing as well as it looks, and I finally got a chance to actually take her out and get her dirty, last weekend. From a lighting suspension, great wheels and tires and massive armor, “The Rock” performs even better than it looks.

I will be attending many events throughout the year and I would love to wheel with as many Toyota enthusiasts as possible!

Of course there’s much more than can be shown here involved in my build, so please visit the links below or contact me for more info.

<http://www.fjcruiserforums.com/forums/member-build-ups/158490-rock.html>

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- XWing sliders

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General Tire

- 5 General grabber red letters 35/12.50/17

Method Race Wheels

- 5 Method NV's

Extreme Outback Products

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Odyssey Battery

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- 50 amp charger

Magnaflow

- Stainless steel Cat back system

Katzkin

- Custom Leather /embroidery

Ricochet

- Under armor protection/Skids

Baja Racks

- Utility rack With the Spotlight system

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SELECTING AN OVERLAND TRAVEL VEHICLE

By Wes Craiglow, CentralOverland.com



Our Toyotas are more than a simple mode of transportation. They are an extension of ourselves, both in personality and functionality. Besides the obvious reason of dashing good looks, we choose a particular make and model based on how we expect it to perform in the myriad conditions we're likely to encounter during ownership. When factory offerings are not generous enough, we'll spend thousands in hard-earned dollars on aftermarket accessories to ensure that our vehicle is as close to ideal as possible. This principle rings true whether hanging some seatback DVD players in the Swagger Wagon or plumbing nitrous into a Supra for track days.

It's certainly true for we adventurous, backcountry travelers, who depend on our Yotas to not only get us out there, but more importantly, to get us back. So considering the levels of investment and expectation we place on our overlanding vehicles, it's imperative to our wallets, our well-being, and our pleasure that we choose wisely.

Capacity is my first consideration. The older I become, the more remote I like to get when traveling and the more comfortable I like to be when I arrive at camp. That means I need to carry plenty of creature comfort and support items with me. But that's not to say that I simply go out and buy the biggest Tundra I

can find. It's important to strike a balance between what you need to carry and what you simply want to carry, and to buy a vehicle tailored to your most common load plan. And always remain vigilant against overdoing it, as loading beyond the vehicle's capacity (gross vehicle weight rating) can have dangerous consequences on steering and braking, and greatly increases cost-per-mile economy.

Comfort becomes more important with every passing mile—especially when those miles are measured by the hundreds on poorly maintained, primitive roads. There was a time in each of our lives when we could enjoy endless, pain-free miles from the seat of a vintage FJ40. Conversely, there comes a time when we begin to appreciate the level of refinement found in late model Cruisers. For most of us, an acceptable balance exists somewhere in between. Consider interior amenities like bolstered seats with lumbar support, power locks and windows, and noise insulation. Don't overlook the important comfort features under your truck, though. Coils provide a smoother ride than leaf springs, and although a solid front axle offers better off-road prowess, a modern IFS can hold its own on the trail while providing significantly better road manners.

Economy, in a nutshell, is our cost of ownership, and includes three primary





of those costs for the period of time you expect to own the vehicle.

Maintainability is a vehicle consideration that can be absolutely critical when things go wrong and you find yourself far from help. With the complex systems on modern vehicles, the chance of a trailside fix on major breakages is becoming less and less likely every year. Furthermore, if common maintenance must be executed with specialized diagnostics and tools, then you can go ahead and dock a few more points from the previous metric of economy.

factors: purchase price, out of pocket expense, and depreciation. In total, these three things can have a dramatic impact on our ability to put miles behind us by limiting our available travel budget. Even if the purchase price is agreeable, be sure to check a service manual and relevant online forums for frequency and costs on things like factory parts and repairs. Of course, fuel mileage and insurance premiums can vary greatly, so investigate those thoroughly prior to pulling the trigger. Finally, gauge the vehicle's resale value and calculate depreciation. Do your best to average all

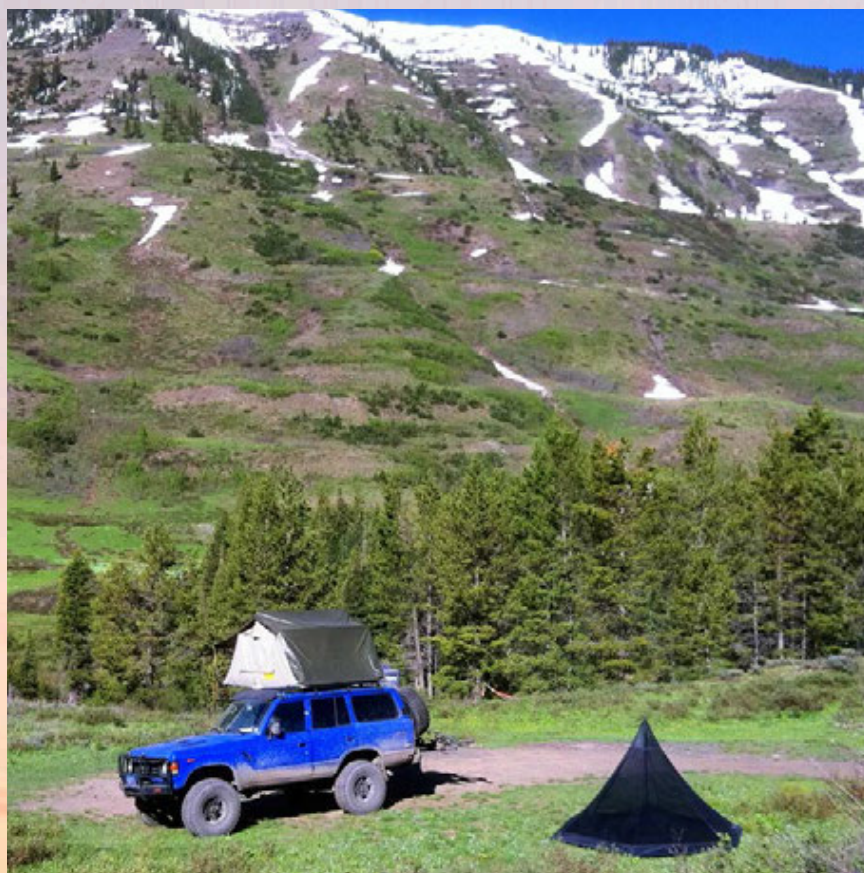


Bottom line: having a vehicle that you're capable of working on in most reasonable situations can save you time, money, and often, miles of walking.

Capability is something worthy of deep examination, as it can become a slippery rabbit hole if we're not careful. It's important to note that although overland travel will sometimes place demands on the off-road agility of our vehicles, it's not the same as recreational "wheeling," whereby drivers deliberately seek out difficult terrain. It is my belief that one can spend a highly fulfilling lifetime overlanding and never shift to 4WD. Capability, for all its bragging rights and exciting trail time, more times than not, has a direct negative impact to almost every other vehicle metric. Therefore, it's important to understand exactly the type of terrain you anticipate covering, and demand from yourself an honest response to the question, "How much off-road capability can I live without?"

Performance is one of those metrics I used to discount, but as a former Vanagon driver who upgraded to a 100 Series, I am now convinced—by the glory of the Toyota gods and a stern V8!—that performance has huge value in any travel vehicle. As long-range overlanders, we're accustomed to cramming ten pounds of manure into a five pound bag. Many of us will add extra pounds with an aftermarket suspension, tire and wheels, and armor. Oh, and don't forget the roof rack full of stuff we rarely use or the sexy off-road trailer with its own ton of toys. In the end, having a travel platform with the muscle to haul and tow that gear while continuing to accelerate, corner, and brake within factory specs, will not only ensure that repair bills are lower over time, but that you'll be safer and happier across every mile.

Reliability of any vehicle type has two primary sources: scientific study and anecdotal evidence. It's important to consider both when choosing your next travel platform. JD Power and Consumer Reports, among a host of others, provide reliability ranking by categorizing empirical data from a range of sources—rankings which have proven themselves so accurate, in fact, that manufacturers use them to



make annual adjustments to their offerings. Experiential knowledge is just as valuable, though, and comes from the collective stories of countless model owners, and includes reputation on both sides of the spectrum, good and bad. Forums are a great place to learn more about every make and model. (Thankfully for us Toyota truck owners, we don't have to worry too much about this one, by and large.)

Safety & Security—With more than 30,000 Americans killed each year in accidents and with about \$4 billion in losses reported annually to vehicle theft and break-in, it's no wonder that safety and security are among the top factors considered when purchasing any new ride.





Potentially amplifying those numbers are the big miles we drive as overlanders, the technical terrain in which we often find ourselves, the added weight of a full kit and its impact on handling, and finally, all of the high-dollar widgets we carry within and bolt onto our vehicles. It's reasonable to expect safety and security to be even more critical to us. Consider a range of factory safety features that are important to you (and how aftermarket components can impact them) and think about keeping a low profile with bolt-on widgets so as to not attract ne'er-do-wells.

The most important thing to know prior to purchasing your next overland travel platform is that there is no perfect vehicle for everyone in all situations. What works for my family and the way we travel might be a terrible fit for yours, and what suits us beautifully on weekend trips might become painful during a trans-continental one. This sounds like common sense, but years of vehicle-based travel and guiding has taught me that many of us have a hard time letting go of preconceived notions about what's best or even necessary.

So, no pressure. Relax and enjoy the buying and vehicle preparation experience, allowing each decision to unfold before you based on careful consideration. The best Toyota for you and your travels will be revealed when you approach this search objectively and measure specific metrics individually, based on your own needs. The previous eight criteria are each quantifiable and specific to long-range, self-supported, vehicle-based travel, and will help you greatly when the time comes to select your next overlanding platform. 🇺🇸

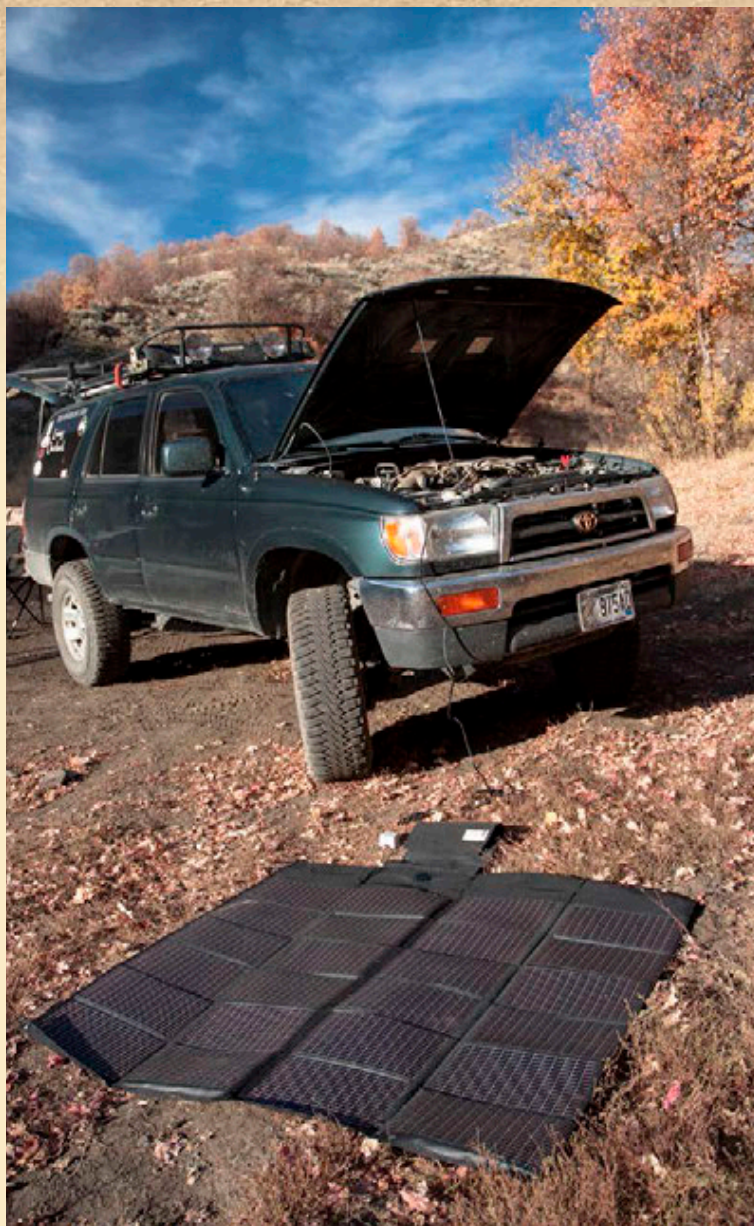


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Review: PowerFilm 60-Watt Panel

By Beau Johnston
LivingOverland.com



An increasing number of people are taking personal electronics and 12volt refrigerators on their camping and overlanding trips, and we are no exception. While these devices allow us to bring some creature comforts from home, they add extra load on our vehicle's battery. If left unchecked, these loads can deplete the battery charge and leave it without enough power to start the engine. While many choose to add a dual battery system to their vehicles, we felt adding a solar panel to the vehicle's 12-volt system would be a more simple solution to extending the battery's charge.

I began looking into solar panels after our trip to New Zealand. We rented a campervan equipped with a 12-volt refrigerator to explore the South Island. While the van was setup with a dual battery system, it failed on the second day of our trip so we were left running the refrigerator off of the primary battery. I began to think that, if sized appropriately, a solar panel could eliminate the need for a second battery or the need to use the engine to charge the battery during the middle of the day when refrigerator loads are highest.

We needed a panel design conducive to international travel and since we wanted to be able to fly with it in our checked luggage, it would need to be light weight and have a compact design. After meeting with manufacturers, I decided to go with a PowerFilm foldable panel. These foldable panels are designed for use by military units deployed around the world. They are semi-flexible and constructed with a heavy canvas back which allows them to be draped over a roof rack full of gear, over a vehicle's windshield, or staked to the ground.

I contacted AJIK Overland Exchange and explained my power needs to Josh. We needed a solar panel capable



of generating enough electricity to power our 63 qt. ARB refrigerator, help charge my laptop, and charge any miscellaneous devices we will be running during our travels. I knew my largest continuous load would be our fridge, with a maximum draw of 2.3 amps at 12 volts. We ran some numbers and determined a 60-watt panel (\$875) would be large enough to handle our electrical loads.

The 60-watt solar panel kit included the PowerFilm 60-watt foldable panel and a 12-volt cigarette adapter. We also ordered a solar controller, battery cables with alligator clips, and four tent stakes to enable us to connect the panel to our 4Runner's battery and ensure it does not blow away in our Wyoming wind. The entire setup weighs less than four pounds and folds down to 13.25"x7"x2". Installation is easy, with water-tight electrical connectors used to connect the panel to the solar controller and the solar controller to the battery cables. While the wiring kit could be modified to permanently mount the power regulator to the vehicle, we chose to run the wiring as supplied. This allows us the option of easily bringing the system on our international adventures where rental vehicles are used.

We are incredibly pleased with the PowerFilm's performance and durability. The entire kit can be stored in two MOLLE pouches in the truck and can be easily deployed whenever we stop for camp. I still believe we made the right decision for our electrical power needs. Although the setup is slightly more money than the price of a dual battery system and a second Sears DieHard battery, I feel it is more versatile and serves our needs better. I would recommend the PowerFilm line of foldable solar panels to anyone looking for a compact, durable, and powerful solution to their in the field electrical needs. ❤️





Finding a Last Minute CAMP SITE

By Wes Craiglow | CentralOverland.com



One of the things I love most about overland travel are the unknowns. What enlightening things are we going to learn about new places and cultures around the next bend? What if we end up stuck or broken down far from services, or if the weather takes a bad turn? Worst of all, what if we can't find a phone or WiFi signal for sharing photos on social media?! These are a few of the many things which help keep the spirit of overlanding an adventurous one. For many of us, camping locations and conditions can be added to this list, as it's not uncommon for us to rise in the morning without so much as a notion of where we'll be resting our heads at night.



Not surprisingly, I am asked fairly often about this by folks with curious, even puzzled looks on their faces. To many people, even lifelong travelers, the concept of traveling without a plan for the day—or in this case, the night—seems quite discomfoting, and justifiably so. If things aren't shaping up favorably as night falls, then best case scenario we may find ourselves settling into a site lacking the peace and natural beauty we all crave. But it's a worst case scenario that means we could end up spending a night



sleeping with one eye open in some random parking lot off the highway.

Over the years, I've developed strategies to ensure that not only does the latter of those two occur only very rarely, but that more times than not, I can actually dip into a more remote, secure location where my camp setup won't draw any attention. A firm grasp of just how many campsite options are really out there coupled to keen situational awareness while progressing a





day's route will almost guarantee you a great place to spend the night.

Without a doubt, public lands should be the first option for most of us most of the time. It's really pretty impressive just how much real estate is owned by you and I, and just how much of it is accessible every day of the year. And as much as I love them, I'm not talking just about the endless backcountry managed by the National Park Service, U.S. Forest Service, and Bureau of Land Management. There is a long list of other Federal agencies which provide quick and easy access to their scenic and secure public lands for little to no cost to users. These include areas managed by the U.S. Fish and Wildlife Service, the Bureau of Reclamation, the Department of Defense, and the U.S. Army Corps of Engineers.

Don't overlook opportunities provided by smaller government entities, either. State parks and forests, and wildlife refuges and game management areas often provide high-quality backcountry settings with far fewer crowds than their popular federal counterparts. County and municipal parks can be a great option if you prefer to camp near a populated area—many are in-town and a short walk from dining and entertainment options. I have even pitched camp along remote, primitive road rights-of-way where other, larger public spaces don't exist. Finally, where state laws permit public access to navigable waterways, travelers can simply drive up dry river beds until sufficiently out of sight and pitch camp on a sandbar. (Be certain you understand and mitigate the risks associated with this option prior to exercising it.)

I have learned not to become too fixated on public property when searching for a quick place to call home for a night. I'm often humbled by the hospitality and welcoming nature of kind folks I meet along the

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way—I know I'd gladly return the favor to just about any overlander who wandered my way in need of a little patch of ground to camp. It ties into that social contract we all share with one another: to help folks in need. It really is as simple as knocking on the door of a farmhouse or church, introducing yourself and situation, asking permission, and agreeing to care for the property as your own during your stay. It might mean you're sharing a pasture with cattle or sleeping next to a cemetery (both of which I've done), but sometimes it's the difference between a getting good night's rest or not. Don't overlook networks like Couchsurfing and other online forums to locate hosts and don't be surprised if you're well taken care of during your stay. We've been fattened up by homemade cooking and been enlightened about special destinations only the locals know about.

Of course, there are always private RV parks and campgrounds to be found, be they large national franchises or smaller, privately owned facilities that are often tucked away in quieter locales. Most offer



excellent services, clean conditions, and plenty of security.

Once you take stock of just how many campsite options exist, any anxiety you might have about the make-it-up-as-you-go travel style will begin to fall away like miles in the mirror. The additional locales you'll experience, conditions you'll enjoy, and friends you'll make will serve to enhance the fulfillment that comes from overland travel. 🚗



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Choosing the Right Camp Stove

By Beau Johnston
LivingOverland.com **Part 1**

I will be the first to admit that there are few things in life I find as rewarding as settling down to a great meal after a day of exploring the backcountry. I will also admit that the first meals Krista and I prepared in the field were less than stellar. I was inexperienced cooking in the wilderness on a camp stove. I had grown up camping with Dutch ovens and had no idea what I was doing when I went to purchase our first stove. Over time I began to realize that not all

camp stoves are created equal, and most have been designed for certain segments of the outdoor market.

Over the next three issues we will be examining the three factors you should address when choosing the stove that is right for you. My goal is not to tell you the stove you should buy but instead provide the right

information for making your camping stove selection. In Part 1 we will see how knowing the types of meals you will be preparing during

the trip factors into choosing a stove. Part 2 will cover the fuels used in camping stoves and we will end our series discussing the various stove designs and the features that make cooking in the field a little easier.

Deciding on Types of Meals to Prepare

The first thing to examine when deciding on a camp stove, is the types of meals you want to prepare when out in the field as well as the number of people you will be cooking for. This falls back to what types of meals are you comfortable cooking at home. Not everybody cares to prepare an elaborate three-course meal at the end of a day's travel. Conversely, some people want something more than a freeze-dried backpacking meal. So how do you strike a balance? The key is knowing one simple fact: it all boils down to the number of burners and how well those burners control the heat.

Someone interested in only boiling water for making coffee and rehydrating freeze-dried backpacking meals would be well served with a compact single-burner stove. The key for this type of cooking is finding a stove with a high BTU/hr rating and burner control is not critical because the stove will be turned all of the way up to boil the water as quickly as possible.



Someone interested in preparing a slightly more advanced meal will be more concerned with the burner's temperature control than the amount of total heat the burner generates. A 30,000 BTU/hr burner is of no use when sautéing garlic and ginger if the burner's valve only provides an all or nothing flame control. Unfortunately this specification is not normally published in catalogs and online. It's a feature you must test for yourself or scour through equipment reviews to find. We have found (as a rule of thumb) that a valve rotation greater than 180 degrees generally gives enough adjustment to adequately control the burner flame. There are exceptions to the rule as the type of valve used dictates the amount of flame control the stove has. We have cooked with stoves that provide more flame control in 180 degrees than others have in 360 degrees of rotation.

Finally, the size of the burner plays a role in the type of cooking the stove is designed and used for. The burner on a micro backpacking stove is designed provide a large amount of heat over a small surface area. These types of small burner stoves are designed for cooking meals in single serving cooksets and for rapidly boiling water. The burner's small size does not provide even heat distribution over larger cook

surfaces, causing hotspots on the cookware. These types of stoves generally limit the size of cookware used to relatively small in diameter. In contrast, the burners on large free standing camping stoves are designed to provide heat over a large surface area. These stoves are designed for cooking large quantities of food in large pots and frying pans.

All stoves are not created equal and are designed for specific styles of outdoor cooking. Knowing the types of meals you will be preparing in the field is crucial to finding a stove that is right for you. The burner on a given stove may provide ample heat for boiling water but may not have enough temperature control to prepare a roux without burning the flour. Next time we will discuss how the choice of fuel factors into choosing the stove that is right for your outdoor adventures and we will wrap up the discussion by talking about overall stove design and how certain features make cooking in the field a little easier. 🍲



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Building the Perfect Family Overlander

By Jonathan Harris

Part one of a three (or more) part series on building a reliable, spacious, yet capable overlanding vehicle for a family of four.

In 2010 my wife Tiffany and I were excited, surprised and terrified to find that we would be welcoming a child into the world. Eight weeks after the initial shock, we were informed that not one, but two girls were on their way. Of course my mind went to all of the things that we had grown to love as a couple and what we wanted to continue to enjoy with a family. Many of the activities that we enjoyed: camping, hiking, biking, skiing etc., revolved around a four wheel drive vehicle. In fact, I had been driving 4x4s since high school, primarily as a means of access to remote areas but also for the fun and challenge of the drive. I set out to find a vehicle that provided a blend of off-road performance while transporting four people and a dog in comfort. Jeep, Land Rover and Toyota immediately came to mind.

The Search

My primary criteria for the new family hauler were interior space, reliability, safety, comfort and aftermarket support; so I hopped online (as many people do) to start my search. I was currently the happy owner of a mildly built Jeep TJ that had served me well, so that's where my quest began. Looking at Jeep's full-sized platform, the Grand Cherokee, I felt that it had lost much of the off-road appeal and prowess that earlier generations had and it had now joined the ranks of the mall wagon.

The unlimited JK was an instant appeal with unrivaled aftermarket support, the fun factor of a removable top and familiarity, so it was high on the list, until I drove one. This was going to be a daily driver, hauling a family and



gear many miles day in and day out. The excellent off-road capabilities were not enough to compensate for a lack of interior space, road noise and poor handling. If this were going to be a secondary vehicle, it might just have made the cut.

A brief look at Land Rovers was done and the LR3 definitely piqued my interest, but finding a smaller off-road enthusiast community locally, and a general lack of local support for a platform that is not known for reliability made it undesirable. This brought me to Toyota.

Well, I was actually looking at everything at the same time and I kept coming back to Toyota. The brand's history, reliability and an enthusiast network like nothing I'd ever seen before drew me in and I never looked back. So the model lineup of interest was the fourth gen 4Runner, 100 Series Land Cruiser and first gen Sequoia.

The 4Runner was marked off the list due to a third row only conducive to pets and groceries and the general lack of interior space. For a single adult or a couple, the 4Runner may very well be the perfect platform. With

more agility, better fuel economy and a generally lower cost of ownership, the 4Runner is a great choice for many. The Sequoia was a favorite, with the largest capacity of anything we had test driven, plenty of power and nice amenities. The lack of aftermarket off-road support was the only concern. Enter the Land Cruiser.

First thoughts were that the 100 series was a Land Cruiser in name only but I soon found that it was a legitimate 4x4 platform. A strong frame, steering and suspension components that were more stout than other similarly sized vehicles and a solid drivetrain were all evident immediately. Moving from a SFA to IFS was a no brainer as well. I had seen IFS vehicles perform as good as their SFA counterparts on moderate terrain and already knew that the on-road and high speed off-road benefits would be appreciated in daily use. The final factor that ultimately persuaded us to go with the 100 series was the fit and finish. With an upscale interior, consistent body gaps, doors that closed with a solid thud, no rattles and an overall higher attention to detail than their counterparts, we knew the 100 series would be equally at home while at the mall and on the trail. 🍷





Muddy Mountain, WY | Beau Johnston

[FRAMED]

f/2.8 1/3s 42mm





Lockhart Basin, UT | Bob Holliday

[FRAMED]

f/8 1/250s 18mm





Twin Cone, CO | Shane Williams

FRAMED

f/10 1/200s 70mm





FRAMED

f/6.3 1/8s 10mm



Bully Dog Tundra, SEMA 2013 | Jonathan Harris



GX 470

Family Adventure & Ski Transport

By Shane Williams

If you've read many articles of mine in the past, or have followed FJC magazine at all, you know what a fan of the FJ—I truly am. I love the fact that it really is multi-use, and you can take it to the mountains and drive it to work the next day. *Unless you have a three year old and an infant to haul to the mountains.*

When we found out our baby girl was on the way, we knew we would need a new more family friendly SUV for our weekly trips to the slopes. The search was short lived when we found a low mileage '07 GX470 with KDSS on Christmas Eve 2012.

The GX, for those who haven't had the pleasure, is basically a Lexus badged version of the Land Cruiser Prado that's available overseas. What's more, the GX is built on the 120 platform which means that many mechanicals are shared with the FJC as well as the 4th gen 4Runner. Needless to say, it's a great vehicle.

The deal when we bought the GX was that I couldn't modify it for a year. A hard bargain to be sure, but a promise is a promise. Luckily our fall Ouray trip included a snow run which reinforced a few ideas I've had about minor modifications. Our family ski hauler had to be safe, easy to clean, and efficient with gear. Changes were in order.

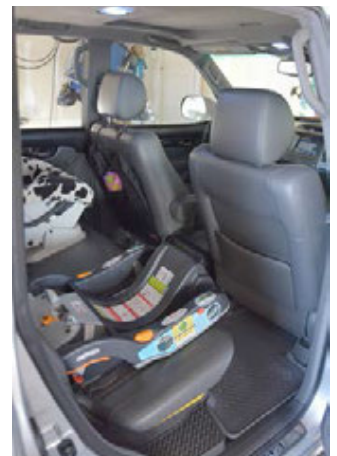
While we love our Nitto Trail grapplers on the FJ, the GX needed a great A/T with excellent on-road and snow manners. Our research pointed to the General Grabber AT2, and when we realized that's what Expedition Overland was running for their Alaska/Yukon trip, it was a no brainer. We got in touch with General and sourced five LT265/70R17 AT2 tires. This size is a +1 over the OEM 265/65, but they fit well with the stock suspension and give the GX a more acceptable look.



For now, carrying skis and snowboards is easy using the Thule rack we've had for years. It easily holds my board and Angie's skis while Brenden's skis ride in the back. The Thule attaches to the OEM rack with just enough room to still fit in the garage, but when we lift the GX we

may need to find another solution. Of course our Maxtrax always ride the GX when we head to the mountains as well.

Since the GX has significantly more room than the FJ as well as four full doors, our family of four fits comfortably for the 2–3 hour drive to Breckenridge. We added a Britax seat protector on the driver's seat to keep small boots from ruining the leather and always have plenty of wet wipes on hand to clean up spills.



The GX arrived from the dealer with basic carpet mats that had seen better days. After searching high and low, we decided a set of Husky Liners would fit the bill, so we sourced a complete four piece set from Husky. These liners are specifically made for the GX-470, and the gray color fits our interior perfectly. The mats appear tough enough to handle anything we throw, drip, or spill on them, but only time will tell if they can withstand the Williams children and our many family adventures.



Of course we're always planning future upgrades for the GX. The suspension is aging so we're thinking of coilovers up front and eventually a coil replacement for the airbags in back. There are a few Prado-based skid plate options available, and we've been talking with a few manufacturers about the best way to create step/slider that's family friendly. Beyond those basic upgrades, the GX is in great shape for our needs.

As a mid-size, 7 passenger, very capable family adventure hauler, I'm not sure you can do much better than the GX-470. Land Cruiser DNA, legendary Toyota/Lexus quality, and enough comfort to keep the entire family happy make this a near perfect choice. The fact that it shares many components with FJC's and 4th Gen 4Runners means maintenance will be fairly straightforward in the long run, so we expect many years of F.A.S.T. use from this GX.

Sources: [General Tire](#) | [Thule](#) | [Husky Liners](#)









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EX-OFFICIO
MAXTRAX take the easy way out!
XVENTURE
GENERAL TIRE

Getting ADDICTED

By Bob Holliday

After a week in Ouray exploring the San Juan Mountains with the Manley off-road trailer mounted with its CVT tent, I was hooked on the convenience of the rooftop tent when overlanding. This got the wheels turning in my head on how to transform Blue Betty into a rig fit for multi-day overlanding explorations. The first step taken toward this new phase of the truck's life was to find a way to mount up a rooftop tent. Without a place to store a trailer and knowing I'll be tackling some harder trails on my journeys, I knew a bed rack would be my best option for what I needed.

When looking for a proper bed rack for the rig, there were many options to choose from for an off-the-shelf bed rack with some optional features to choose from. These bed racks would have done the job, but they all seemed to be missing something from my ideal bed rack. When discussing my plans with Scotty at Addicted Offroad, he knew exactly what I was going for and told me that he and his crew would be able to build a bed rack to fit all my needs. I was looking for a bed rack low enough to reduce some wind resistance that is common with bed rack mounted RTTs; the ability to store Rotopax, Maxtrax, a shovel, an axe, a hi-lift, and a fire extinguisher; have multiple light mounts, and tie down options; and fit within the bed rails so I can still run my soft top during the winter. This project was a perfect fit for Addicted Offroad and their knack for quality custom fabrication.

Given two days, Addicted Offroad turned those plans into reality. Made from nearly 70 feet of 1.75-inch .120 wall tubing, the bed rack comes in around 150 lbs. without the accessories. The bed rack will hold the CVT tent, 48-inch hi-lift up front, Rotopax on both sides, Maxtrax under the tent, shovel and axe will mount to the inside of the side tubes, quick release fire extinguisher mount near the tailgate and has multiple lights for camp and off-road use. I even have the ability to run my soft top over the bed rack with the tent removed for the winter season.



Clean canvas for Addicted to work with.



Among many things, Addicted is known for their tube work.

To ensure a proper fit to the bed rack, I left my truck in the skillful hands of Addicted Offroad. This allowed them to build the rack on the truck and make any adjustment necessary before finalizing. With goals to keep the height as low as possible and frame of the rack within the bed rails, this was the best way to make that happen.



Building inside the bedsides allows for use of the soft topper.



With plans of running a roof top tent, having a lower profile rack allows for a lower center of gravity as well as less wind resistance while the tent is mounted.

Keeping the frame of the rack within the bed rails not only allows me to run the soft top still, it also allows for a stronger foundation. Many off-the-shelf bed racks rest on the bed rails putting additional stress on the sides of the bed. Addicted was able to build solid baseplates to mount the bed rack to and utilize the existing bed bolts and D-ring bolts for additional strength.



Utilizing a base plate mounted to the bed bolts and D-ring bolts, the bed rack has a solid platform to rest on.

With the outer frame established and tacked together, it was time to work on tying things together. The upper support tubing was welded in along with the cross members that will be used to clamp the RTT to.



Time to start tying things together.

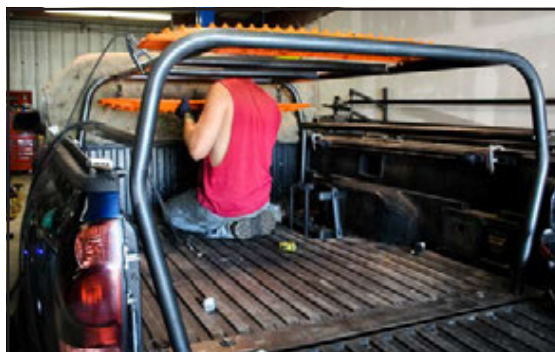


With the main structure in place, it's time to start burning things together.



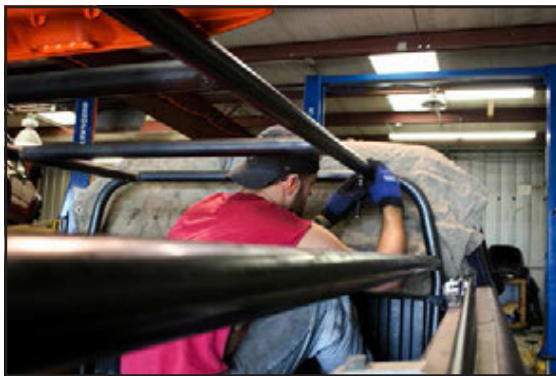
Cross members will give the RTT a solid platform to mount to.

After the main structure was assembled, it was time to turn their attention to the accessories. It took a little bit of trial and error to figure the best placement for all the accessories, but patience paid off and proper homes were found for all items needed. Tabs were welded into place to allow the Maxtrax to mount up and out of the way. Side mounts will come later to hold the Rotopax and the hi-lift will be mounted in the front of the bed.



Next task taken on was to find placement for a set of Maxtrax





Custom mounts were fabbed up for the Maxtrax mounts.

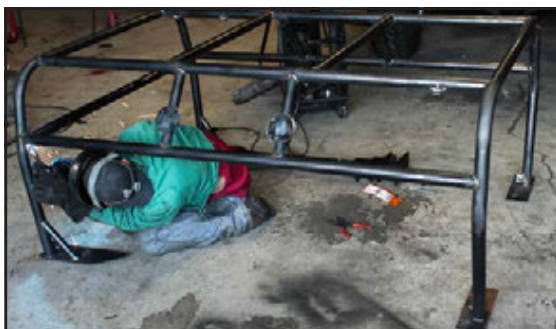


Maxtrax mounted up.



Things are coming together nicely.

With a final layout determined, it was time to pull the rack out of the bed for final welds and a coat of paint.



With the rack out of the truck, it was time to burn everything in with final welds.

Welded and painted, final assembly was all that was left! Rotopax found their homes on the sides of the bed rack, while the Maxtrax and hi-lift were mounted up on the top and up front. The CVT mounted up for a perfect fit to top everything off.



Side mounts were added to hold Rotopax on both sides. Hi-lift mounts were also fabricated at the front of the bed.

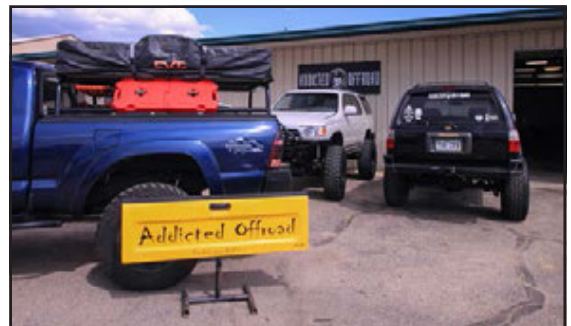


Painted up and loaded up. Addicted has yet again knocked a project out of the park!

With the addition of an Addicted Offroad decal, Scotty gave his final approval of the project and handed the truck back over. This was my first project with Addicted and hopefully won't be the last. From design to finish, they were able to meet all of my requested build specs and beat all of my expectations.



Scotty putting his final touches on the bed rack with an Addicted Offroad decal.



Final product along with some other amazing Addicted builds

Only thing to do after that was to get out and explore! From the rugged terrain of the Holy Cross wilderness to the vast openness of

Southeast Utah, Addicted Offroad's bed rack has been a vital asset to our travels.



Even through the rough terrain on the Holy Cross trail, the bed rack with RTT do not hinder the truck's performance.

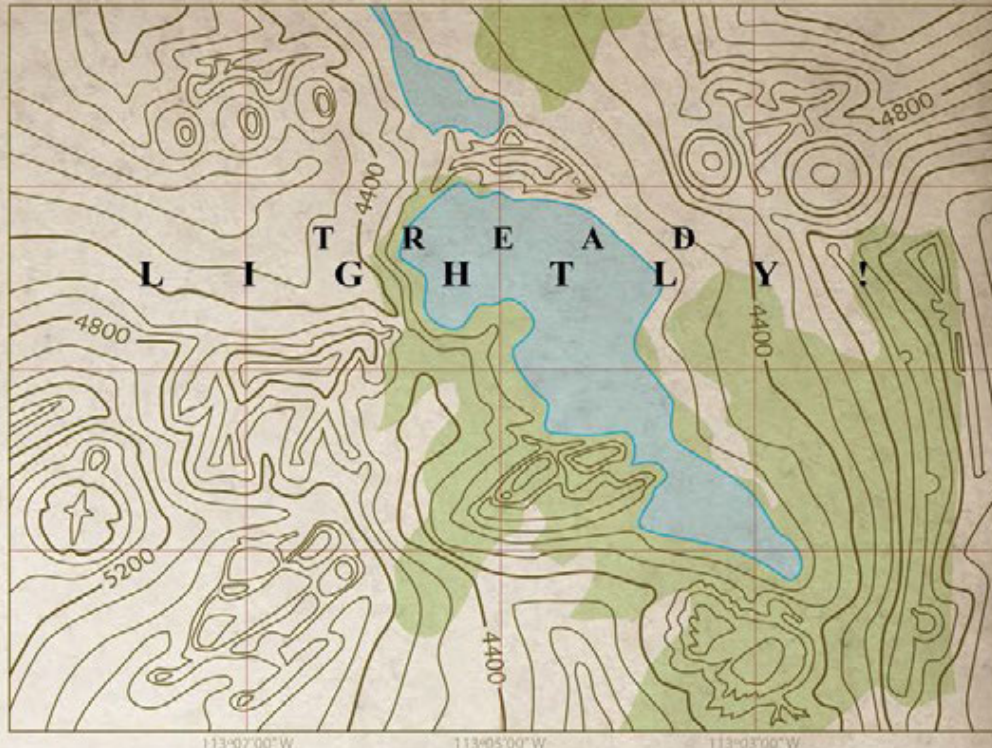


Proven to be a great platform for the RTT and allowing access to remote locations with ease.



Addicted's bed rack has been proving to be a great asset in overlanding adventures.

Thanks again to Scotty and his crew at Addicted Offroad for their help with this project! For more information about Addicted Offroad and their latest projects, check them out at www.addictedoffroad.com or visit them through their Facebook page. 🇺🇸



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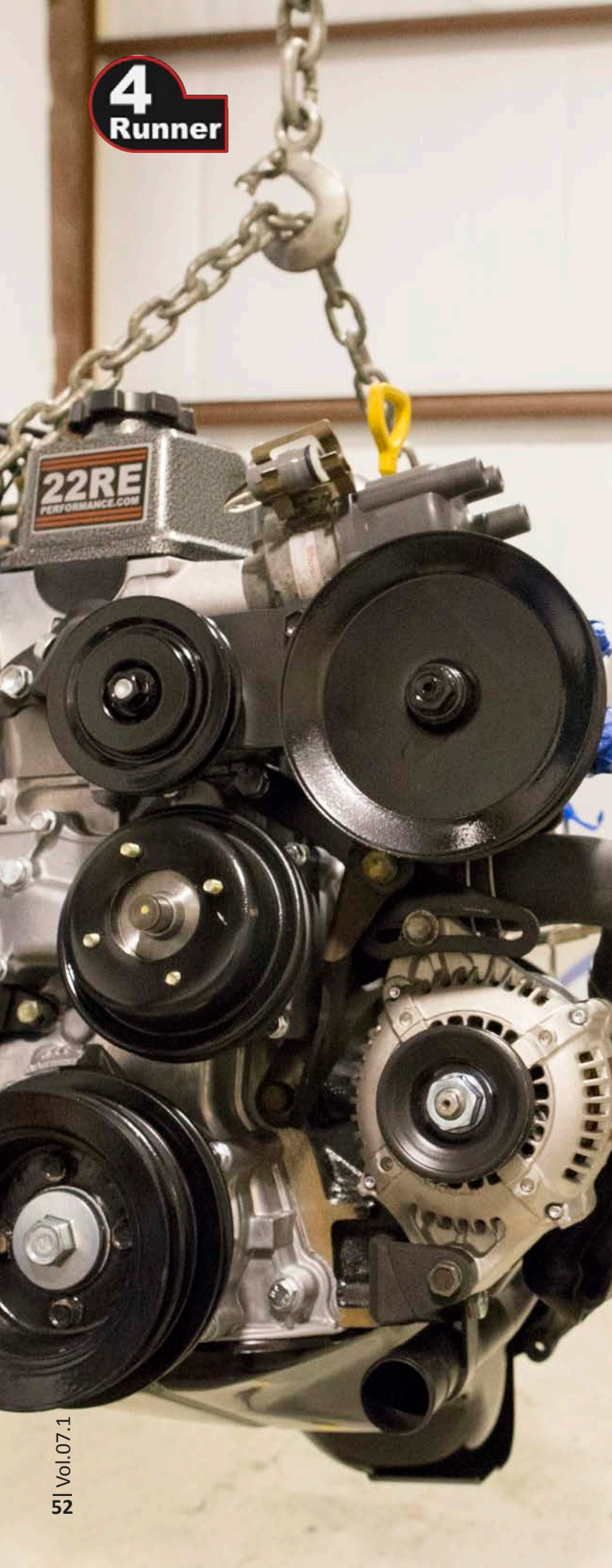
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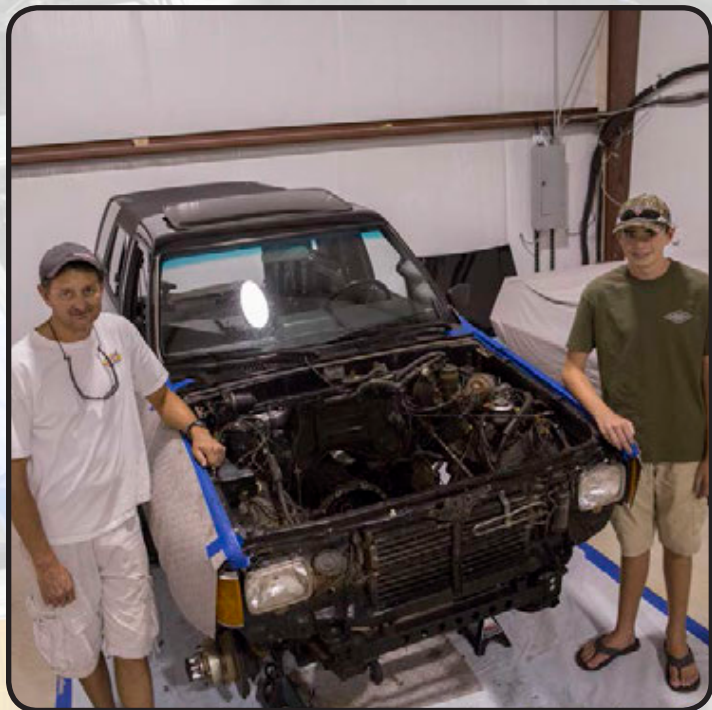


Father and Son **1985 4Runner** *Rebuild* **Project** *Part 1*

by Phillip Jones



Jeff Williams and his 16 year-old son, Blake, have embarked on a rebuild and restoration project that will enable Blake to enjoy a very capable off-road 4Runner. Jeff wanted something durable that was fairly easy for Blake to modify and work on. Jeff's brother, Mike, is also involved in the project. The Williams family has a long history working with Toyota products. Jeff owned a 1983 Toyota SR5 4X4 pickup truck for 19 years that had over 300,000 miles when he parted with it. Over the years, Jeff has related his memories in that truck to Blake. These truck stories inspired Blake to look for a first generation Toyota to call his own. Jeff currently owns a 1983 Toyota FJ40 (in fairly stock condition)—a vehicle that exemplifies the simplicity and durability of the early/first gen Toyota trucks.



Just prior to purchasing the 1985 4Runner, the body went through a recent restoration, so it was in great shape except for some minor off-roading damage. With 317,000 original miles on the engine, they planned to do a full rebuild. After calculating costs for machine work and parts required to rebuild the motor, Jeff decided it was more cost-effective and beneficial to purchase a long block engine from 22RE Performance.



After an extensive discussion with Jerry at 22RE Performance, they made the decision that the Stage II engine with approximately 120 HP and 140 ft. lbs. torque was the best option for this project. Jeff recalls his discussion with Jerry, "After my first call with Jerry at 22RE Performance, I knew I found the right group. He asked all the right questions about our expectations, what we planned to do with the truck, and just seemed very interested in making sure their product was a good fit for us."



Included with the engine purchase was the optional big bore throttle body, which bores the inside diameter 3.5mm larger, has a larger throttle plate, and a smoother throttle shaft inside the bore for better flow. They also added a header from LCE Performance, which matched up well with the Stage II engine. For improved aesthetics, Jeff decided to add powder-coated upper and lower intake manifolds.

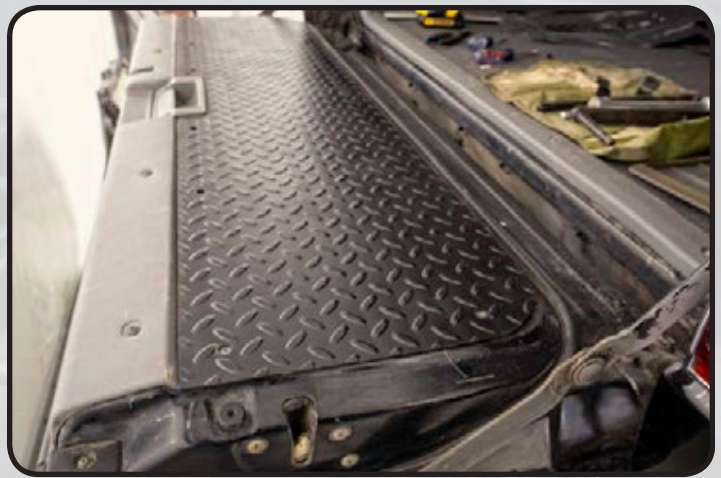
One of the goals with this project was to utilize OEM parts as much as possible. Jeff's philosophy for this is based on his years of experience doing automotive restoration and rebuilds. He notes, "Simply, nothing works better than OEM parts. It just makes the process go so much easier with fewer surprises. It's not easy to find all the OEM parts needed to rebuild a truck approaching 30 years old. I have an old friend, Fred Fowler at Pat Lobb Toyota in McKinney, TX, who has worked in the Toyota parts group since the early '80s and if anyone could help me assemble all the parts, it was Fred." Jeff and Fred devoted a lot of time combing through the numerous computer drawings of the engine compartment to identify all of the needed parts. Jeff found that a lot of the parts are still available, including fasteners and clamps.



With a nearly 30 year-old truck, the reusable engine components were in need of serious cleaning. Jeff and Blake removed, cleaned, and repainted all of the brackets, pulleys, mounts, power steering pump, and various connectors. This meant cleaning parts individually, which was a tedious, but worthwhile process. The most difficult step was the painting, as it took multiple attempts to learn how to prep and paint brackets and pulleys to achieve a professional look.

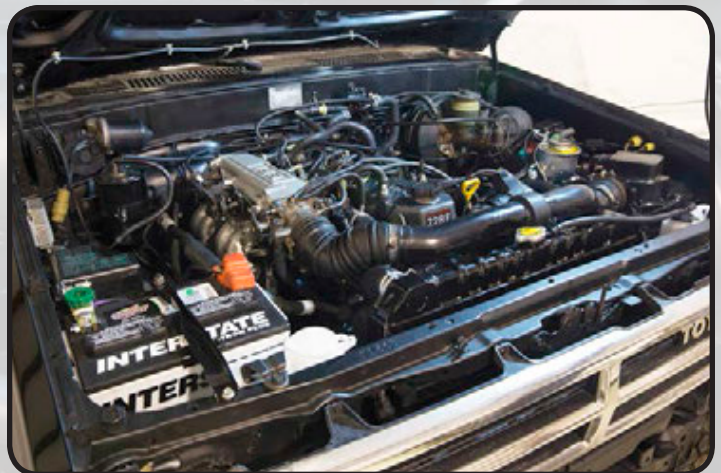


For the tailgate, Blake decided he wanted to install a unique interior treatment. The original tailgate cover was frail and worn, so a treatment was needed. Since Blake plans to use the truck for hunting and fishing, he wanted something more durable than cloth. He decided on a diamond plate. Not only is this solution very durable and pragmatic, it provides a nice touch to the interior aesthetics.



The front seats were in need of a complete replacement. Jeff commented on his search, "After searching online (thanks Yotatech.com), we found a pair of '92 4Runner seats at a salvage yard for \$50. They were in remarkable shape because the donor truck had very low miles." The only problem with the seats was the color was wrong. "We needed to find someone that could not only recover all the seats, but also have the knowledge and experience to transfer and rebuild the passenger seat bottom framing from the stock passenger seat. I worked with Andy at Xtreme Upholstery in Denton, TX, and his shop did an amazing job."

The engine compartment aspect and most of the interior work is completed. The engine is running and the truck is drivable. With the truck sitting on ProComp 35-inch tires, the next step is a new off-road suspension. That will be followed immediately by an off-road test. Blake will likely be the only student at his high school who can proudly say he built his own vehicle. Years from now, he'll be able to reflect on the fond memories of this family project. 🇺🇸





Trailer Upgrade Components

By Shane Williams

There are a few schools of thought when building a capable, useful off-road trailer. Some choose to go very basic, using their trailer as little more than a cargo carrier, while others go all-out with built in kitchens, showers, and entertainment systems.

Regardless of how you intend to use a trailer, the basic upgrades are usually the same. Of course storing basic camping gear such as food, accessories, clothing, and camp gear is a given, a few other essentials are usually on the list of upgrades.



RotoPax Water



Geri Water



Front Runner Tank

Water Storage

Storing water in standard camping-style containers works OK for short trips close to home, but usually a permanent (or semi-permanent) water storage system is high on the list. An under-trailer tank (usually a re-purposed RV water tank) is a good option if you'd like to keep the weight low and near the axle, but you also have to worry about protecting that tank and ensuring it's adequately drained & cleaned when not in use. Front Runner makes a jerry-can-sized water tank with a spout on the bottom, which allows you to use almost any standard jerry-mount for storage. There are a variety of other permanent mount solutions available from A/T Overland, Front Runner, RotoPax and others as well. Finally, Expedition One sells the Geri Water Pack, which is meant to be stored on a roof or mounted in some way. This low-profile water tank holds 4 gallons and is designed to handle up to 800 lbs. stacked on top of it.

Tongue Box

A tongue box is also high on the list for many trailer owners. If you have a friendly local fabricator, one can be fashioned from diamond plate or another suitable material fairly easily. Any trailer supply store will have a variety of options, from tall, heavy steel boxes to lightweight plastic versions. Prices vary, but for a size that fits most M416 style trailers, you can expect a \$150–\$250 range. Boxes are very useful for storing trailer essentials such as the tongue jack, wheel chocks, and locks when not in use. Many owners also choose to add a battery box inside the tongue box for easy charging and access.



Aluminum box



Poly trailer box



ArkPak



Wagan Solar Cube 1500



Yeti Solar Generator

Solar Power

Beyond showers, shower mats, and mini-bars, a solar setup is very common among overland travelers. Those that choose to install a battery in the trailer usually follow with a solar setup soon after. Goal Zero has a large presence within the community mainly due to their very user friendly systems. All of their products (panels, battery packs, etc) work together well, but you pay a premium for this convenience. The Yeti Solar Generator system with panels will run over \$1700 retail, yet enterprising tinkerers can build a similar system for less than \$1,000. One of the newer options (in the US) is the ArkPak battery box (see New and Noteworthy, Page 6). Combined with a quality collapsible panel and a good AGM battery, the ArkPak is a great way to solve your portable power problems. Another option is the Wagan Solar Cube 1500. It's similar to the Yeti but much less expensive (under \$1,000), although it comes with a lower capacity battery and the built in panels can be cumbersome.

Propane Storage

With wildfire threats and burn bans in effect across the western states every year, the traditional campfire is not as common as it once was. Many of us have opted to purchase a propane-fueled fire ring for use during these times. Our fire ring, cooking and the A/T portable heater burn through propane very quickly, so we need plenty of it. Storing a tank in your trailer is never a good idea, so finding a suitable tongue or trailer-side mount is important. Some trailers include shelves on either side for additional storage, while others will need a permanent tongue-mount solution. Most of the overland vendors offer propane storage for 5–20 gal tanks.



Side Mount Propane



AT10 Bracket



20 lb. Holder



DIY Pup Tent



Oz Trail Tent

Sleeping Options

Last, but certainly not least, is your choice of sleeping options. Our original CVT Mt. Ranier tent worked great for Angie, Brenden, and I, but now that we have a baby girl to keep warm while camping, we're looking for a more family friendly option. Multi-room family style tents are available, but are quite expensive. The 3DogCamping option (see New and Noteworthy, Oct. 2013 issue of FJC Magazine) is a great way to go, if you can afford the \$5,000+ price tag that goes with it. Manley ORV now offers a 'Basecamp' option, which replaces the stock lid with a fold out tent that includes a large room, but you lose your lid and the versatility that goes with it. CVT is currently working on a top-secret project to create a lower height, family style tent that will work on several trailer platforms. We're excited to learn more about that in the coming months.

We're still deciding on the best way to upgrade the TCT Magazine MORV Explore, but hopefully by this summer we'll have our major upgrades in place. Stay tuned to our website as well as OffRoadTrailerInfo.com for updates and more upgrade ideas. 🐾

FEATURED



Photo by Brian Rogers

2001 4Runner 4x4

Owner: Nathan Mobley

Location: Alamogordo, NM, originally from Augusta, GA

Occupation: Serves in the US Air Force

Nathan frequents the desert off-road trails in the Sonoran and Sacramento Mountains Desert and the forest roads of Lincoln National Forest in his 4Runner. He has off-roaded for over 12 years throughout North Carolina, Arkansas, and Tennessee. He started with a 1974 Bronco that he still owns. His favorite style of off-roading is technical rock crawling.

This 4Runner is protected with a prototype CBI front bumper, CBI rear bumper, rock sliders, and full set of Savage skids. For suspension, Nathan installed extended travel ICONs in front to obtain a 3-inch lift, rear ToyTec SuperFlex coils for a

3.5-inch lift, and Tacoma 5150 Bilstein shocks. For CV axles, he went with 3rd gen custom chromoly CV axles made by Glenn Yoshida. His rig is locked in the rear with a Spartan locker. Nathan did all the install work himself, including constructing his own rear lower control links.



Ham Radio



& APRS Install

By Tim Mitchell

This past summer I took the test to get my amateur radio (HAM) license. One thing that interested me about amateur radio was APRS, or Automatic Packet (Position) Reporting System. APRS basically uses radio waves to transmit data automatically at various intervals. The information transmitted can include many different items, but one bit of data often transmitted is GPS coordinates. This location data can be very useful to keep track of others in your group, or for someone at home to monitor your off-road location. <http://aprs.fi/> is one online site that shows recent APRS user locations. Information of local APRS users can also be shown on your radio or on an attached GPS device.

There are many ways to set up an APRS system. I decided to install a Kenwood TM D710a since it is able to handle all the data internally, has APRS controls built in, and dual-band

Location data can be very useful to keep track of others in your group, or for someone at home to monitor your off-road location.

capabilities. The dual-band allows operation of the APRS on one band and talking on the other band (two radios in one), reducing the number of radios installed in the truck. The radio is also able to act as a repeater and rebroadcast the signals from my lower

powered handheld radio at a higher power from the truck.

First, I laid everything out and assessed the parts and cable lengths.



Inventory of parts.

I spent time trying to figure out how to fit all the parts in the truck and still leave everything looking good.

One thing my wife did not want was wires laying all over the truck getting in the way. I test fit the control panel in several places on the dash, but it interfered with various other controls, was in the way of my legs, or was hard to reach. I could not mount anything to the top of the dash, since my short wife wouldn't be able to see over it when she drives. I opted to mount the controls over the rear view mirror. This location offers good access to the panel for both the driver and the passenger and is generally out of sight from outside of the truck. The body of the radio was placed in a pretty standard location under the passenger seat to keep it out of view and keep the kids from stepping on it. The GPS was wired up to mount to the windshield with the included suction cup mount.

To mount the control panel, I removed the mirror.



Mirror being disassembled.

The back of the mirror bracket had some plastic that fit into the sheet metal of the truck roof.



I needed to cut off this section of the mirror bracket to allow the control panel mounting bracket to sandwich between the truck roof and the mirror mount.



The protruding plastic now removed.

A quick test fit was done to see where the mirror mounting screw lined up. I was hoping it would fit into a slot in the radio's mounting bracket, but I needed to mark a spot and drill a hole. Once drilled, the bracket and mirror were reattached and one of the bracket tabs was pressed up into the hole of the sheet metal to make room for wiring to pass through to above the headliner. The wires for the control panel would be hidden behind the headliner.

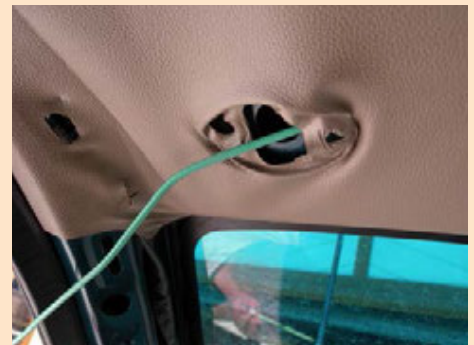
Two wires needed to be run to the control panel, one to carry the GPS information and one to connect to the body of the radio. For whatever reason, I decided to run one wire down each side of the windshield, rather than only disassemble one side of my truck. This ended up working well for where the components were installed and to reduce the amount of wires

running through each location. I took the trim off of the A-pillars, and had to do one of the toughest parts of the install—remove the handles—there was a massive amount of thread-lock on each of the screws.



Exposed A-pillar where the wire will be run.

Once opened up, I used some stiff wire to fish the wires through the headliner and then ran them down the A-pillars.



The feeder wire emerging at the hole where the sun visor mounts.

The GPS cable has a small conversion box in the center of the cable that complicated where I was able to run the wire. The conversion box for the GPS was tucked beneath the dash on

the driver's side and the other end was brought back up to connect to the GPS unit on the dash.



The feeder wire popping out from behind the dash.

The wire to the body of the radio was brought down the passenger side, behind the kick panel, below the door sill and out under the seat where it pops through a small slit in the carpet.



I thoroughly taped the ends of the wires to the feeder wire so that it would not snag on anything as it traveled through the headliner and behind panels.



Securing the wires on the A-pillar.

I checked the clearance of the radio under the seat. After seeing that everything would fit and estimating where the radio should go, I removed the passenger seat. The mounting bracket was put into place and screwed into the floor.



Power was run from the battery. I snaked the wires behind the pedals to the center of the dash, then under the carpet to the radio.



Wires running behind the pedals.

The antenna was mounted to the hood, and the antenna wire was run back to the radio, next to the control wire.



Wires popping out from behind the dash to be fished to the main unit under the seat.



Fishing the wires to the main unit.



Connecting the wires to the radio unit.

Once I had all the wires hooked up, I finished putting the truck back together.

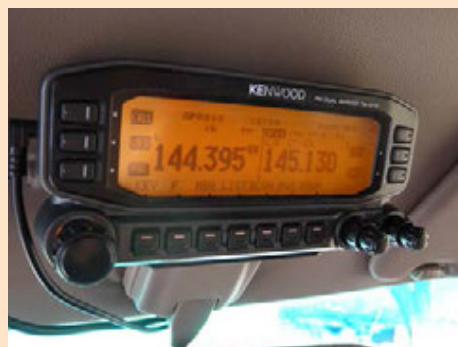


Radio head unit mounted to mirror bracket.



The main unit connected and mounted under where the seat will remount.

This finished install has worked well so far.



The control panel is easy to remove when the truck is parked for a while, and is easy to see and reach. The clarity of the radio is amazing over CB quality sound. The only thing I have to work out yet is where to place the freaking huge speaker and if I should mount the microphone.

The ability to track our location added an extra degree of safety.

My wife was not able to go out for an off-road ride so we had the opportunity to test out the system. She was able to pull up the website I mentioned earlier and see where we had been, and at times see exactly where we were. The ability to track my location added an extra degree of safety in addition to having a planned route and wheeling with others. 📍

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Leg 3 Part 1—Strength in Numbers

By Monte Nickles

Photos by: Monte Nickles, Ben Springli, Mike Digirat

Hello TCT Readers! Some of you might be very familiar with this great adventure The Epic from the last issues of Tacoma Magazine. Some of you however are new to this tale. It's great that it's all finally come together so we can now share our adventures amongst our fellow Toyota brothers. That said, allow me to fill in the new guys as to what is going on.

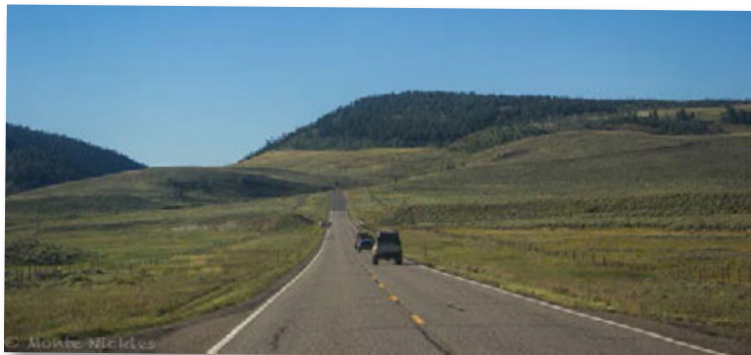
The Epic is the name for the two week long expedition over the states of Wyoming, Montana, and Colorado—over a thousand miles and 20 trails during this epic journey! We had people join us from as far as Washington and Arizona.

Leg 1 consisted of Wyoming and Montana trails. We started on the infamous Morrison Jeep trail that climbs right up the Clarksfork canyon walls. We continued on to Sawtooth Lake from there to camp for the night on the lakeside. The following morning we headed to Cooke City and took a back road to Daisy pass and Lulu Pass, then on to Goose Lake Jeep trail to camp next to the creek in the most beautiful pocket hidden in the high peaks.

Leg 2 was all in Wyoming—Lander, WY to be exact—where we hit two harder trails. Due to falling behind schedule we did the first trail, Christina Lake mostly in the dark. The next morning we set off

for Shoshone Lake trail. This was the most unrelenting trail with its constant pounding of rocks. It's exhausting to drive it and you are never more happy to get to the calm lake side after the drive down from the peaks. Our campfire was most enjoyable that night after such a long day.

This brings us to Leg 3, where we left off last issue. The third and final leg of our adventure was also the longest. We are headed to the southwest corner of Colorado to explore the vast San Juan Mountains, leaving Lander with our skids and sliders battered and bruised but our spirits high.



As soon as we crossed the border into Colorado, we could instantly tell—mountains appear all around us and everything is green again. We have taken a slightly longer route so we can

drive in the canyon on the Colorado River Road along the Colorado River. We set up camp on national forest land just before the road.

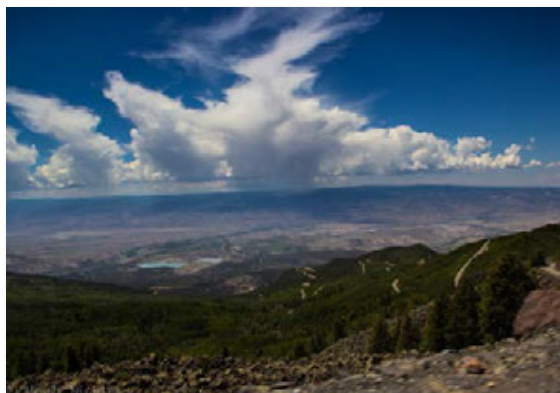
The following day we enjoyed the morning sun along the river on a small county road where a few houses dotted the





road side. It was a very peaceful drive to set the mood for the morning, but the peace was quickly interrupted by the fact we were late, again. We hit the interstate hard for Grand Junction.

We made it to Lands End Road just south of Grand Junction to start our ascent up the Grand Mesa and pick up three more rigs. The road is a snaky ribbon of dirt that comes out on top of the great mesa. The view was very impressive of the valley below and was a great preview of what was to come. We drove on taking highway 65 south to Delta before getting on the “Million Dollar Highway.”



As we pulled into Ouray we realized the “hostile” territory we are in. Ouray is the “Jeep capital of the World” as signs proudly point out throughout the town. Too bad! Toyota Invasion! We enjoyed dinner at a local restaurant and hit the road to find camp.

This simple feat proved rather more difficult in the area around Ouray. Finding small spots is easy, but not for seven Tacoma trucks. We headed our way to a trail off of the South Mineral Creek road that looked promising that leads up to Clear Lake.

Clear Lake was tucked in a cove of high peaks. The water was a mirror to everything that looked into it. It was beautiful, peaceful, and perfect. We quickly set up camp after yet another very long day of driving and unwound around the campfire getting to know our new companions.

The following morning started out peaceful but was soon interrupted by pouring rain—something that would return on and off over the next three days. This worried most of us as Black Bear Pass was the first big trail we were to hit. We had been told it wasn’t bad so long as you don’t do it in the rain and snow. With the rain seemingly held off we set off to climb our first 12,000 foot pass.



Nearing the summit of Black Bear Pass however, the weather took a turn for the worst. Heavy hail, like snow, pounded us! You’d think that during mid-August that wouldn’t be an issue. Well, welcome to Colorado! The small flurry left quickly though and we reached the top with little problem. At the top, we soaked up the majestic beauty of 12,840’.



THE EPIC:

During our descent to Telluride more storm clouds roll in, and as we neared the rocky ledges known as The Stairs, it once again started to rain. I was determined to do this trail to compare it to Morrison and since I had been put in the lead at this point. I didn't stop. Making it down The Steps, I quickly pulled the truck into a wide space and ran up to help spot everyone else down. By that time the rain was in full down pour mode. With spotting and a slow pace, we all made it through alive and well. Of course as soon as the last truck is through, the rain stopped. Thank you

Colorado! So I am here to tell you, it is possible to take on Black Bear in the rain! Although, I don't recommend it for the faint of heart.



The rest of Black Bear consisted of going down a very narrow trail on the edge of the steep mountain side with a few sharp corners requiring 3-point turns or more. Nothing too drastic though and it was easy to soak up the beautiful view as we drove.



At the bottom of Black Bear we drove through the town of Telluride to get gas. The funny looks we got from the locals were quite humorous. They must not be used to seeing anything other than Jeeps, I guess. We quickly started up Imogene Pass to get back to Ouray.

Imogene Pass is a great road. Many of these passes are very accessible to all basic 4x4s and this trail really shines to show that. It's not super rough but not really maintained. The climb starts right out of Telluride and you can look back at Black Bear from where we had just come. The views on Imogene were wondrous and mysterious. Not only did we crest the 13,000 foot mark on this pass, but we also had a very large dose of the mining operations that were here. The run-down mine ruins were intriguing and were spread all over. They added a very historical feel to the scenery and we loved it. We drove through the grounds of a big mine just before our second crest of the day. Above 12,000 feet in less than 3 hours—welcome to Colorado!



At the 13,114-foot summit of Imogene Pass, we were stunned. I know I have been saying how beautiful everything is to the point of it sounding boring. But seriously, wow! The mountains here seemed endless.





The descent down to Ouray was wonderful. We did a few creek crossings and saw a ton of old mining equipment. Rain rolled in and out all day and while it was a bit of a dampener it brought even more mysterious qualities to the lands. We headed back to South Mineral Fork as camping space was abundant there and camped along the creek this time. Once again,

we had a blast around the campfire. We relived the highlights of the day and looked forward to the next day as it would be one of the most trying days we would face—but we didn't know that yet.

Poughkeepsie Gulch trail was not for a normal 4WD truck nor to be attempted alone. This road was narrow in places, very rocky and bumpy in areas, and most importantly has a massive obstacle aptly named "The Wall." This was where our day would start.



It was a fun, twisting, rocky trail with Moab-like ledges all over. We were enjoying ourselves when we came upon an older gentleman ATVer heading down the



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THE EPIC:



mountain. He was with a young girl and he did not appear to be having a good time. It turned out that the man thought he had dislocated or broken his hip and he was in a lot of pain. He was a tourist on a rental ATV with no other real gear, which left him with no way of calling anyone. His daughter couldn't drive the ATV. Luckily

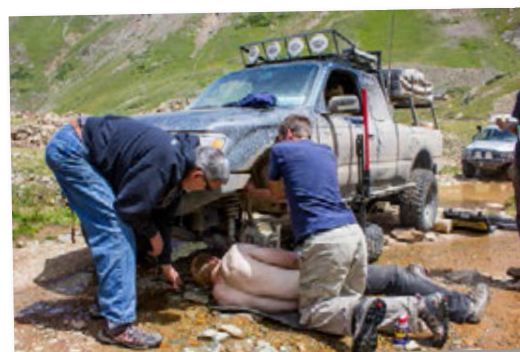
Joey still had cellphone service and called 911 for an ambulance to meet him at the end of the trail which was not far. He thanked us and continued on his painful descent. He refused to let us follow him or give him a ride, not that we could have since we were a few miles away from a decent turn around location. This was a powerful reminder about how traveling in groups and having the right equipment is very helpful and can be lifesaving. It wouldn't be the last reminder of the day.

As we continued up the trail we very much enjoyed the roughness Poughkeepsie was throwing at us. We finally broke through to an open meadow and we knew what was to come next—The Wall—an obstacle where lockers and winches were highly recommended. We grew excited as we approached the final hill to get to the base of The Wall; however, my truck, Frankenstein, had other ideas for excitement. After leaving a large puddle, my driver side lower ball joint gave out mid-stream. Two bolts had fallen out somehow and with only two left, they just could not handle the strain and sheared off. Luckily, together, we were prepared for the situation.



We gathered, diagnosed the problem, and got to work. The truck was jacked up and the tire removed. Since two bolts were sheared off, that meant the other half was still in the spindle. One bolt was impossible to get to being an outer bolt but the other was an inner and had just over ¼" sticking out. Of all people, Ben had vice grips and I spent the next 30 or so minutes slowly and painfully backing out the bolt. Cody and Mike both had extra bolts for me to use.

Mike also provided a file that allowed me to open up one of the alignment sleeves that had been tweaked. Then Joey provided the Locktite to seal the deal. All in all, it took about an hour and a half to fix and I literally could NOT have done it without my companions. I would have had to have abandoned the truck and come back for it. It was a great experience and really showed the importance of wheeling in groups. Never take your friends for granted on the trail. One day, they may just save your ass.



We continued to the base of The Wall, not 200 yards away. Mike hit the massive steep rock face first and made it up with relative ease. Although, he managed to slam his slider hard enough to be picked up on seismographs as the next major earthquake in San Francisco. Joey followed him and struggled a bit more, but after some quick adjusting he made it up. Ben was next. Only having 32s, sliders, and the factory rear locker, his anxiety levels where a bit high. The third truck was the charm and he nailed the right line on the first try, making it up completely drama-free. He was the last of us to do it unassisted. Cody's rig struggled immensely having clogged his very worn KM2s with mud, and he was the first to be winched up. Dave's mostly stock second gen didn't mess





with it much and was winched up promptly. I, sadly, had to be winched up since I didn't want to risk breaking anything, driving with only three bolts in the very fresh healing wound.

Needless to say, this was a serious obstacle and very fun to drive up. We had a blast doing it and I hope to return to drive up it under my own power. We gathered and prepared to leave; we were happy with our successes of helping a man, doing a major trail repair and conquering a large obstacle—it was only just the morning. Welcome to Colorado!

To be continued, for the last time I promise ...

The Epic: Leg 3, Part 2—Never Ending Peaks and Memories 🇺🇸



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Graduated

4Runner

Matt Hayward • TCT Magazine



It was time for graduate school, which also meant a more reliable and efficient vehicle than my worn out Silverado was needed. After a brief search for a car, I realized I needed an SUV. Having some prior experience with 4Runners, I set my sights on one.

A 4th gen was chosen since they felt more robust than the older models and, after some interweb scouring, several were located nearby. However, few were within my mileage and price constraints. About this time the 5th gens were hitting the scene and my aunt, knowing that I was looking at 4Runners, devised a scheme in which to get herself a new model and help me with a deal on her '03. After a little more searching around, the decision was a no brainer and I was to be the proud new owner of a mint Limited with a stack of maintenance docs as thick as my textbooks.

The only caveat was that it was 2X4 which at the time wasn't an issue because my last truck, the Silver Slut, had logged as many miles in the dirt as on pavement and the abuse had taken its toll. I didn't want that to happen to the 4Runner, so the lack of front driveline was viewed not as a hindrance, but as insurance that it wouldn't leave pavement (hah!). Little



A T4R.org gathering was coordinated by several Central Alabama members; all but one of the 4Runners pictured were lifted in Matt's driveway.

did I know what thirst for adventure and obsession with the outdoors and photography the purchase would lead to.

Just because it was light on front mounted drivetrain components didn't mean it had to remain stock. I didn't want to get caught trying to unlock some coed's SororRunner at the mall with my key, so I planned for a few changes to make mine stick out. Before there was a 4Runner in my driveway, there was a Defiant Truck Products short tube light bar and Yakima

Ease of use and desire for cargo space led to a prior cargo drawer system being ditched in favor of a stealth style sub box, tool bag, and backpack.



MegaWarrior sitting in my garage, in addition to some components pilfered from the Silverado.

After spending some time behind the wheel and surfing the web (especially T4R.org) in search of advice, I came across the FJ spring swap, a simple suspension change that would eliminate my biggest complaint about my new purchase. It rode like a boat—caroming over bumps and leaning around corners. After finding some lightly used coils and a set of Spidertrax spacers because they made the wheels stick out and look cool, I took a trip to my buddy's shop and had the whole thing finished in a few hours. That was that. My 4Runner was perfect.

Well, then I got a call from another friend who needed his Harley pulled to Southwestern Colorado. Before he could say "free gas," I was already at his parents' place loading up the trailer. I also picked up a DSLR for the trip, a purchase that would provide me with a new passion. Once the trailer was unhooked I was ready to explore the wilderness and had a capable SUV to carry my bike and myself wherever I wanted to go. That is until I made my way to the Wheeler Geologic Area, the rustic dirt road suddenly turned to rocks, the smooth grade suddenly became undulating, and finally

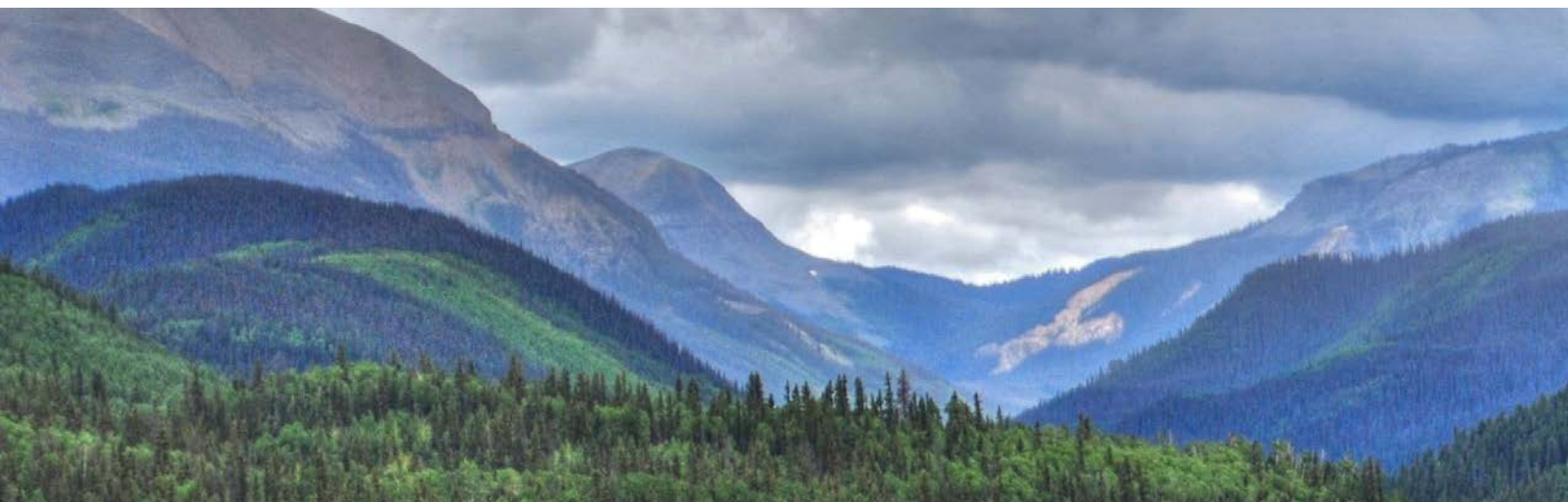


Taking in the heavens and the tranquility on Metroz Mountain, near Pagosa Springs, CO.

dirt turned to mud. After it started raining, and I'd scraped the running boards more time than I was comfortable with, I decided to turn back.

This was the first time I'd ever retreated from a trail; I didn't like the feeling. Little did I know that feeling would lead to a series of modifying and re-modifying every aspect of the truck. While it was still mostly stock (and 2WD), it did get me to several striking, remote places on my trip, igniting a fiery passion for capturing those moments and views for others to see.

The useless rear reflectors were adapted to fit LED units for putting extra light on the ground when backing up.



For a period, several suspension setups including Old Man Emu, SwayAway, and Radflo were combined with 275/70R17 ATs to support the truck but those were eventually ditched in favor of the original Bilstein 5100 and FJ Cruiser coil spring suspension that currently keeps the 32-inch BFG A/Ts, on gunmetal TRD BBS wheels, out of the fenders. The milder setup yields better mileage and ride quality to allow for longer trips from home (and save for camera equipment).

A Gobi Stealth rack holds a Hi-Lift jack, two RockyMounts bike mounts, several LED bars, and whatever else circumstances dictate; access is via a Gobi hatch-mounted ladder. Stubbs HD-SKO rock sliders were welded on to keep the rockers off the trail while Expeditioneers and BAMF skids protect the engine and lower control arms, respectively. Other trail worthy mods include WabFab rear sway bar links, Timbren front bumps, aFe cold air intake, B&M tranny cooler, several front and rear LED bars, Diehard Platinum, and EBC slotted rotors and pads. Creature comforts and other bling include a custom Kenwood, JL, and MB Quart sound system with Garmin navigation and backup camera, LightSource interior and exterior LED lighting, 5000K Morimoto Retroquik HID retrofit, red instrumentation lighting, blacked



Overlooking the San Luis Valley from Mt. Blanca on the infamous Lake Como Road.

out front lamps, B-Quiet sound deadening, and the notorious Satoshi grille mod. Future plans include front and rear bumpers, on-board air, HAM radio, and a 4x4 conversion when time and money permit.


Thanks to the picturesque, often hard to access, locations the 4Runner takes me, my proclivity toward outdoor photography has become a passion that, like the 4Runner, will be with me throughout my days. 🇺🇸

An Expeditioners engine skid and Bay Area Metal Fab lower control arm skids keep the trail away from vital components. The old Radflo 2.0 coil-over setup is visible in this photo, the handling was terrific but noise became an issue.



You're not the first one down this trail. Don't be the last.

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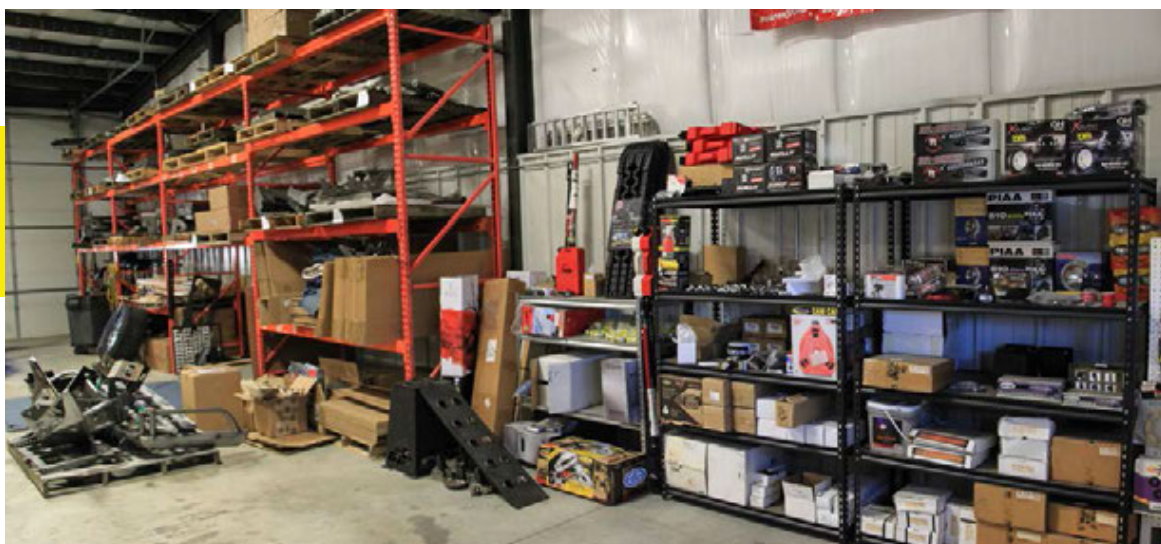
Introducing

BY BOB HOLLIDAY



Back in 2000, when Steve Eagan started the business, he was primarily a Toyota guy, occasionally doing different projects for people he knew. As the business began to grow, so did the need for a larger shop and more help. Through 2010, Steve was a one man show with an occasional part time helper. Steve basically built the bumpers, shipped them out, and was his own accountant, salesman, and etc. In 2010, Nathan Wright and his father came in to help take CBI from a one man army to what you see today. Now CBI Offroad offers services and custom builds for all makes and models. Their production lines are primarily focused on Toyotas and Jeeps, producing products from bumpers to sliders to roof racks and everything in between. Even though their production lines are among the top products in the market, CBI is known for their custom work. With a growing product line and a name for quality, CBI is showing they will be a force to be reckoned with for years to come.

On a recent visit to Idaho Falls, ID, we had an opportunity to meet up with Nathan Wright and see what makes CBI Offroad tick.





Q What are some of your goals as a company?

A Our goals at CBI are to continue our growth as the leading bumper and parts manufacturer for Toyotas and Jeeps. We have set some great goals that will help us in our growth as a company. Looking forward, these will help us deliver product quicker, offer new and improved products, and expand our reach to those customers who can't access our products.



Q What are some of the hardest things to overcome as a fabricator in this market?

A Competition is tough in this industry. The biggest challenge most of the time is educating the customer on quality versus price! Price seems to speak the loudest but quality will trump price every time. We want to sell the best in quality products, whether we manufacture them or resale them, and that is the challenge to educate the customer to the difference of each.



Q What can we expect out of CBI in 2014?

A Customers can expect some great new products from CBI in 2014! Look for new bumpers (including our new 5th gen 4runner rear bumper) along with many new bumpers and products for Toyotas and Jeeps. Also look for more selection of our newly released ditch light brackets!



Q What sets you apart from your competitors?

A Quality and customer service! These are the principles that our business was built on from the beginning and continues to grow from.

There isn't anyone out there that puts out the quality of bumper that we do. It is a combination of the right material (both quality and the correct gauge or thickness) along with the best fabricators in the business. I have professionals in the industry all the time comment to us on the quality of our products and especially the quality of the welds!

We are a full service offroad shop offering fabrication, service and mechanical. That is why people bring their vehicles to us from all over. We can build a custom bumper and auxiliary fuel tank and then put it all together, plumb it, and even do a gear swap and differential service too! What I'm trying to say is many shops just fabricate or do service-related items or resale other people's products. We do it all!



Q We know you have many US and Canadian customers, but where's the furthest CBI customer?

A We have sent products to Australia, Bulgaria, locations across South America and Mexico, Hawaii, and many locations along the country of Canada.



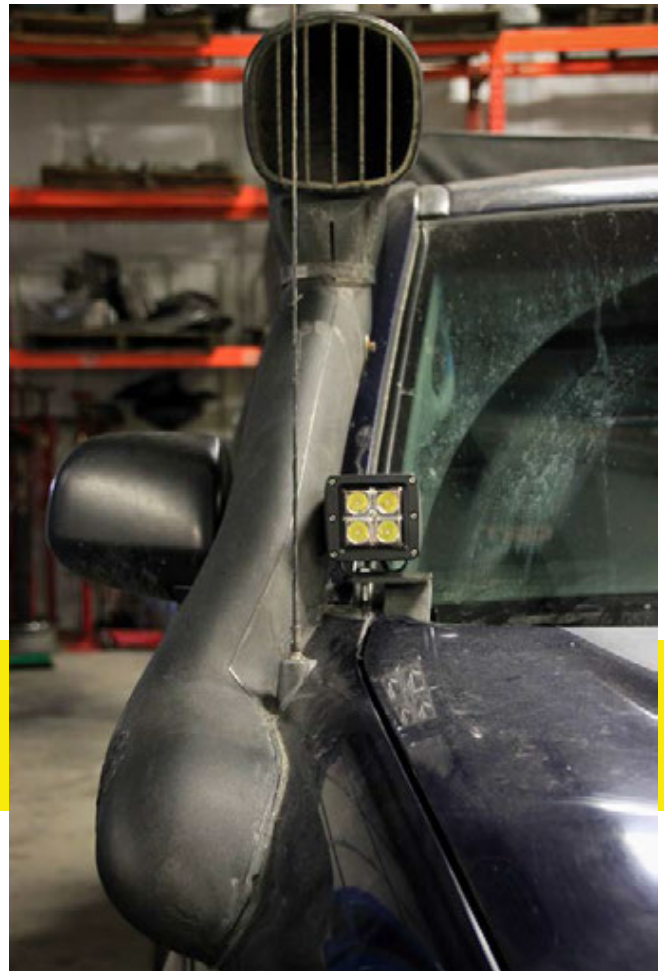
What is your favorite vehicle to work on/build for and why?



We love all vehicles we work on but deep down the roots of CBI are Toyotas, so we all get excited about a good Toyota build! The next would be custom projects. We get them in all shapes and sizes. Our customers have great imaginations and that allows us to all put our head together and come up with some great builds that are unique, and very functional!

We thank Nathan and his crew for their hospitality and taking the time to sit down with us. Stay tuned to future TCT features as we take a first-hand look at some of the quality products that CBI Offroad offers.

For more information on CBI Offroad and to see how they can help bring your rig to the next level, check out their website www.cbioffroadfab.com or visit them on their Facebook page for up to date product information, custom projects, customer photos and new releases. ❤️



We've been able to build an amazing team for the launch of Toyota Cruisers & Trucks Magazine! Our Managing Editors and contributors have really hit this first issue out of the park.

That being said, we still have some gaps to fill. Our **TCT Event List** currently includes 26 events for 2014, and there's simply no way we'll be able to attend them all. Our magazine (like FJC & TM before) is all about serving the reader, and we really want to keep it that way.

So we're announcing the TCT Magazine Trail Team, which will give you the opportunity to help us provide the best Toyota off-road, 4x4, and overland content on the planet! Trail Team members will help us cover many of the events we all love to attend, and will be rewarded for their hard work.

It's easy to become a member, but there are a few requirements. First, you must be able to take decent photographs and write a few paragraphs about the experience. I know many are concerned about that second part, but it's really not difficult to write down your view of how an event went. It's also a lot of fun covering events for a publication!

Once selected as a potential TT Member, we'll get you in to the event you're attending at no charge to you. From there you submit your first article and if all goes well, BINGO, you're on the Team! Team members will have the opportunity to cover an additional 1-4 events per year and will be paid \$200 per event on top of registration fees. You'll produce an article for each event along with high-quality photos, and will be one of TCT Magazine's official representatives.



**Additional benefits you'll receive after
you're selected to the Trail Team:**

- TCT Trail Team magnetic decal for your rig (for use when covering an event)
- Exclusive Red & Black TCT Badge after your second published article
- Personalized TCT Magazine Trail Team business cards
- 2 TCT Magazine Embroidered Shirts
- TCTMagazine.net e-mail address

Trail Team Members that have written for more than 4 events and choose to become Tread Lightly certified and trained by a sanctioned 4WD school can become Trail Team Leaders, and eventually may be asked to join the TCT Magazine staff.

If you're interested in joining the TCT Magazine Trail Team, please get in touch with us soon so we can get you going to an event! E-mail jim@tctmagazine.net and we'll get you started.

