

TCT MAGAZINE



SUMMER 2017 • VOLUME 10 • ISSUE 3

On The Cover:
Kayla's FJ Cruiser
exploring the Col-
orado Mountains,
FJ Summit XI

Photo by
Bob Holliday



Travel South of the Border



Summer Market



FJ Summit

22



28

S/T MAXX Review



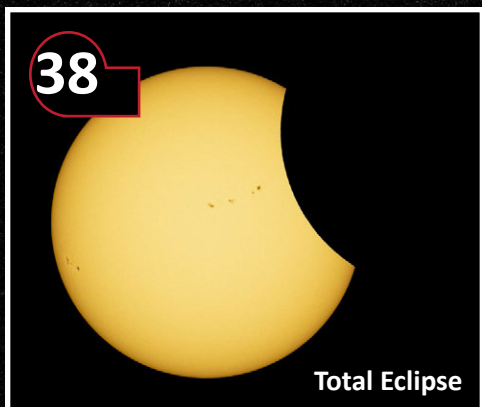
32

Inside X-Hangar



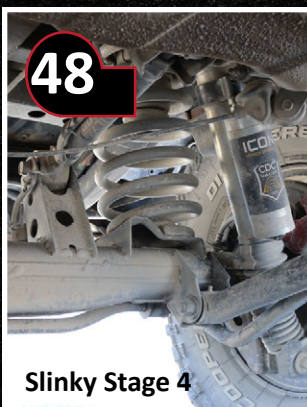
34

GX-460



38

Total Eclipse



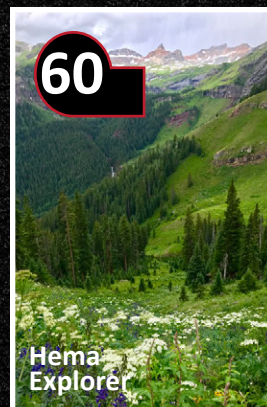
48

Slinky Stage 4



52

4Runner Prep



60

Hema Explorer

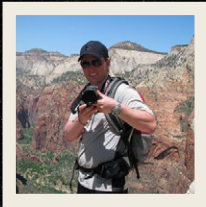
EDITORIAL STAFF



Shane Williams | Publisher
2012 Lexus GX-460
Colorado Springs, CO



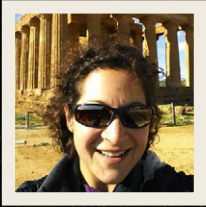
Beau Johnston | Editor In Chief
1998 4Runner | 1969 FJ-40
Casper, WY



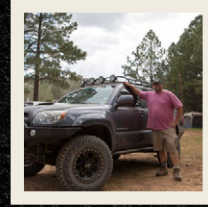
Bob Holliday
2006 Tacoma TRD
2007 FJ Cruiser TRD SE
Denver, CO



Heather Swearingen
Too Many Land Cruisers
Toquerville, UT



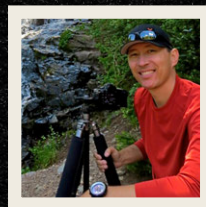
Krista Johnston
1998 4Runner | 1969 FJ-40
Casper, WY



Phillip Jones
2007 4Runner | 2006 Tacoma TRD
Frisco, TX



Daniel Markofsky
1993 80 Series Land Cruiser
Denver, CO



Dennis Lloyd
2010 FJ Cruiser
Eagle, ID



FROM THE PUBLISHER

Leaves are changing here in Colorado, that must mean it's time for our summer issue. This one is amazing.

Our team + contributors have traveled well over 10,000 miles in creating the latest issue of the top Toyota Adventure magazine on the planet. From South America to Colorado, Canada, and Wyoming for the Total Solar Eclipse. I could not be prouder of the work that comes from these dedicated professionals.

As we head toward the Fall season and prepare for our in-depth SEMA show coverage, I think it necessary to acknowledge the losses many have seen in recent weeks.

Our thoughts and prayers are with everyone in Texas, Florida, and the Caribbean islands as they deal with the aftermath of powerful hurricanes. Fans & enthusiasts in the northwest who have been choking on wildfire smoke for over two months as well. Mexico has seen a rash of powerful earthquakes that have killed or injured thousands.

So as you enjoy our publication, please take a moment to remember those that cannot go out for an epic adventure. Please don't take your opportunities for granted, and donate to a good cause if you have the means.

As always, stay safe, Tread Lightly, and have fun!
Shane



Monument, Colorado 80132

www.tctmagazine.net

Published By
Zaxyn Media, LLC

Shane P. Williams, MASc, FAA sUAS | Publisher
Angela C. Williams, CSFA | Associate Publisher

Editor in Chief
Beau Johnston, P.E.

Senior Editors
Bob Holliday
Phillip Jones
Dennis Lloyd

Copy Editor
Shane Williams

Associate Editors
Don Grey | Event Photographer
Daniel Markofsky | Associate Editor
Stan Reed | Event Photographer
Heather Swearingen | Digital Editor

Creative Director
Kimberly Proffitt

Contributors
Austin Johnson and Leah Cheney
Adam Tolman

"TOYOTA", "FJ CRUISER", "LAND CRUISER", "4RUNNER", "TACOMA", "TUNDRA", "LEXUS", et. al. are registered trademarks of Toyota Motor Corporation. TCT Magazine is not affiliated with or endorsed by Toyota Motor Corporation, Toyota Motor Sales, U.S.A., Inc. or any of Toyota's affiliated companies. These terms are used for descriptive purposes only, and not to denote affiliation or connection with Toyota Motor Corporation.

Copyright 2017 by Zaxyn Media, LLC
Reviews, opinions, comments, and ratings of any product do not represent endorsement of said product by TCT Magazine, it's editors, or publisher.

Statement of Ownership
Number of issues published annually: Five
Annual in-app subscription price: \$9.99 in U.S.A.
Location of known office of publication:
19250 Sixpenny Ln., Monument, CO 80132
Owner: Zaxyn Media, LLC 19250 Sixpenny Ln.,
Monument, CO 80132

ZAXYN
MEDIA, LLC

WHEN ONLY THE BEST WILL DO.



**5 YEAR
EXTENDED
WARRANTY**
ON ELECTRICAL COMPONENTS



COMEUP USA INC. WWW.COMEUPUSA.COM

Clackamas, OR Tel: 503-783-6142 email: info@comeupusa.com

**COMEUP
WINCH**

New & Noteworthy

Front Runner Monsoon Bag

It's raining, it's pouring and you're still out exploring. Ready for extreme weather, the heavy-duty Monsoon Bag is 100% water and dust proof. Declutter the interior of your vehicle with this roof-rack ready bag that's designed to keep all your gear clean and dry while you adventure on- and off- road.



- Versatile storage solution for small to large cargo
- Simply fold or roll the bag to perfectly fit the size of the contents
- Free up precious interior space by attaching it to a Front Runner Rack
- Scalable up to 90L (5492 in³) capacity
- Expands to hold 2 Cub Pack - by Front Runner
- Removable rigid tray makes packing a breeze and protects the bag from chaffing when carried on a roof rack
- Soft Grip handle with steel spine for easy manual handling
- Bag can be secured to the roof rack using a pair of Stratchits - by Front Runner*



- Integrated air-pressure release valve for a water tight seal when rolling and sealing the bag
- The IP66 rating guarantees an air-tight, dust proof seal and protection against powerful jets of water
- A separate mesh bag provides quick access to smaller items. It can also be used to store small wet items that need to be dried
- Folds compact for easy storage to keep your garage clean and organized

\$149.00

URL: <https://www.frontrunneroutfitters.com>

GX Armor Options

The GX platform (both 470 and 460 – See “To New Beginnings on Page 34) is quickly becoming the go-to for 4x4 & overland Toyota enthusiasts, and Metal Tech 4x4 is one of the leaders in top-notch modifications & armor for these trucks.

GX-470 Front Bumper

This GX-470 bumper is a direct bolt on no body cut armoring solution for 2003-2009 GX-470. The overall weight of the bumper makes it one of the lightest on the market for the GX470, featuring over 5 different thicknesses of steel which puts strength where it needs to be.

Standard features:

- Winch ready two part winch mounting system
- Integrated 3/4" pull points mechanically locked back into the winch mount
- Single center hoop of DOM-SRA steel tubing
- LED fog light pockets (lights optional)
- LED center 25" single row light bar pocket (light optional)

Starting at \$1349



GX-460 "Talon" Front Bumper

The off road bumper for Lexus GX-460 is a direct bolt on no body cut armoring solution for 2010 - 2013 GX-460. The overall weight of the bumper makes it one of the lightest on the market for the GX460, featuring over 5 different thicknesses of steel, putting strength where it needs to be.

Standard features:

- Winch ready two part winch mounting system
- Integrated 3/4" pull points mechanically locked back into the winch mount
- Single center hoop
- LED fog light pockets (lights optional)
- LED center 25" single row light bar pocket (light optional)

Starting at \$1399.95



GX Sliders

Metal Tech has a range of sliders for both the 470 and 460 that are compatible with both KDSS and non-KDSS vehicles. You can start with economical Outpost Off Road sliders at \$495 for raw steel, all the way up to the brand new GX-460 sliders that come powder coated inside & out for \$715.

URL: <https://www.metaltech4x4.com/lexus/>

New & Noteworthy

Rhino-Rack Pioneer Rooftop Trays



Located right here in Denver, Colorado - Rhino Rack USA builds on their Australian roots to create amazing lightweight roof racks & accessories.

We recently learned about their line of Pioneer Roof Trays:

The Rhino-Rack range of Pioneer Rooftop Trays will maximize your carrying potential, as well as freeing up space inside your vehicle.

Since developing the first of its kind lightweight aluminum rooftop carrier in 2010, Rhino-Rack has maintained their standing as one of the best for well made, durable and user-friendly off-road vehicle products.

Constructed from aluminum and fiberglass reinforced nylon, the Pioneer range of lightweight yet strong rooftop accessories are perfect for off-road enthusiasts & daily drivers.



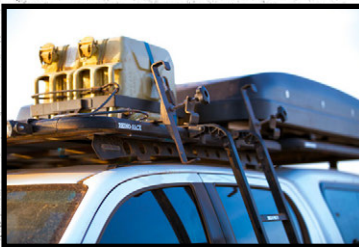
The Pioneer Platform offers minimal wind drag and noise on the road. With a flat design and no side rails, the Pioneer Platform provides easy access to your gear from all four sides. Loading, unloading and securing loads is made easy, simply slide goods on and off the roof and secure them to the bars or utilize the C-channel rail design and additional eye bolts.



Designed for weekends and workdays, the Pioneer Elevation provides an easy solution for the transportation of ladders, construction equipment and long loads that extend beyond the base of the platform. Fully welded rails on two sides provide a rigid tie down point, with user-friendly hand grips also built into the design.



The versatile Pioneer Tray has been built to maximize your load capability and provide added security against shifting loads while driving - it even features a front wind fairing to facilitate a quieter drive. These features, coupled with a fully welded, closed rail sidewall make the Pioneer Tray a great rooftop transporter.



Rhino-Rack also provides a variety of accessories for all of their racks. Everything from awning mounts, Hi-Lift holders, and shovel mounts are available. Their recently released Aluminum Folding Ladder makes it easy to reach items stored on the Pioneer rack.

Starting at \$499

URL: <http://www.rhinorack.com/en-us>

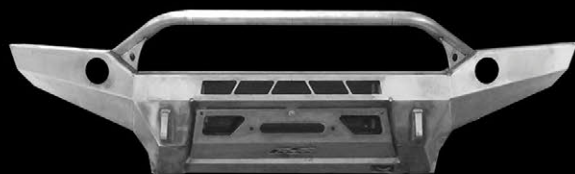
792 East Iona Rd. • Idaho Falls, ID 83401 866.522.0697



ONLY THE **BEST** WILL DO
FOR YOUR **TOYOTA**



T4R5-FB-PRM-CGP-SHRT



T3-Front-CGP-SHRT

www.cbioffroadfab.com



ROOF RACK SYSTEM



www.prinsudesignstudio.com

BODY ARMOR



Adventure Travel

South of the Border

Story and photos by Austin Johnson and Leah Cheney

A few years ago, sitting at my desk job playing on the internet; I stumbled upon the blog of a couple traveling south on the Pan-American highway in a first generation 4Runner. The more I read, the more excited I became at the possibility of such a trip. I went home and shared the dream with my girlfriend (now fiancée) Leah. That evening we became lost in the magic of an adventure of this magnitude, and our minds began to whirl as our future goals changed. Over the next couple of months, as the enormity of the trip sunk in, we realized that we would need a lot of time to plan and save to pull off such an endeavor. Leah was just about to start a two-year MBA program, and I was nearing a career change. We forecasted our budget, crunched the numbers, and realized that we could be debt free and have our required funds ready by the end of her MBA program. After a few months of intensive research and the beginning stages of saving; we were well on our way to our Pan-American Highway adventure that would take us from Denver to Ushuaia.



Homemade bumper and swingout ready for the trip south.

Earlier that year I had purchased our 2004 Toyota 4Runner for camping, off-roading, and as my daily driver. Since the 4Runner is such a reliable and well-built vehicle, we knew it would be the perfect vehicle for an overland trip. As our budget allowed, I started to purchase the desired suspension and various other upgrades that we would need. Since the 4Runner had just over 100,000





miles, I rebuilt most of the front suspension and changed the stock front shocks to 2.5-inch Sway-A-Way coil-overs and SPC upper control arms. The rear suspension was changed to MetalTech4x4's version of long travel suspension with custom built control arms. Since much of our driving would be highway, we decided that a tall, skinny tire would be the best option to help with fuel consumption while still performing well off-road. The tire of choice was the 33-inch Cooper S/T Maxx because of the unique size and the semi-aggressive tread pattern that would be able to handle any type of terrain.



One of the many overlanders encountered on the trip.

At times building an overland vehicle on a strict budget can get very frustrating, such as the large price tag on a rear bumper with a spare tire swing out. With prices hovering around \$2,000, we had to discard the dream of the new beautiful steel bumpers. Instead, I drew up some plans and custom made one specific to our needs, saving us \$1500. I also made and installed a full set of drawers with easy access from the back that would also allow us to sleep inside if necessary, all the while keeping an extra seat for a third traveler. We did invest in a Tepui rooftop tent, which has made for a very comfortable home in nearly all types of weather and has been by far one of the best investments we have made for this trip. I built and installed a 100W solar and dual battery system to power up our 43-quart refrigerator and to keep us self-sufficient in remote places. The build turned out to be a reliable and comfortable setup, and hopefully tough enough for the grueling 30,000 miles of paved, potholed, dirt and sand roads ahead.



Shipping the 4Runner from Panama to Columbia cost approximately \$1,000 via agent Ever Logistics, Inc.

The 4Runner has been a great vehicle for us on this trip. Except for Mexico (which doesn't sell 4Runners), we have felt confident that in the event we encounter a problem, we would be able to find and replace parts. We have come across all types of roads and all types of weather along this trip. The 4Runner has powered through every type of terrain with such grace that it almost makes the trip seem, dare I say, easy. Mudslides that have stood in our way, hundreds of miles of dirt roads and sandy beaches, there was even a road in southern Mexico that had in excess 300 speedbumps in 150 kilometers! All of which the 4Runner has made its way through with relative ease.



Camping in the Coclé Province, Panama.



Leah fishing on the beach of San Juan Del Sur, Nicaragua.

We have been to some pretty amazing places so far on this trip, but there are really a handful that stick out in our memory. In Mexico, Chichen Itza was a great visit. We also enjoyed just about every cenote that we dove into, especially the one in the town of Valladolid.

If you were to ask us what beaches we would recommend, well we would have to ask, what are you looking for? If you're looking for the surf culture, then the Pacific beaches of El Salvador are for you. If you're looking to scuba and snorkel, we would point you in the direction of the Caribbean coast because of its clear blue water and tremendous reefs. One of the most clean and beautiful countries in all Central America is Costa Rica. The parks are very pretty and full of wildlife, the beaches are clean and free of trash, and the lakes are top notch since there are not hundreds of speed boats zipping back and forth all day long. The greatest city that

crossed our path in Central America was undoubtedly Panama City, Panama. The cityscape is one of the most amazing scene from the docks of Panama Bay, which is south of the city off a small strip of land. This city was very clean and well planned, which is something every trip navigator will appreciate, although traffic is an absolute nightmare.

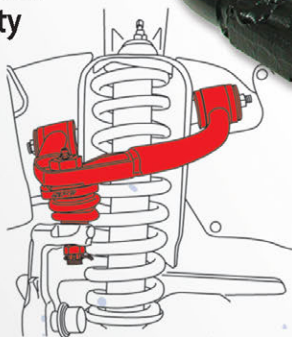


Visiting the ancient Aztec pyramid: Pirámide Del Sol, Teotihuacán México.

GOT LIFT? ADJUSTABLE CONTROL ARMS

DEMAND SPC PERFORMANCE

- Return drivability with $\pm 2.0^\circ$ camber and 0° to $+4.0^\circ$ caster adjustability
- Maximize clearance for oversize wheel/tire combinations
- Extend droop travel with 80° ball joint articulation and free pivot bushings
- Upgrade to a greaseable sealed ball joint



IT'S ALL ABOUT THE BALL JOINT

	SPC	OE	Monoball
Articulation	80°	68°	68°
Sealed	✓	✓	✗
Greaseable	✓	✗	✗

SPC
PERFORMANCE
800-525-6505
www.specprod.com

metaltech
METALTECH4X4.COM

LOWRANGE
OFF-ROAD

SOUTHEAST OVERLAND

slce
OFFROAD

HEADSTRONG
OFF-ROAD

TOYTEC

4 WHEEL PARTS

WHEELER'S
OFF-ROAD, INC.

TOYTEC

One of the best aspects of this trip that was unexpected was the relationships that we would forge with other overlanders. When you meet another overlander the connection is automatic. You immediately fall into deep conversation and form a bond as if you have known each other for years. It is these spontaneous relationships with other overlanders that has given shape to our trip. Prior to leaving, we believed that we would have a plan of what and where we would be a month out. This view changed very quickly.

The best example is how we spent this past Christmas. We were headed across the border to Belize, when we started talking with another overlanding couple and, decided on the spot to join them for the holiday. This involved driving three days to Lake Atitlán in Guatemala, where we celebrated with eight couples from eight different countries. We came together, shared our favorite dishes from home and shared stories until the early hours of the morning. Since then we have traveled on and off with these same overlanders.

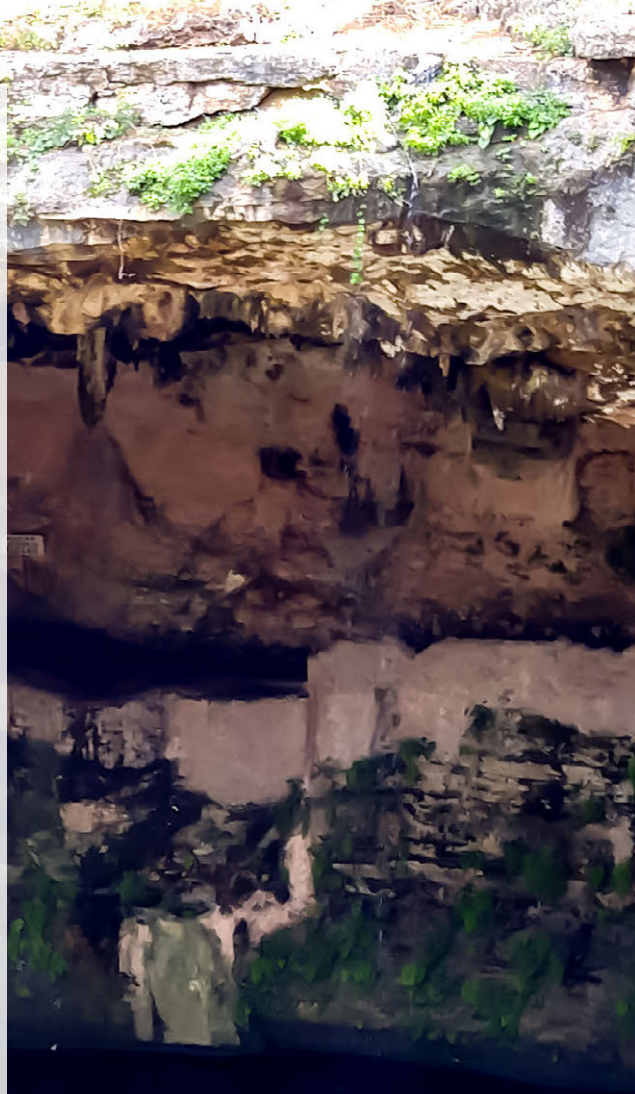


The dirt road up to Lago Parón in Peru is a climb up 6,500 feet in only 20 miles, bringing you up to an elevation of 13,800 feet.



The only regret we have is that both of us should have taken our Spanish lessons more seriously. Don't get me wrong, we have made it a long way with our broken Spanish, but we completely miss out on being able to connect with locals on a deep and meaningful level. We have had to rely on our overlanding friends who speak fluent Spanish, or the grace of the locals with whom we are trying to communicate.





For those who dream of a trip like this, we have but one piece of advice for you ... do it! If we have learned one thing on this trip, it is that the world is continually changing and not always for the better. Experience it while you can, learn to explore and adventure will unfold at every turn, including learning a lot about yourself. If you are afraid of what lies beyond our borders, let us tell you that we feel just as safe on the road as we would in any national park in the United States. People south of the U.S. border have been friendly, helpful and generous.

A major topic around the overland campfire is the issue of bribes. We do our research prior to entering a new country; we try our best to follow the letter of the law and are respectful to any officer that we come across. We are firm believers that being polite and giving a big smile are all you need, and of course the proper documents to get out of any situation bribe free. Early in our trip we had the pleasure to meet a couple that has been on the road since the early 90's; the best advice I took away from our lengthy conversations was that the best tool you have in non-ideal situations is time. As an overlander you must be patient, and willing to go with the flow.

You can follow their adventures on their website and Instagram site:

- <https://4runner4adventure.com>
- <https://www.instagram.com/4runner4adventure/> 🇨🇪



IT'S MORE THAN A BUMPER IT'S ENGINEERED PROTECTION

Whether you're scaling rugged mountains, forging rivers or exploring the great unknown, the reliability and durability of your equipment is paramount. ARB's wide range of vehicle accessories are engineered and manufactured to the highest standards to give you the freedom to play harder and escape farther.

ARBUSA.COM

©2016 ARB 4x4, all rights reserved.



4X4 ACCESSORIES



Outdoor Retailer Summer Market 2017

By Beau Johnston

Outdoor Retailer turned a new page this past July as we saw its last show in Salt Lake City. It was a bittersweet trip for me as I drove over to Utah from Wyoming. Krista and I have been covering both OR's Summer and Winter Markets since 2010. I know this pales in comparison to the 21 years Outdoor Retailer has graced the halls of the Salt Palace Convention Center but one cannot help but be a little nostalgic about the whole thing. We grew up in this outdoor editorial field while attending the shows in Salt Lake so part of me feels like we will be leaving home when the shows move to Denver, starting in January 2018.

I don't think I was the only one who was a bit nostalgic as this year's Summer Market had a subdued vibe about it. Several of the cornerstone clothing and gear manufacturers had opted to not attend this year's show to protest and draw attention to Utah's decisions on managing public lands. Because of this, there wasn't the energy in the room as there had been at past shows.

Those manufacturers that chose to attend did so with some phenomenal gear. Although there wasn't a clear "must have" item, as we saw when standup paddle boards first came to the market, there were several items that caught our eye. Here are our top products from this year's Summer Market.

LifeSaver Jerrycan 20,000UF



A robust and portable water filter capable of filtering 20,000 litres/5,282 U.S. gallons of clean drinking water, removing viruses, bacteria, cysts and parasites instantly. The LifeSaver Jerrycan holds up to 18.5 litres of water at any one time and is designed to support those with a greater demand for clean water such as group expeditions, adventurers embarking on overland travel, families or those setting themselves up for off-grid living. MSRP: \$224.96

[Learn More](#)

Gerber Center-Drive with Bit Set



Gerber's new multi-tool offers uncompromising performance through revolutionary design. The innovative center-axis driver opens to align like a real screw driver, yielding maximum torque and rotation. No productivity is sacrificed with the addition of a 30% longer outboard blade and one-thumb opening sliding jaws. Full size, real tools—the multi-tool just got a reality check. MSRP: \$132

[Learn More](#)

Coleman Northern Nova

Fill your entire campground with light with the brightest Coleman® lantern, the Northern Nova™ Propane Lantern with Case. The patented tube-mantles shine brighter than standard versions, and this lantern doubles up on that brightness technology to produce 3000 lumens of light that reach up to 32.5 meters away. When you're ready to head home, the legs fold up for more compact storage in the included case until you're ready for your next bright adventure. MSRP: \$149.99

[Learn More](#)



myCharge AdventureUltra



The AdventureUltra is myCharge's largest battery bank with the highest power output. Designed to replace the heavy and bulky generators used when tailgating or camping, the AdventureUltra is a more streamlined power source option that can run a 42-inch television for up to three hours. The compact device weighs 1.05 pounds and measures just 1.2 X 5.8 X 4.1 inches. The AdventureUltra has a maximum power output of 45 watts, enough to run a laptop or recharge a drone battery. MSRP: \$129.99

[Learn More](#)

Pelican 24-Can Soft Cooler



Offering a convenient and lightweight alternative to hard coolers, The Pelican™ Elite Soft Cooler is ADVENTURE READY. This 24-Can Soft Cooler is durable, easy to carry, waterproof, leakproof and keeps ice for up to 48 hours. Strap it on your kayak, stand up paddle board, ATV/UTV or take it with you on your next hike to the beach or lake. All Elite Soft Coolers feature a quick access dual-lock buckle system, 100% Leak proof TIZIP® Zipper, compression molded anti-slip base, and stainless steel tie-down and bottle openers. MSRP: \$279.99

[Learn More](#)



CampMaid 12" Outdoor Cookout Grill Set



Quite possibly the Swiss Army Knife of Dutch oven cooking. Outfit your Overland vehicles with the CampMaid cooking tools pack - the ultimate compact outdoor camp kitchen that transforms into multiple uses - a smoker, pizza oven, grill, griddle, steamer, baking, & more! The 12" Outdoor Cookout Grill Set includes CampMaid's patented 12' Lid Holder & Serving Stand, Flip Grill, Charcoal/Wood Holder Heat Source, KickStand, Charcoal Chimney, pre-seasoned Dutch oven and carry bags. MSRP: \$215.99

Learn More:

Thermacell Backpacker Repeller



The Backpacker Repeller will be powered by camping gas canisters, such as butane propane mix, and will work with all leading brands. It uses an integrated Piezo lighter to heat the allethrin infused Thermacell repellent mats, creating an odorless and invisible Zone of Protection. Allethrin is a copy of a natural repellent found in chrysanthemum flowers, which repels mosquitos, black flies and no-see-ums and is an alternative to DEET, which can ruin gear and irritate human skin. MSRP: \$39.99

Learn More

Watershed Yukon Duffle



The Yukon duffel is the ideal size bag for 2-5 day river expeditions. There is room for a summer-weight sleeping bag, tent and some gear, or it could be used in tandem with other Watershed bags for food storage on a group trip. The bag also makes a great comprehensive ditch bag for long range marine use. MSRP: \$159

[Learn More](#)



Outdoor Retailer Summer Market 2017

Living Overland

Gourmet Cooking · Travel · 4WD

www.LivingOverland.com



The gourmet recipes and equipment reviews you need to make your overland trip a success.

FJ Summit XI: Questions & Answers

By Daniel Markofsky

After years, why keep coming back? Why come the first time? Will you come again?

It's no secret that the crew at TCT Magazine loves the FJ Summit. We keep coming back. Shane and Angie were at the first FJ Summit in the original Williams FJ and have attended ever since. Director Jonathan Harris also became a TCT editor. Associate Editor Daniel Markofsky leads trails here in his 80 series Land Cruiser.

Why?

People, scenery, tech, trails, history, education, vacation, food, relaxing, hot springs, excitement, community, camaraderie, and family.

Prep. I need that lift. Don't forget armor.

Photo By Bob Holliday



Photo By Daniel Markofsky



Photo By Jackson Philby



Photo By Jackson Philby



Photo By Daniel Markofsky



Do I really need sliders, dual batteries and solar? Check.

Axe and shovel. Check.

Gears. Next year, nope, now.

Definitely a roof rack.

CB or HAM?

Photo By Daniel Markofsky





Photo By Daniel Markofsky



Photo By Daniel Markofsky



New tires?

Every Summiteer goes through this type of list.

Day 1: Breakfast. The steam rises off your fresh local burrito as it peeks out of the foil. Coffee steams in your other hand. You feel the chill, but know the day will warm. You meet the group. You make new friends.

On the trail.

It's why we are here.

Tire pressure. Check. Debate. Check. Ask. Debate. Add air. Check.

Fuel. Never pass a gas station. Is my tank full? How much is my reserve? How long is the day? How much gas do I need? Do I really need a full tank? I have enough, I think.

How hard is the trail? What is your experience? Let's check out your rig. What is your tire pressure? Are you scared of heights? Do you have A-Trac? Lockers? Have you ever used them? No, you won't need them. You will need them.

Having trouble on the trail? Are you in low range? You mean this button? What does that one do? What is it? I don't know, I just turn them all on. I was told that was what to do.



Photo By Daniel Markofsky



Photo By Jackson Philby



Photo By Daniel Markofsky



Photo By Jackson Philby

A promotional graphic for Red Can Outfitters. On the left, a white t-shirt features a circular logo with the text "LOCKED & LOADED" around a central "4x4" emblem, with "REDCANOUTFITTERS.COM" at the bottom. On the right, three black baseball caps are displayed, each with a red truck logo. The background is a scenic mountain landscape. At the bottom, the "RED CAN OUTFITTERS" logo is prominently displayed, with "EST. 2015" inside the red can icon. Below the logo, the text "QUALITY GOODS FOR THE TOYOTA ADVENTURER • REDCANOUTFITTERS.COM" is written.

RED CAN
OUTFITTERS

EST. 2015

QUALITY GOODS FOR THE TOYOTA ADVENTURER • REDCANOUTFITTERS.COM



Photo By Bob Holliday

No, I did not air down because I have no way to fill up. To what? 50 PSI like the sidewall says.

ATVs coming up. Side-by-sides coming down. Jeeps ahead. Did you turn? Where is the bathroom? What time do we get back to town? Can I get a spot! How did they get that bulldozer/Subaru/Jeep/Honda up here? Do those people need help? What time is lunch?

Lunch. Is it a cold sandwich, handful of chips, grilled chicken, or mac-n-cheese hot off the manifold?

Did you take in the view? Glad the rain stopped. I don't need 4-low first gear all the time? Oh, You were on channel 22, that explains it. Car off, hand brake on, manual tranny in gear every time we stop?

Dinner. The food is good and the line is a slow roll down vendor row. Dude! We chatted online, soooo great to meet you! Under the tent you are welcome at any table and anyone is welcome at yours. At the brewery, grill, or grocery you are surrounded by friends. Maybe you pass on that additional margarita as the excitement for the next day appears.



Photos By Jackson Philby



Photo By Daniel Markofsky



Photo By Jackson Philby



Photo By Daniel Markofsky

Sleep. Is it a comfortable condo? Hotel room? RTT, camping pad? Maybe stealth on the sleeping platform you built the night before you left. Shhh. 2017 treated Summiteers to a lightning show of biblical proportions, thunderclaps worthy of the Roman Gods, and snorkel eating rain.

Saturday night: Hi remember that trail we ran Thursday? I did all those things my trail

leader showed me. It was so much fun! I can't wait to get home and explore my local trails. Now I finally understand how my FJ/4Runner/Tacoma/Prius works! (ok, not the Prius.)


Sunday: Yep, mine is 6, 8, 9, 16 hours to home.

Oh, me, I'm here another week.

Cool. See you in 2018! 🇺🇸

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

Always Stay The Trail.



Colorado OHV Opportunities Map

STAY THE TRAIL COLORADO

Keep Your Wheels Where They Belong® with your free Colorado OHV Opportunities Map from Stay the Trail. Discover all the challenging off-road adventure Colorado has to offer. More information and detailed trail maps available online at www.staythetrail.org



Cooper Tire Discoverer S/T MAXX 1-Year Review

By Beau Johnston

Images by Beau Johnston, unless otherwise attributed

We have had an on-again, off-again relationship with Cooper Tires ever since we purchased our 1998 4Runner in 2006. We initially ran a set of their Adventurer A/T and a set of their Discoverer S/T tires before embarking on a five-year, 82,000 mile, fling with remolded tires. That fling ended tragically last July with a sidewall failure and blowout as we were traveling through Montana. It was then that I reached out to our readership to ask which tire you would want us to review. Much to my surprise, you overwhelmingly asked for us to review the Cooper Tire Discoverer S/T MAXX. So, we reached out to Cooper Tire, and three weeks later I had five brand new 285/75R16 tires sitting at my house.



As with its more aggressive sibling, the Discoverer STT Pro, the Discoverer S/T MAXX utilizes Cooper's patented 3-ply "Armor-Tek³" construction, which consists of a full 3-ply carcass. The third ply is overlapped at an 8-degree angle to produce a 66% stronger and 2.5 times more tear resistant side wall compared to the Discoverer S/T. The S/T MAXX also features a new, and proprietary, cut and chip resistant blend of natural and silica-based rubber compound for the tread. Cooper Tires' goal with combining these two elements into the S/T MAXX was to produce a tire that is "built for demanding off-road use to give you the confidence of having a tyre that is built to last."

I explained the backstory at the beginning to set in your mind where I am coming from when writing about my experience with the Discoverer S/T MAXX. Over the last year our set of Discoverer S/T MAXX tires have seen just under 10,000 miles of mixed driving. They have seen everything from hot pavement to muddy back country roads and snowy winter driving. So now that we are a year in to running them, I would like to take the opportunity to reflect on how well the S/T MAXX tires have performed.

Dry Pavement Traction

I am starting with the dry pavement traction first because I believe this is the only area where I found the S/T MAXX to be, well, underwhelming. It wasn't good, but it wasn't bad. I say this after driving for over five years on softer remolded tires. The S/T MAXX's cut and chip resistant tread compound, I believe, makes for a harder/stiffer tread which provides less grip that I am used to. This is not to say that I slid all over the highway while driving but did have to slow down while cornering on roads I have been driving for the last five years.



RATING: ●●●●

Wet Pavement Traction

I was surprised when, after driving on dry pavement for a few weeks, that we experienced our first monsoonal rainstorm. Much to my surprise the S/T MAXX performed beautifully. Even in a heavy downpour and standing water on the roadway, I experience little to no hydroplaning. I attribute this to the tire's 4-5 rib tread pattern and the natural and silica rubber compound.

RATING: ●●●●●

Off-Road Traction

Off-road traction is really where the S/T MAXX shines. Whether driving on dirt and gravel roads, sand, or muddy water crossings, this tire chews up the terrain. It is a far contrast from my experience on dry pavement. Without a doubt, these tires either find traction or they somehow make it. Even with open differentials, I have only struggled to find traction twice in the last year. The first was when I buried the 4Runner to the frame in snow and had to use our MAXTRAX to get out. The second was an off-camber corner where one back tire slid into a gully and I had to be pulled out.

RATING: ●●●●●●

Winter Traction

As with my experience driving on dry pavement, I found the S/T MAXX to provide average traction during the winter. I believe the cut and chip resistant rubber tread compound limits the tire's ability to find grip when driving on snow and ice. We experienced several weeks of sub-zero weather here in Central Wyoming and the cold weather only proved to cause the tread rubber to become even stiffer.

Because I run these tires year-round I chose to not run studs in the tires.

RATING: ●●●



Ride Quality

After running a remolded copy of the Goodyear MT/R for over five years, I had forgotten what it was like to not hear the MT/R whine. It boggles my mind that, for how aggressive the tread on the S/T MAXX tires is, that they are so quite driving down the highway and interstate. All of our tires balanced beautifully with minimal counter weights. Our four primary tires remained balanced until I installed the ARB internal TPMS kit, which forced a rebalance.

RATING: ●●●●●●

Tread and Tire Life

As I mentioned earlier, we have driven just under 10,000 miles on this set of four Discoverer S/T MAXX tires. In that time I have had the tires rotated three times and have experienced zero issues. A quick survey of our four primary tires revealed zero chipping or other tread damage. A quick measure showed that the tires have lost 3.5/32nds. If this wear rate stays consistent, we should easily see this set of tires lasting 45-50,000 miles before they would need to legally be replaced when the tread reaches a depth of 2/32in.

I am also pleased with how well the overall tire has lasted. The sidewalls, despite rubbing up against curbs, rocks, and tree roots, still look great and show no signs of damage.

RATING: ●●●●●●

Conclusion

I came back to Cooper Tires thanks to you, our readers, and I am glad I listened to your request for this tire review. Despite my gripes with its dry and winter traction, I have really enjoyed driving on the Discoverer S/T MAXX tires. I would, without reservation, recommend this tire to anyone looking for an aggressive all-terrain tire that is capable of tackling demanding backcountry trails and doesn't compromise a



IMAGE BY TYLER ELISER

daily commute. This is not to say that the Discoverer S/T MAXX is the perfect tire. As with everything, there are tradeoffs. I believe the MAXX sacrifices some on-road performance in favor of off-road performance, and that is something I am okay with.

Vehicle & Tire Specifications

Vehicle Tested On	1998 Toyota 4Runner
Tire Size Tested	LT285/75R16
Load Range	E
Approved Rim Width (in.)	7.5 – 9
Measured Rim Width (in.)	8 (FJZ-80 wheels)
Section Width (in.)	11.7
Overall Diameter (in.)	32.91
Tire Weight (lbs.)	64
Max Load (lbs.)	3750
Tread Depth (1/32")	18.5



*** Disclosure of Material Connection: Cooper Tires gave me the tires used in this review in consideration for review publication. That said, I do my best to relay unbiased feedback, and I hope that is evident in all my reviews! ❤️



FJCRUISER FORUMS.COM



The Largest FJ Cruiser Forum on the Net!

- Discussions •
- Photo Gallery •
- Owner Blogs •
- Buy/Sell/Trade •
- Contests •

Recent Threads					Rating	Last Post	Replies	Views	
Factory Skid Plate						11-16-2010 01:16 PM by MR2D14	0	1	Want to
front locker						11-16-2010 09:14 AM	7	181	4x4 / Off
big news, Toyota CJ Cruiser in the						09-16-2006 08:46 PM	2,078	313,718	Picture/
yuryz						11-16-2010 10:36 AM	74		Introduc
2010 Slider Spacing Question						11-16-2010 12:34 PM	106		Mainten
Right Navigation radio						11-16-2010 01:03 PM	458		Off-Topi
285 70 17 All Terrain - Who's got the best Deal on 5 of them?						11-16-2010 01:02 PM	7		General



Free Membership!



Inside^{the} X-Hangar

By Shane Williams

I'm sitting in a shop outside Bozeman, MT with a long-time friend and the source of so much inspiration within the industry. We chat about the first time we met and how so much has changed, and things that haven't.

We've covered Clay Croft and Expedition Overland in previous issues. If you're not familiar with the XO web series, go have a watch, then come on back.

Clay and I met at SEMA Show 2011, after midnight, at the Overland Journal party. I had, quite literally, just watched the first episode of Expedition Overland which launched just a few weeks before.

I recognized Clay immediately and introduced myself as "The FJ Cruiser Magazine guy, who really loves your series!"

The original series of Expedition Overland featured Clay's personal vehicles which were initially modified for exploring Montana backroads. At the time the Clay was in a budding career as a film maker, but was between gigs. That is when XO was born, but I digress.

Back to the shop ...

This little shop on the Croft property outside Bozeman is called the X-Hangar. It's a custom designed shop, logistics hub, creative space, and production studio. Also, it's awesome!

Last month I had the opportunity to visit the X-Hangar for the first time since it's completion and Clay was nice enough to give me a personal tour.

SPACES The Shop

Custom bi-fold airplane hangar door is over 14 feet tall and houses 3000 sq. ft. of shop space, all the tools you can imagine, and already

plenty of stories. The shop is where rigs are built, modified, repaired, and prepared for expeditions. They're also home to XO's new series "Oh Hey There!" and "In The Shop."



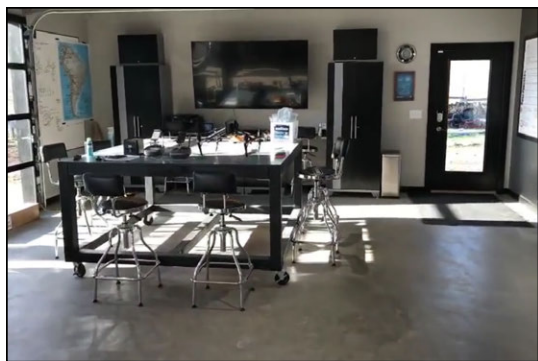
The Offices

There's plenty of room for planning, promoting, and various staff to hang their hats. On the day I visited the XO team was busy planning and editing their upcoming South America series. In the outer office, comfy couches plus a linear fireplace with a very large display panel are perfect for reviewing daily edits and previewing upcoming releases.



The Logistics Area

Clay tells me how when they originally drew out their South America route it was -30 outside the door. A large custom table provides room for the entire crew to discuss where the next adventure will take them. I'm also told that dozens of XO hats, shirts, and other swag are packed and sent out from the Logistics Area each week.



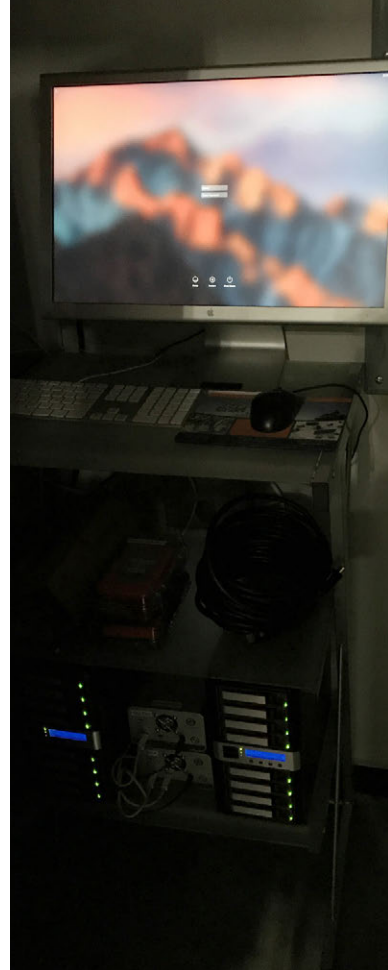
The Edit Suite

The suite is my favorite room in the X-Hangar. XO designed it to be as comfortable as possible—this helps ensure editing continues uninterrupted for as long as is necessary. I caught a glimpse of epic aerial footage from South America during my tour, alas Clay wouldn't reveal any details though. The edit room features custom lighting, is sound proof, has professional audio capture, and an extra-wide curved screen connected to a top of the line Mac Pro. The goal of this room is to

produce the most inspirational and amazing content possible.



It has been almost six years since I met Clay Croft and became aware of Expedition Overland. I knew from the beginning this team would produce world-class content. I knew they would inspire tens of thousands of enthusiasts to get out and explore. The X-Hangar now allows them to do so with a dedicated facility. I have no doubt the future seasons of XO will continue to inspire all of us to get out & explore! ❤️





To New Beginnings: Our GX-460

By Shane Williams

*"You know you'd love another project, you need one."
—Angie Williams*

More true words have never been spoken.



If you've followed our publication for long you'll know that we've always tried to focus on interesting topics, vehicles, and ideas to help get you out into the great unknown with your Toyota truck or SUV. Our journey has been covered in great detail within these pages ... now the next chapter begins.



As our lives change, so do our needs for daily transportation and weekend exploration. Our original TRD FJ Cruiser served us well for nearly 10 years, however as our family grew, we had to move on. Our 2007 GX-470 was a great vehicle, but came along around the same time that we needed to do a “flagship” build (See TCT Explorer 2015-2016). The Tundra is still by all accounts almost the perfect exploring vehicle, and will be missed in our stable. Alas, daily driving, mileage, and my need for a new project all resulted in our latest vehicle—“Project 4.”



The Lexus GX 460 is by no means an unknown or unproven vehicle. In most parts of the world, this platform is known as the Toyota Land Cruiser Prado 150. It's closely related to the 5th Gen 4Runner, and enthusiasts throughout North America already have great builds for inspiration.



So why is the 460 the best fit for our next project?



First, its Land Cruiser and Toyota heritage means that we know it will be a solid truck for many years. Ours is a 2012 model with just over 70,000 miles on the clock. Just barely broken in from a Toyota perspective.



Also, the newer version of the GX includes the more efficient 4.6L 1UR-FE V8 engine, the same that powers small V8 Tundra trucks. At 301 hp and 329 ft. lb. of torque we have plenty of power to get us anywhere we want to explore. That power also hauls or pulls whatever gear is required for just about any adventure.



Finally, since the 460 debuted in 2010 as a luxury vehicle, they are just now starting to price down to what we consider a “normal” level for an off-road or overland build.

Unlike the TCT Explorer, which was essentially a show truck with a thirst for dirt, the GX will be more of a “sleeper.”

We’re two months in and so far, we’ve only added tires (See Economical A/T Sidebar). Next on the list are sliders from Metal Tech 4x4, followed by a fully tuned suspension with minimal lift from Toytec Lifts. We’re also looking at a Pioneer rack system from Rhino Racks, USA as a great lightweight option. Beyond those basic modifications, we’ll see where the wind takes us.



Our goal for the GX-460 is to show how with very little effort, a luxury SUV can be configured to travel anywhere a North American family wishes to explore.



Follow us on Facebook, Instagram, and within the pages of this magazine to see how the GX-460 is an amazing family overland explorer! 🍷

Economical All-Terrain

We expect to own the GX-460 for many years, so we'll likely try many sets of tires for the truck, which is primarily daily driver along with very little towing, and some trail use.

The choice for our first set seems like it was meant to be. Let me explain. Less than one week before FJ Summit XI we suffered a small hole in an old tire, so we needed



something quickly. Price is always a consideration, but we also knew we needed to move from a standard passenger tire to a slightly more aggressive all terrain, while maintaining as much efficiency as possible.

A search of available options in our area led (as it almost always does) to Discount Tire. I found the economical "Trailfinder" A/T at the local store, but couldn't find any information about it online. More of an entry level tire than other options, this tire is exclusive to DT and is offered as "dependable performance and excellent value", and comes with a 45,000 mile warranty. That equals about two years of daily driving and a few off-road trips. Also, since this is a very new offering with little information published, it presents the perfect opportunity to test an entry level, economic option. Follow us on Facebook, Twitter, and Instagram as we post updates on this tire over the next few months and years.

Tire Details:

Size: 275/65R18

Load Rating: 116 (2705 lb.)

Weight: 9 lb./tire heavier than OEM (36 lb. total)

MAKE YOUR VEHICLE EXPLORATION READY!





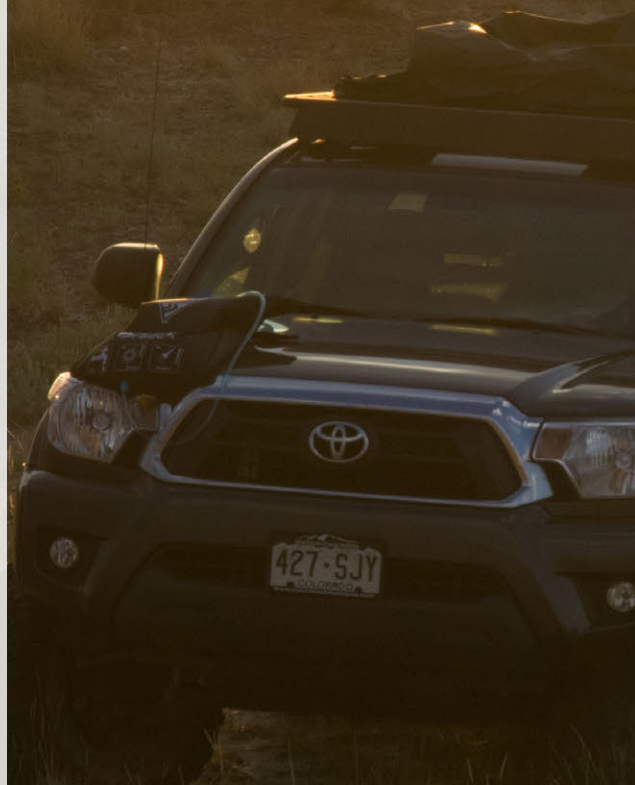
Total Eclipse in Wyoming

Story and photos by Phillip Jones

As I surveyed the dirt roads of the BLM land surrounding the Castle Gardens Petroglyph site, I took note of the variety of numerous camping rigs sprinkled across the land. It was as if Overland Expo was sharing space with a Retro Glamping event, and first-time-ever campers. The total eclipse of 2017 attracted an unprecedented amount of attention. The plentiful public lands in Wyoming made it an ideal target for eclipse chasers. With a population of just over 585,000 people, some news sources speculated that the population number doubled on the day of the eclipse.



Picking out first-time campers was quite easy: no shade, no table, tent set up right next to the road, and car parked partially in the road. Some people didn't even bring chairs, so they sat on the ground and leaned against their vehicles. It seems as if it took an eclipse to get people to leave their comfort zone and experience the great outdoors. Hopefully they took note of the gear used by others and will want to pursue natural escapes.





A group of fellow Toyota off-roaders started organizing an eclipse gathering back in 2012 and the Castle Gardens area was the chosen destination. I received my invite in 2016 and started planning the telescope situation. Despite all the planning and the multiple eclipse photography tutorials and articles I endured, my preparation was still inadequate. I didn't capture the eclipse quite how I envisioned. Fortunately, I learned my lessons and have 7-years to prepare for the next total eclipse.



I arrived at Castle Gardens on Friday, August 18 and found one of the organizers, Bob Devereux with his wife sitting next to their 80-series Land Cruiser enjoying the setting sun. When the last bit of sunlight vanished, I treated my camp mates to an evening of deep space objects viewing. Using an 130 mm aperture apochromatic refractor, we examined galaxies, nebula, and star clusters. We finished with the Andromeda Galaxy—an object so large that it fills even the lowest power eyepiece. I always enjoy sharing views through my telescope with people who have never experienced

a telescope in dark skies. Hearing the expressions of amazement make it worth the effort.



Rave partiers set up a small camping community.



An eclipse chaser looks through the Lunt LS50THa hydrogen-alpha filtered solar telescope.

The next day, as more friends arrived, I set up the Hydrogen-Alpha dedicated solar telescope (Lunt 60THa). This filtered telescope displays surface detail of the sun, as well as solar flares at the edge of the sun. A set of sun spots across the middle resembled the Caribbean Islands. Two large solar flares, each capable of holding 5 to 6 earths, were visible.



On eclipse day, the human presence was strong. Dead rattlesnake carcasses were scattered across the dirt roads—evidence of the numerous vehicles that drove into the Castle Gardens area the previous night. Reports of a rave party was shared by frustrated amateur astronomers, who lost their dark skies to the glamping and party lights. Roadside rookie campers were subjected to dust as vehicles sped down the dirt roads as though they were shooting a Mad Max scene.



Sunspots were visible during the early stages of the eclipse.

Fortunately, the organizers for the gathering I was with had found us a spot up on a hill next to a cliff in an area that required high clearance for access. We thought we were safe from the herds of rookie campers. While most vehicles that attempted to come up in our direction were defeated, a little AWD Subaru wagon with paper tags managed to conquer the high clearance road, take a left and drive right into the middle of our campsite. Realizing we were not



the droids he was looking for, he turned around. 30 minutes later, he was back, and this time he tried driving through the middle of our campsite. One of the guys sprinted past the Subaru and stopped the lost and confused driver before he damaged his new car and our camping gear.

The cookie-bite look of the sun greeted us after breakfast on eclipse day. It wasn't long before the morning sunshine was more yellowish-orange than white and people were looking up with their ISO-certified cardboard specs.

I was feverishly shooting bracketed photos through two DSLR cameras attached to two different telescopes. One was equipped with a dark ND filter, the other with a white light solar filter.

Totality came too fast.

I removed the filters and started capturing the corona and solar flares. After two

minutes and 20 seconds, totality was over. People were cheering. It was truly a moving experience. Light increased and I tried to capture the diamond ring effect. Turns out, it is better to shoot that through long focal length camera lens than through a telescope. Lesson learned.

Total Eclipse: See you in 2024! 🌑



The author with 3 of his Toyota overlanding buddies from the Dallas area gathered for the eclipse.



[FORUM](#) | [REVIEWS](#) | [LOGISTICS](#)





ERAMED

f/4 1/400s 24mm

Alstrom Point, Lake Powell | Photo by Juan Gonzalez





Monache Meadows | Gene Cho



FRAMED

f/8 1/200s 155mm



Red Cone Pass with a Texan | Bob Holliday



FRAMED

f/9 1/40s 48mm

Slinky Suspension: Stage 4

By Adam Tolman

With sunlight fading, we pushed the accelerator closer to the floor. Our perfect campsite was still several miles away on the shores of Lake Powell. We needed to get there before dark. The narrow, overgrown trail allowed for good speed but hid rocks and ruts that could cause serious damage at speeds.



I was clipping along in my 80 series, at almost 70 mph through the sage and yucca, when cresting a rise I found myself nearly on top of the next big bump with no time to scrub speed. I got light in my seat. The truck left the ground briefly. There was now a long straight section of trail mostly obscured by desert grass. I mashed the throttle and the needle passed 70. Just as I felt confident to keep accelerating a deep, sharp ditch across the trail came into view through the grass. Again too late to drop speeds, I accelerated to try to get the truck to carry across the gap instead of hitting a low point. I prepped myself for a big hit.



noise was not as bad as I expected. Even more shocking: other than the noise, the truck didn't disintegrate. I slowed to a stop to check the damage. No bent steering. Control arms still straight. Nothing leaking. The suspension seemed to just grin at me, mockingly saying, "is that all you've got?"



A year earlier I had upgraded the suspension on my 80 to a new kit coming out of Australia. The Stage 1 Slinky Long Travel kit. I was intrigued by the tapered wire, dual rate coils, and the Australian spec ICON 2.0 shocks. Fast forward 12 months later and I had almost 20k miles on this suspension from daily driving, to 7-8,000 off-road miles of slow speed rock crawling and high speed desert running. If you want to find out what I thought about the Stage 1 Kit, take a look back at the Summer 2016 Issue of TCT Magazine and you'll find my review. In sum, I believe the Slinky kits are the best all-around performance suspension available for the 80 series when considering bolt-on kits and not going full custom.



As time slowed my mind considered all of the parts in the front end that were going to be broken. Bang! The distinct

Back to the story that I started with... we were on our third day of a product testing trip. We had several hundred off-road miles from St. George to Moab, UT, with Darren McRae, of Autocraft the creator of the Slinky kits, and US distributor counterparts. We also had a handful of Slinky customers or prospective customers. Before the trip, we visited IH8MUD headquarters just outside of St. George to use Woody's shop lift so I could upgrade my suspension yet again. This time I was stepping up from the Stage 1 to the Stage 4 shocks.

I want to focus on the differences and pros and cons to the different Slinky shock options. The Stage 1 shocks are an ICON 2.0 smooth body IFP shock that has been valved and tuned by Darren specifically for the 80 series. For those looking to get to another level of performance with their 80, but still need to fit in a budget, these Stage 1 2.0 shocks are the best smooth body shocks I've experienced in my 20 years of 80 series ownership.



In contrast, the Stage 4 ICON shocks are a 2.5 remote reservoir (front) and a 2.5 piggy back reservoir (rear) that, when combined with the Slinky Long Travel coils, create the triple threat setup. A number of things make the Stage 4 shocks unique and different from the Stage 1's. First, it starts with a "flutter stack" in the valving to allow some movement of the shock shaft before full valving sets in. This provides a supple ride with a higher fast piston

speed valving code. Think of corrugated roads when you haven't aired down your tires from 45psi, no fun right? Not anymore. With the Slinky shocks, washboard roads now feel smooth and you wonder where that buzzing noise from the bumps is coming from.



Second, the Stage 4 shocks have adjustable Compression Dampening Control ("CDC"). The CDC secondary piston and valve stack stops the pintle style, restrictive "90 psi in the tires" feeling on sharp bumps when road driving and are typically less than half the line pressure of other adjustable shocks at fast piston speeds. There are 8 different adjustability settings. Changing the setting is a simple turn of a dial. Stage 1 shocks are the equivalent of a setting of 4 on the Stage 4 CDC adjustment dial. No tools are needed, so it's easy to make changes and dial in your ride for different conditions or vehicle loads in a matter of seconds.



Third, the Stage 4 Slinky shocks have a built in hydro bump zone at fast piston speed for when the piston goes past the top manifold. What does all this mean for the average dude that isn't a suspension engineer? It means a dramatic increase in vehicle control and comfort not only on the road but in rough terrain. Both kits are available either in 50mm or 75mm lift heights with intermediate or heavy coil spring rates. The shocks are a full 12" of travel, and the coils have a taller free height to stay seated in the coil buckets even at the limit of flex. There is a full compliment of supporting components like adjustable track bars (panhards) and heavy duty rear lower control arms and adjustable upper control arms, along with brake lines and caster correction options to get everything set up correctly.

During the course of our testing trip we had vehicles with Stage 1 Slinky suspension, Stage 4 Slinky suspension, and without Slinky suspension. We needed to cover a lot of miles in a short few days in order to get to Cruise Moab on time. We travelled fast. The vehicles that were not Slinky equipped were unable to keep pace with the other trucks. In trying to keep up, all non-Slinky equipped trucks had varying degrees of shock fade, with some having total shock failure. This slowed them down even more as there was essentially no suspension dampening at all until the shocks cooled. With the Slinky Stage 4 shocks, and piggy back and remote reservoirs there is enough oil in the shocks that it is virtually impossible to run them hard enough for a long enough amount of time to create any shock fade. So, long

off-road trips like this at high speeds are no big deal. Not only is the truck less fatigued, but you as the driver are less fatigued after a long day on the trail.

The excellent valving and adjustability of the Stage 4 shocks provides an entirely new level of confidence when driving an 80 series at higher speeds on rough terrain. I stopped even thinking about rocks any smaller than a basketball in the trail. The shocks just soaked them up. Catching some air off that crest? No problem. If you own an 80 series you know that they are heavy trucks right off the lot. When built up with bumpers, winches, bigger tires, roof racks, rooftop tents, fridges, drawers and all the camping gear you bring along for days on the trail exploring and camping, they get significantly heavier. When you start to push speeds in an built 80 the truck will lean and wallow through corners. It can be unnerving to say the least. You also find your bump stops regularly when travelling fast. That is just not the case with the Slinky suspension.




With my truck fully loaded and carrying one of the heavier roof tents on the market I was comfortably and confidently driving speeds in the dirt that far exceeded any speeds I would have ever attempted, even with an empty truck prior to having the Slinky suspension. It would have been quite nerve-wracking to drive like that with other commonly used suspensions.



In conclusion. I spent a year with the Stage 1 shocks and was very happy with them. The limitations of the Stage 1 shocks become evident at higher speeds. I would occasionally "overrun" the Stage 1 shocks and bottom out through big bumps. The Stage 1 shocks are fantastic for relatively lightweight 80s that aren't burdened by lots of extra weight from modifications and gear. But if you're 80 has more than say a front bumper, a winch and some sliders you may want to consider stepping up to the Stage 4's. They will handle the weight and give you the ability to make adjustments for when your truck is unloaded for daily driving or when it's fully stacked for that two week trip down the Baja peninsula. They will give you the confidence to know that when you run out of talent like I did in the story I began this article with, the suspension will soak up your mistakes, whether it's a smooth landing or surprise hole in the trail. There is serious technology and engineering behind the Slinky suspension systems. It was developed specifically for the 80 series. These kits have been tested and proven in Australia for years and it's exciting to have these kits as an option for us here in the US.



If you are looking for top tier suspension performance for your Cruiser, I think this just might be the best. Slinky kits are available through Endless Horizon Outfitters

URL: <https://www.endlesshorizonoutfitters.com/>. 









YOUR TOYOTA LIFT AND 4X4 ACCESSORY SPECIALIST

303.255.4959
WWW.TOYTECLIFTS.COM

4Runner Prep

for 4-Week Eclipse Expedition

Story and photos by Phillip L. Jones

The goal was to escape the August Texas heat and land me in an ideal spot for the solar eclipse. My plan was to start in Colorado by hitting sections of the Enchanted Rockies Trail, stop off at Canyonlands National Park for an early morning sunrise photo at Mesa Arch (bucket list item), head north into Glacier National Park, Waterton Lakes National Park in Alberta, Canada, Yellowstone and Grand Teton National Parks, then finish the trip by meeting a group of fellow Toyota off-roaders in central Wyoming for the solar eclipse.

I already had a long list of things I wanted to get done for my 2007 4Runner, but planning didn't stop there. I had just sold my XVenture trailer in hopes of buying a teardrop style enclosed trailer rugged enough for medium difficulty trails. This meant getting a new trailer ready. For eclipse preparation, telescope and lens filters had to be researched and ordered. Wildlife photography was my primary goal in the National Parks, so I bought a few guidebooks on where to locate wildlife. Books don't do much good if you don't have time to read them, and time was quickly working against me as the trip date approached.

Eclipse Expedition Mods

Each of these new items were field tested while I was on my 6,830 mile journey spanning 27 days across seven states and into Alberta, Canada.

- Singer 240-amp alternator
- Kenwood DMX7704s and Kenwood CMOS-230 Backup Camera
- 4x4 Labs rear bumper with dual swingouts
- GOBI roof rack
- Hiker Trailer—Extreme Off-road Edition
- ARB Awning and Room
- Road Shower
- BFG KO2 tires (285/70-17)
- Front Runner Monsoon Bag
- NorthStar 27 Group AGM battery

Singer 240-amp Alternator and NorthStar 27 AGM Battery

My 4-year-old 31 group Marine battery had already toasted two alternators, and was struggling to stay above 50% after three days of being parked. The need for a new battery and a higher output alternator prior to the trip was the top priority, so I jumped on a group buy for a NorthStar 27 group AGM battery. Having edited Brian Patton's dual battery article in the Spring issue of *TCT Magazine*, I knew about Singer Alternator. Knowing I would be charging a second 27 group battery located in the trailer while driving, the higher amperage was a requirement. After spending an hour on the phone with Mike Singer, I was confident that the recommended 240-amp alternator with lifetime warranty was the right solution. Toyota specialist Pablo Moreno, owner of *Tandem Automotive* in Fort Worth, TX, did

the alternator install and testing. During the alternator swap, he noticed my belt tensioner was in bad shape and possibly wouldn't make the journey. I'm very glad he discovered it before I hit the road.



Singer 240-amp alternator.



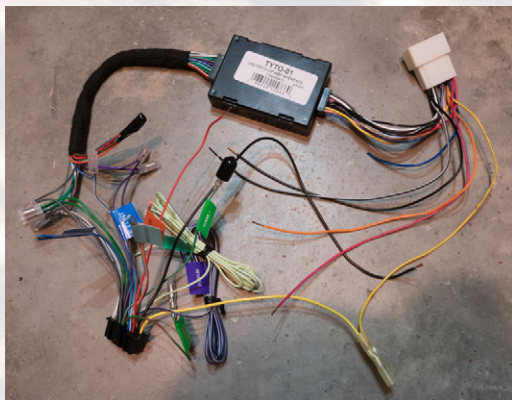
After powering on the A/C, stereo, LEDs, and other accessories, the alternator continued to stay above 14 volts without the engine need to increase RPMs.

Kenwood DMX7704s and Kenwood CMOS-230 Backup Camera

My 4Runner came with the JBL audio system which sounds pretty good for an OEM install. However at 173,000 miles, the head unit was suffering signs of potential failure. For a replacement, I wanted a large screen, but the units with built-in navigation cost nearly double of those without. I also didn't want a CD/DVD player. The Kenwood DMX7704s seemed like the ideal solution: priced at \$500, 7-inch screen, no CD/DVD, digital equalizer, and it comes with a GPS antenna, but no navigation software. Instead, it relies on a smartphone to provide the navigation software via Apple Car Play or Android Auto. Coupled with the TYTO-01 amp interface, the Kenwood unit utilizes the JBL amp and the result is much improved sound quality. Even Sirius XM sounds great. I added the Kenwood CMOS-230 Backup Camera for safety.



Deconstruction of the center console wasn't difficult. The thought of putting it all back together and making the new Kenwood DMX7704s fit was certainly intimidating.



The TYTO amp interface is designed to preserve the JBL amplifier when installing a new head-unit. Wire connectivity was made less complicated thanks to the instructions provided by Crutchfield.



Successful fit of the 7-inch screen head-unit.



Apple Car Play navigation on the Kenwood screen and the iPhone work in unison.

4x4 Labs Rear Bumper with Dual Swingouts

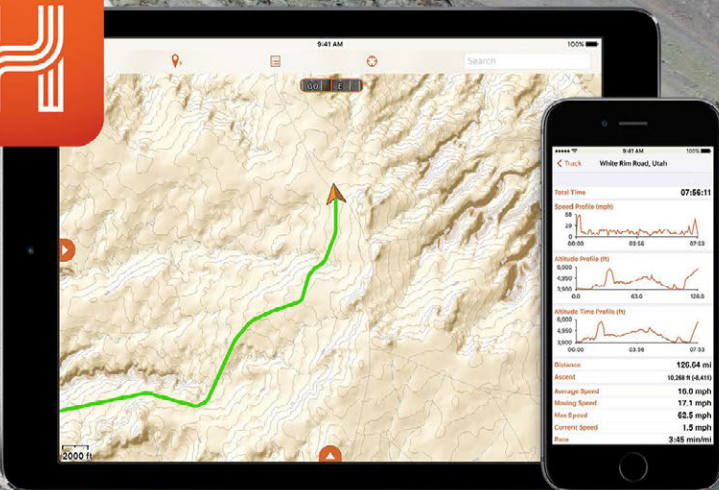
My previous rear bumper had a single swingout, which became quite heavy when the spare tire, Hi-Lift Jack, and two cans of fuel were attached. I struggled to get it closed at times. Worse, I couldn't open it when a trailer was attached. I sought out a dual swingout solution that would meet my needs and decided on the 4x4 Labs model. In addition to designing the rear bumper to my specs, Luke at 4x4 Labs suggested I go with the optional drop-down aluminum table and drop-down cutting board. I placed the

order and started psyching myself up for the install—there were two install steps that had me a bit nervous: cut off the rear crossmember, and cut three inches off the rear frame. Doing so allows the bumper to be positioned further into the truck while serving as the new rear crossmember. The swingouts come with small shocks to prevent slamming them shut. The table and cutting board drop-downs are mounted with bicycle quick-release axles, and can be removed when not traveling. The bumper angles offer superb clearance and the fabrication pieces offer excellent protection.



Crossmember removed and three inches cut off of the rear frame.

Hema Explorer



Download on the
App Store



ANDROID APP ON
Google Play

North America Offline 4x4 Adventure Navigation

- Plan your journey with routes and waypoints
- Navigate offline with multiple map sources
- Share your trips with other explorers on the Hema Explorer Cloud

LEARN MORE:

hemamaps.com/hema-explorer





Photo taken right after the install. The fit is perfect.



Drop-down cutting board and table make breakfast and coffee prep convenient.

GOBI Roof Rack and Front Runner Monsoon Bag

I've always wanted a GOBI rack ... my previous two roof racks were lower cost solutions, but lacked the ability to haul gear securely and were noisy. I joined in on a group buy and three months later, I had the roof rack I should've purchased years ago. My aluminum travel boxes fit snugly in the rear while the Front Runner Monsoon Bag fits securely in the middle. I used a pair of Front Runner Stratchits to keep the bag to the rack. The newly released bag (see New & Noteworthy) is waterproof, rugged, and carries a sizeable amount of cargo. The bag has an air release valve, which is necessary to open when sealing the bag. Once the bag is tight, close the valve and everything inside stays dry. I was in the Colorado Rocky Mountains for two days of solid rain while the bag was mounted on the roof rack; all of the bag contents remained dry.



Front Runner Monsoon Bag is durable and waterproof.

Hiker Trailer, Road Shower, and ARB Awning with Room

As soon as my previous trailer sold in April, I submitted a build and price request to Hiker Trailer for a 5 x 8

Extreme Off-road Edition. Good news: the price came back within my budget. Bad news: earliest they could build it was December, and I needed it by the end of July. I looked at other manufacturers and discovered lengthy waitlists were the norm. A buddy texted me as soon as he saw a Hiker Trailer posted for sale online. It was a 2016 Extreme Off-road Edition, but the 4 x 8 size. At this point, the size wasn't an issue—I needed a trailer quick. The trailer lacked the options important to me: brakes, Road Shower, roof rack, electrical, and Fantastic Fan. The seller was located within minutes of the manufacturer near Denver, CO. I contacted Rob Reeve, owner of Hiker Trailer, and asked if these options could be added and completed by the end of July. Rob agreed to do the work and meet my tight timeframe, so the seller was kind enough to deliver the trailer to Rob.

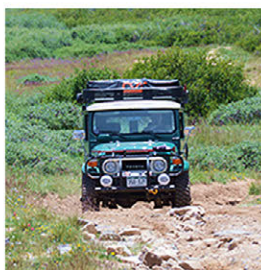


Land Cruiser | Toyota Trucks | 4Runner | FJ Cruiser | LX/GX/Prado
Outdoor Lifestyle | Overland | Toyota International | Events



PRINTED COPY 

FREE DIGITAL
SUBSCRIPTION 



TCT MAGAZINE

Lucky me, Rob had one Road Shower left (at that time, the manufacturer was out of stock). The electrical package included a new Interstate 27 group battery, solar panels, trickle charger, fuse box, and wiring into the trailer interior. A Rhino-Rack roof rack was added, which came in handy for hauling astronomy and camping gear. Upon completion, I made the long drive to Denver to retrieve the trailer the weekend before my trip. I went to work to add the ARB awning, a power inverter, and a large tongue box capable of holding the ARB room, a chair, and camping gear. I purchased new alloy off-road wheels from Discount Tire and kept the 33-inch Hankook A/T tires put on by the previous owner. The trailer and tires looked new!

It didn't take long for me to replace that "new" look with a "heavily used" image. The rain had turned the Rocky Mountain dirt roads and 4 x 4 trails into mud. After a day of getting dirty exploring the Colorado mountains, it was nice to have the Road Shower. This dark tube stores up to five gallons of water and 20 PSI air for pressure. During the day, the tube heats up. I found that at high altitudes, it is important to take a shower before sunset, otherwise the tube and water cool quickly.



The trailer handled well on the most rugged portions of the trails. It tracked well, stayed dry in the rain, and comfortable during my one hot evening thanks to the new Fantastic Fan. The suspension absorbs trail bumps well, which prevents the trailer from going airborne on a surprise hit. I found the 4 x 8 size to provide plenty of sleep space (I'm 6 feet and 250 lbs.) as well as adequate storage. As for rear visibility, the 4 x 8 size allows me to see around the trailer with my side mirrors. I'm content and have no plans to upsize. Hiker Trailer uses a Lock N Roll hitch, which serves as a multi-directional off-road hitch that is easy to connect and disconnect.



Set up for the solar eclipse.

During the third week on mostly dirt roads, I was scheduled to work remote for four days so I needed an office to set up my laptop. The ARB Awning Room with Floor became exactly that. It had enough room to serve as kitchen, changing room, and office. For those four days, I stayed at an RV park outside of Grand Teton NP for the high-speed Wi-Fi. The breeze during the day kept the room cool and comfortable. When it rained, the room kept me dry, but the awning had to be slanted for water runoff. I do wish ARB had a solution to prevent water from gathering in the middle of the awning roof.

BFG KO2 Tires

Having gone through two sets of Hankook M/T tires, which are very capable for technical and muddy off-roading, I decided this time around I wanted quieter tread more suited for the trail. I recently put a set of KO2s on our FJ Cruiser and was impressed with the silence on the road. I found these to be the right choice for the 4Runner. I did get stuck in the mud once (Maxtrax to the rescue), but any other technical hurdle was handled with ease. The ride is slightly softer than mud-terrains, and the pavement grip in rainy conditions feels secure.

Conclusion

It was an epic expedition to say the least, and these modifications made the trip comfortable and stress-free. Everything performed at or above expectations, so if you need a to-do list for your expedition setup, take note. Of special note, the Hiker Trailer is a keeper and will be used on many more adventures around the country. 🇺🇸



LAST GREAT ROAD TRIP

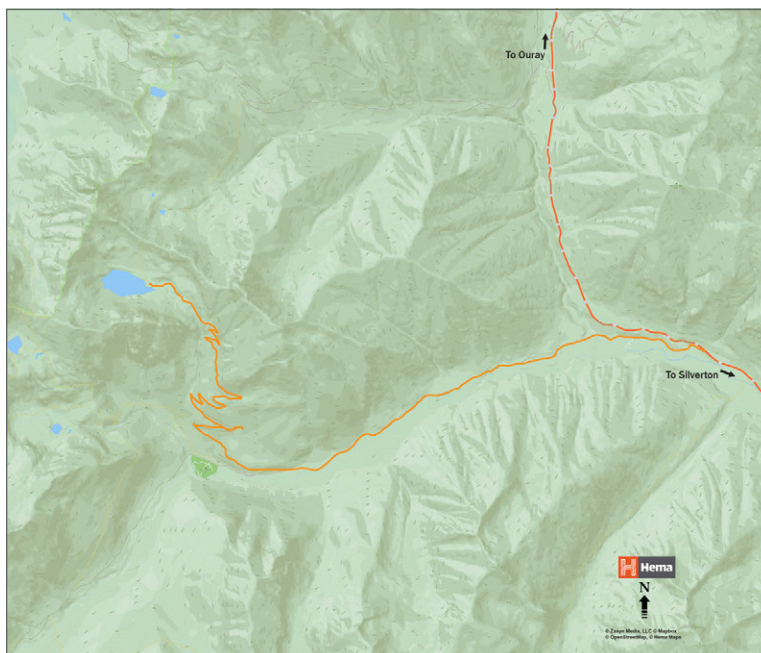
OFF ROAD ADVENTURES | TECH | PICTURES | VIDEOS

WWW.LASTGREATROADTRIP.COM

BECOME PART OF THE ADVENTURE ON FACEBOOK - FACEBOOK.COM/LASTGREATROADTRIP

Hema Explorer: Clear Lake, Colorado

What do you do when you've explored every FJ Summit trail in the Ouray-Silverton-Telluride area multiple times? Find something new.



Our plan during a rainy day in July was to test out the new GX-460 on a mild but fun trail, hopefully with an epic mountain lunch spot at the end.

The Hema Explorer system helped to scout a high alpine lake that we've never explored. With a route planned in the cloud, I synced the tracks to my phone and tablet and downloaded the

proper maps. We hit the pavement south of Ridgway, headed for Red Mountain Pass.

After turning off the highway, we found a standard forest road complete with a washboard surface. We aired down to 22psi on the new tires, hit record on the app, and headed for the hills.

Despite the cloudy & rainy day, we were able to find some really great views throughout the approximate 8 mile journey which included over



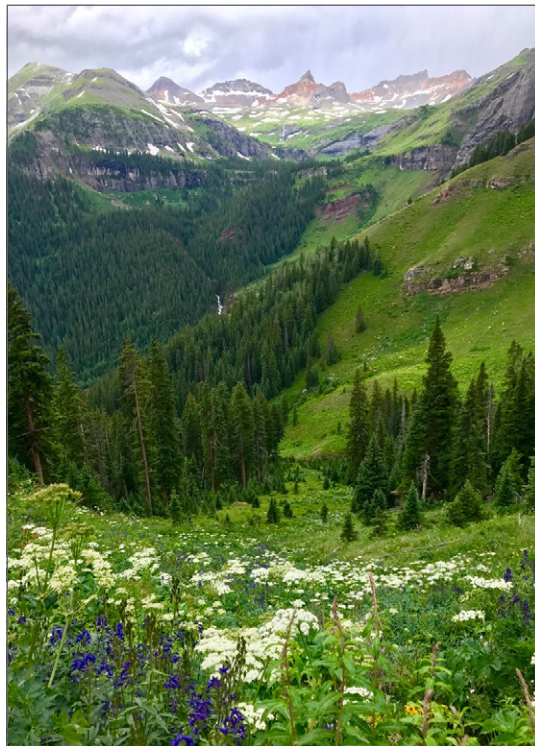
3,000 ft. in elevation gain. We spotted the Golden Horn a few times, along with several lakes, waterfalls, and great potential campsites.

You can see our track on the Hema Explorer Cloud: <http://hema.li/clrlkco> 📍



The end of our trip revealed a socked-in yet still beautiful Clear Lake. At an elevation near 12,000 ft. the lake is actually ... quite clear. It's also cold, and a really great place for lunch. Alas, the rain caught us so we enjoyed our sandwiches in the comfort of the GX.

This trail is suitable for any stock 4x4 or SUV with low-range and you should plan 2–4 hours for a round trip, depending on how often you stop to capture the views.



YOUR RIGS



FJ Summit XI

From Jackson Philby

IT'S NICE TO SHARE...

Have a great photo with a story to share? Submit it & you may be included here!

<http://tctmag.us/myrig>

Gorgeous Tacoma at a favorite (undisclosed) fishing spot.

From Kyle Smith

