

TOYOTA

CRUISERS & TRUCKS

ADVENTURE. INSPIRATION. EXPLORATION.



WHICH WINCH?

What is the proper recovery setup for your rig?

THE TOYOTA REBELLES

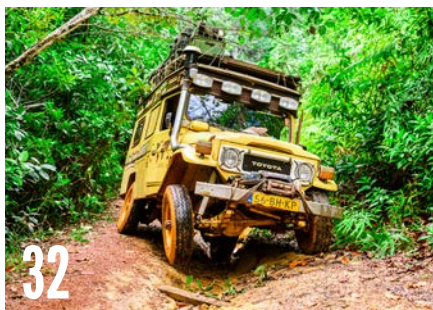
The second installment with the rest of the Toyota teams from the Rebelle Rally.

WANDERING FRENCH GUIANA

Land Cruising Adventures takes us through the dense forests of French Guiana.

TABLE OF CONTENTS

VOLUME 13 | ISSUE 1 | WINTER 2020



FEATURES

8

TOYTEC LIFTS BOSS ALUMA SERIES SUSPENSION FOR LEXUS

Testing out the new Toytec BOSS Aluma Series 2.0 and 2.5 suspensions on a GX-470.

12

COVER » 2019 REBELLE RALLY: TOYOTAS FOR LIFE

In her second installment, Mercedes interviews the rest of the incredible Toyota Rebelle Rally teams.

32

WANDERINGS IN THE WILDERNESS: FRENCH GUIANA

Land Cruising Adventures take us through the dense green jungles of French Guiana.

42

WHICH WINCH?

Certified I4WDTA trainer Rich LaRusso goes over technical aspects of choosing the proper winch for your rig..

» ON THE COVER

Team #190, Xelles Racing, first place winners in the 4x4 class of the Rebelle Rally in their 2019 Lexus GX 460.

Page 12

PHOTO BY Mercedes Lilienthal

tctmagazine.net

DEPARTMENTS

2 | *Publisher's Letter*

4 | *New & Noteworthy*

Land Cruiser

38 | *Snow Fun in Vintage LCs*

What happens when you take two vintage Land Cruisers into the high country before the snow melts? It is Snow much Fun!

Review

50 | *The Magic Ride*

Upgrading a 200 Series Land Cruiser suspension to the latest ICON Stage 6.

Tacoma

56 | *Ozark NF with Kenda Klever R/T Tires*

Phillip and his 3rd Gen Tacoma tackle water crossings on a great Arkansas adventure.

The Last Word

60 | *The Future of Toyota 4x4*

Like it or not, the world of off-road and 4x4 from Toyota is changing. It could actually be better..

Your Rigs

Back Cover | *Reader rigs*

[FRAMED]

*Amazing photos of
off road adventures
from our readers*

24 | Alstrom Point/Photo by Daren Welsh

26 | Merry Go Round Farm/Photo by Chris Cordes

28 | Cardinal River/Photo by Villiers Van Der Merwe

30 | Twin Creek/Photo by Phil Swanson

EDITORIAL STAFF



SHANE WILLIAMS | Publisher
2018 Tundra
Monument, CO



PHILLIP JONES | Senior Editor
2019 Tacoma TRD Pro
Frisco, TX



BOB HOLLIDAY | Senior Editor
2006 Tacoma TRD | 2007 FJ Cruiser TRD SE
Denver, CO



HEATHER SWEARINGEN | Digital Editor
Too many Land Cruisers
Toquerville, UT



DANIEL MARKOFSKY | Senior Editor
1993 80 Series Land Cruiser
Denver, CO



DENNIS LLOYD | Senior Editor
2010 FJ Cruiser
Eagle, ID



KATHY LOCKE | Creative Director
2008 FJ Cruiser
Aurora, CO

TOYOTA
CRUISERS & TRUCKS

ADVENTURE.
INSPIRATION.
EXPLORATION.

FROM THE PUBLISHER

First, we hope that you, your loved ones, and friends are staying safe and healthy.

We are truly living in trying times, likely facing challenges that none of us could have ever imagined. Everyone on the planet has been impacted by the current worldwide pandemic, and it is likely the topic of most of what you see and read online. TCT doesn't need to add to the stress of the situation.

Instead, we've begun our 13th year of publishing with another fantastic issue. Like many of you, most of our team are now working from home and staying secluded to do our part to flatten the curve. Luckily, our computers, editing apps, and publishing software still work. So let me present our **Volume 13, Issue 1** =)

From the Rebelle Rally Toyota vehicles to Land Cruising in French Guiana, we all hope that our stories provide some inspiration as well as a bit of a distraction from what's going on in the world. Perhaps you can spend some of your indoor time planning your next adventure? Also remember that you can find and follow us online:

<http://tctmag.us/fb>
<http://tctmag.us/tw>
<http://tctmag.us/ig>
<http://tctmag.us/videos>

Until next time, stay safe, plan well, and look forward to summer!

Shane



PRINTED COPY

Download on the **App Store**

Follow us on Facebook and Instagram to get up-to-date industry news, events, and of course, amazing adventures, stories, and photos!

   @TCTmagazine

 Comments? Kudos?
Email us at info@tctmagazine.net and let us know!

AND ALWAYS CHECK US OUT AT TCTMAG.US

ADVENTURE. INSPIRATION. EXPLORATION.

TOYOTA CRUISERS & TRUCKS

Monument, CO 80132
www.tctmagazine.net

PUBLISHED BY
Zaxyn Media, LLC

PUBLISHER / EDITOR IN CHIEF
Shane P. Williams, MASC, FAA sUAS

ASSOCIATE PUBLISHER
Angela C. Williams, CSFA

SENIOR EDITORS
Phillip Jones
Bob Holliday
Daniel Markofsky
Dennis Lloyd

FEATURE EDITOR
Mercedes Lilienthal

DIGITAL EDITOR
Heather Swearingen

CREATIVE DIRECTOR
Kathy Locke

CONTRIBUTORS
Michael Holland
Rich LaRusso
Eric McKercher
Glen Pearson
Michael Rudd

Karin-Marijke Vis & Coen Wubbels

"TOYOTA", "FJ CRUISER", "LAND CRUISER", "4RUNNER", "TACOMA", "TUNDRA", 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. TOYOTA is used in the title of this magazine solely to identify the subject of interest to the Magazine. These terms are used for descriptive purposes only, and not to denote affiliation or connection with Toyota Motor Corporation.

Copyright 2020 by Zaxyn Media, LLC

Reviews, opinions, comments, and ratings of any product do not represent endorsement of said product by TCT Magazine, its editors, or publisher.

STATEMENT OF OWNERSHIP

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

ZAXYN
MEDIA, LLC

tctmagazine.net

WHEN ONLY THE BEST WILL DO.



8 YEAR WARRANTY

ON ELECTRICAL COMPONENTS WITH PRODUCT REGISTRATION



Patented Cone Brake Structure

Patent #: 6,520,486/7,568,559/7,374,153



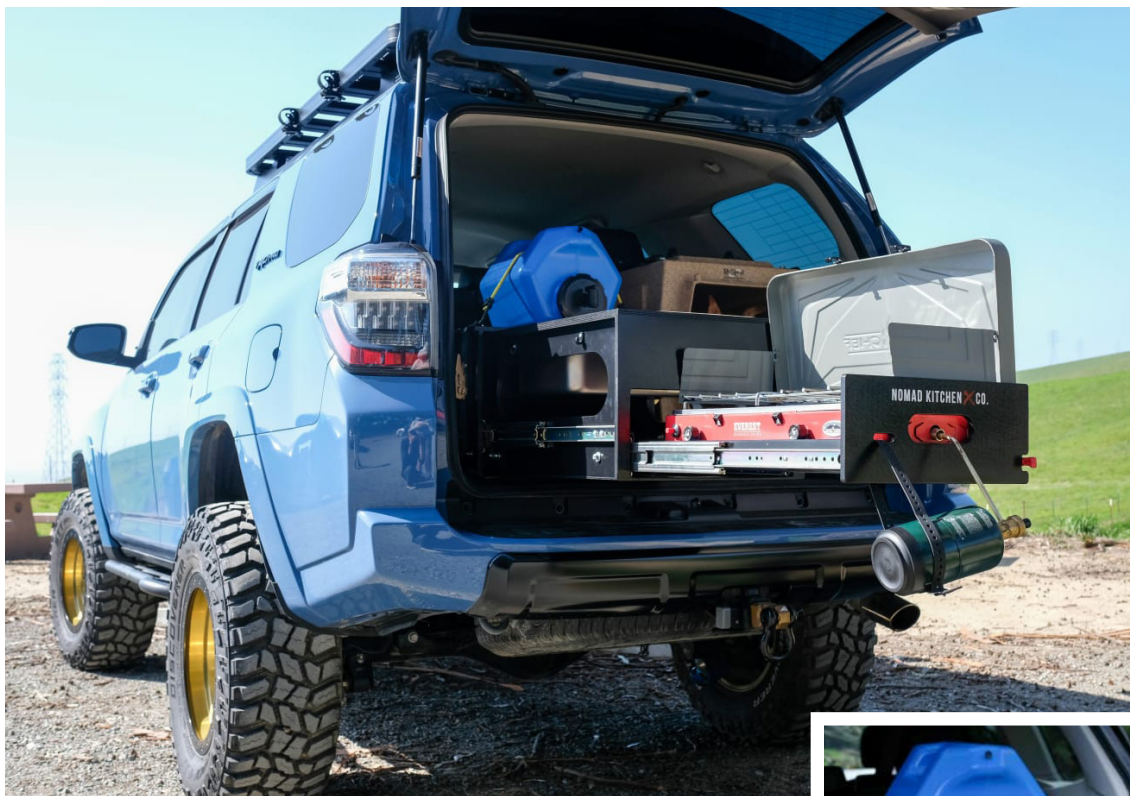
**COMEUP
WINCH**



WWW.COMEUPUSA.COM

COMEUP USA INC.

Clackamas, OR TEL: 503-783-6142 EMAIL: info@comeupusa.com



NOMAD KITCHEN

MOST CAMPERS AND OVERLAND ENTHUSIASTS have some sort of camp kitchen setup. Sometimes the gear resides in a couple of sturdy plastic boxes, and sometimes you spend thousands on a custom designed setup for the back of your Land Cruiser. Nomad Kitchen is a new Indiegogo campaign that offers another option. Their kitchen is meant to work in a variety of vehicles, yet be self-contained and easy to install or remove.

IT INCLUDES:

- Rugged construction built to support up to 200 lbs
- Heavy-duty slides and Locking drawers
- Stainless steel washbasin
- Bamboo cutting board
- Space to support water tank (tank available separately)
- Accessory hangers for trash bags, utensils, spices, etc.
- Plenty of storage space to keep your gear organized and a drying rack
- Drawer for your favorite two-burner stove (stove available separately)
- It also includes a strap to support a fuel canister!

The Indiegogo campaign is currently running, and they've already met their funding goal.



PRICE: \$1,099 RETAIL, EARLY BACKER PRICING FROM \$799

WWW.INDIEGOGO.COM

SHIPPING ESTIMATE: JULY 2020

SKYDIO2 DRONE

THINGS HAVE COME A LONG WAY since we showed off the 3DR Iris drone back in 2014. In late 2019, Skydio announced their second generation aircraft, the Skydio 2.

Designed as a 'personal film crew' that can fly autonomously while avoiding obstacles, this drone is packed with all the features you would want for creating great visuals:

- 4K/60 HDR Camera with a 3D stabilized gimbal
- Subject following using the controller or an available Skydio Beacon

THE SKYDIO 2 INCLUDES:

- 1 battery
- 2 additional propellers (one of each type beyond the four required to fly)
- 1 wall adapter for charging
- 1 USB type C cable for charging and data transfer
- 1 microfiber cleaning cloth
- 1 custom-fit hard shell case

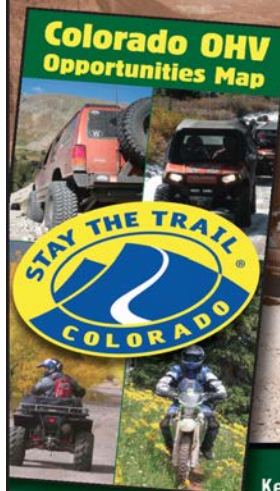


 [HTTPS://WWW.SKYDIO.COM/](https://www.skydio.com/)

 **\$999, \$100 DEPOSIT FOR DELIVERY IN 2020**



You're not the first one down this trail. Don't be the last.
Always Stay The Trail.



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

NEW & NOTEWORTHY

By TCT Staff

**VSSL GEAR**

TODD WEIMER GREW UP IN NORTHERN CANADA as an avid outdoorsman that learned how to travel light. Recently he realized that the handle of a standard Maglite could now be used to store essential gear, and VSSL was born.

The standard VSSL (camp) includes compact versions of all the essentials in a survival kit:

- VSSL LED Light
- Compass
- Mini-First Aid
- Firestarter Kit
- 25' Marine Grade rope + razor
- Small fishing kit

It's made from military grade aluminum and is waterproof. It comes with a Lifetime Warranty and weighs less than 1lb.

VSSL kits are also available in Mini versions, First-Aid focused versions, and of course the VSSL Flask.



 [HTTPS://WWW.VSSLGEAR.COM/](https://www.vsslgear.com/)

 **PRICES START AT \$129 FOR THE STANDARD CAMP, OR \$99 FOR VSSL MINI.**

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





Toytec Lifts New BOSS Aluma Series 2.0 and 2.5 Suspension

Remember when you first bought your new Toyota 4x4 and got the “mod” bug? You started searching the internet for available products that would suit your needs. One of the first companies that comes up on the search—Toytec Lifts. Toytec has been providing suspension solutions for today’s Toyotas since 2004. From the humble beginnings of their Aluminum spacer kits, to the solid BOSS 2.0 platform, Toytec has grown over the years into a one-stop-shop to outfit your rig

from the mild to the wild. Now offering everything from a simple suspension install to a full vehicle build to get you out there and back safely.

With this expansion it’s no surprise that Toytec would up their suspension offering to meet their customers’ needs. In walks the new BOSS Aluma Series suspension system to fill this very need. This suspension takes the BOSS line to the next level. Offered in 2.0, 2.5, and 2.5 with Resi, this suspension has all the key elements to be



a proven winner in performance, durability, and comfort. Here is why:

- Shock bodies are made from hard anodized aluminum for cooler operation as well as better protection from the elements.
- Adjustable from 2-3" of lift.
- Internal hydraulic valving optimized to match the 700lb rate spring for use with or without a bumper or winch. 650lb spring options are available.
- Both the 2.5 and the 2.5 Remote Resi coilovers provide increased oil volume for cooler operating

temperature, providing better performance and consistency.

- Nitrogen charged design with internal floating piston to help prevent shock fading and cavitation.
- Heavy duty 19mm induction-hardened piston shaft.
- Shocks are fully rebuildable for continued use over the life of the vehicle.

I was given the opportunity to acquire one of the first sets of this suspension and run it on my 2008 Lexus GX470 last July. This set consists of the 2.5 coilovers w/Resi and 700lb springs in the front and the 2.5



smooth bodies in the rear. My GX had a BOSS 2.0 suspension on it already. My initial impression of this suspension was outstanding. But then again how often does a brand-new suspension NOT outperform a used suspension. Well the BOSS Aluma Series did not stop there.

Shortly after install I attended a GX event happening during FJ Summit in Ouray. This was my opportunity to run the suspension hard and see what it could put up with. The entire time I was there running trails the suspension never gave up. It soaked up bumps, hard hits, and an occasional floating whoop I tossed at it. And it has never quit since then. Now nine months into its use, I just got back from a trip to Moab and it is still as smooth as ever. The balance of the valving with the spring rate is great for an all-around use vehicle. From weekend getaways to long mileage trips the BOSS Aluma Series is built to last.

I recently went out on a day trip with Hugo from Toytec Lifts and Phil Swanson to capture some content and get Hugo's thoughts on the suspension. His 5th Gen 4Runner also received one of the first sets of the 2.5 suspension. It replaced a prior Toytec 2.5 suspension system he had on his 4Runner. I asked Hugo for his

The entire time I was there running trails the suspension never gave up. It soaked up bumps, hard hits, and an occasional floating whoop I tossed at it. And it has never quit since then.

honest thoughts on this line versus the old suspension and he said, "I am really impressed with the quality and performance of the new Toytec BOSS Aluma Series suspension. The ride is incredibly smooth. The aluminum shock bodies allow the shocks to work at cooler temperatures, so you don't sacrifice performance on or off road. Overall a great, reliable product."

Toytec has really outdone themselves with this new line. The initial reception from customers has been nothing but positive. So, if you have just caught the "mod" bug or are considering a suspension upgrade to your current system, give BOSS Aluma Series a long look first. It very well may be the last look you need. *TCT*

www.toyteclifts.com
303.255.4959



DEMAND THE BEST

Get all these benefits when you switch to SPC:

- **Get more droop travel:** Don't let OE ball joints or mono-ball articulation limit your travel. SPC joints are oversized and provide 80° of travel.
- **Get your drivability and tracking back:** Your truck may have started to 'wander' after you lifted it. That is because you lost caster. Install SPC arms and get your 'drivability' back by putting your alignment in specification.
- **Get your tire where you want it in the wheel well:** Are your oversized tires rubbing the fenders or frame rails? SPC Adjustable Arms, in combination with OE adjustments on the lower arm, allow you to dial in alignment specs at the same time that you move the tire forward/outward in the wheel well by up to 1".

Isolated xAxis™ Sealed Flex Joint Bushings

- Booted to keep contaminants out
- Free pivoting to eliminate binding
- Bonded Rubber Sleeve To minimize Noise, Vibration, and Harshness (NVH)

Designed, engineered, tested, and assembled in Colorado.

Premium Greaseable Ball Joint

Fully Forged Arm

- Maximum strength
- Maximum clearance
- +2 Degrees of Caster built-in

	SPC	OE	Monoball
Articulation & Stud Cross Section	80°	68°	68°
Sealed	✓	✓	✗
Greaseable	✓	✗	✗

US Patent No. 7,513,514 • ©2018 Nissint Corp. dba Specialty Products Co.

metaltech METALTECH4X4.COM
4WHEEL PARTS
LOW RANGE OFF-ROAD
HEADSTRONG OFF-ROAD
WHEELER'S OFF-ROAD, INC.
SOUTHEAST OVERLAND GET LOST!
TOYTEC

SPC PERFORMANCE

www.specprod.com • 800-525-6505



THE 2019 REBELLE RALLY: Toyotas for Life

Words and photos by Mercedes Lilienthal

Toyota vehicles showed up at the 2019 Rebelle Rally in force, they outnumbered all three previous years. From Tacomas to Tundras, FJs, Lexus, and a Land Cruiser, each two-person team was ready for action—and action they got! Whereas my first feature showcased FJ Cruisers (Fall 2019 issue), this story highlights non-FJ Toyotas.

The all-women's traditional navigational rally traversed through 1,500 miles of dirt, rock, and sand. Among the Yota competitors was Kathy Locke, the Creative Director of TCT Magazine. She and her partner Stacey commandeered their FJ Cruiser and completed the Rebelle Rally strong. They, along with the other Toyota teams, finished more confidently as they navigated 10 days of off-road challenges.



TEAM: #190 XELLES RACING

Driver: Rachel Croft (2016 and 2019 Rebelle)

Navigator: Taylor Pawley (2016 and 2019 Rebelle)

Vehicle: bone stock 2019 Lexus GX 460

Build list:

General Tire Grabber A/T tires

Seasoned Rebelles Rachel Croft and Taylor Pawley paired up together to win this year's Rebelle 4x4 and bone stock classes. Rachel, who produces Expedition Overland with her husband, Clay, is a busy mother of three boys and loves driving off-road. Living in Montana, she learned she could be a solid off-roader, no matter what the terrain was.

Taylor, who has spent time traveling the world, once journeyed from Oregon to Uruguay on the Pan American Highway. She quickly found out there's an amazing group of folks that love traveling the globe and creating a sense of community while doing so. That's a major reason she's competed in the Rebelle Rally.



WHY DID YOU DECIDE TO COMPETE IN THE REBELLE RALLY?

RC: I love challenging myself. Combine that with amazing women who are with you, driving all day, problem solving, learning how to work with your teammate, not having your phone, and not knowing what to expect, is the perfect recipe to fill me up and inspire me to grow!

TP: The Rebelle is the most fun, difficult, exciting, overwhelming, fulfilling, and all-around best thing I get to do in my life! I'm so fortunate I get to do it again this year, and with an amazing teammate who is a kick-ass driver with a ton of experience.

WHAT WAS THE MOST CHALLENGING THING DURING THE RALLY?

RC: Letting go of our mistakes and tackling the dune day on day seven. It was a total mental game for both of those things that required some serious redirection and overcoming of negative thoughts and emotions.

TP: Dealing with the sheer exhaustion that comes with seven days of 14+ hour days of being 100% invested in what you're doing. We were so tired at the end of day five we forgot to check in to base camp despite being there early, costing us 10 easy points!

WHAT'S YOUR BIGGEST TAKEAWAY?

RC: Making a goal and strategically pushing for it day after day will pay off. Wins don't happen by accident. It takes extra mental preparation and daily "giving it your all" to help make it happen.

TP: Life is about taking risks and putting yourself out there, because without doing that you can never find out what you're capable of.

TEAM: #182 LOCOS MOCOS REBELLES

Driver: Laura Hardesty (2018, 2019 Rebelle)

Navigator: Erica Sacks (rookie)

Vehicle: 2004 Toyota Tacoma TRD

Build list:

Total Chaos mid-travel kit

King shocks (front)

Deaver leaf springs (back)

Erica Sacks and Laura Hardesty work in the off-road world full-time. Erica's competitive nature started when she was young, when she and her Dad raced off-road together. Then she started racing with other limited class teams. She's currently a professional navigator who continues to race. She also owns her own company, the Waypoint Nav School.

Laura also has been off-roading since a kid. Her career as a firefighter and paramedic turned into owning and operating VORRA (the Valley Off Road Race Association) with her husband, BJ. They showcase a variety of desert





races throughout Nevada and California. Laura and I became instant friends once we learned we both were rallying the 2018 Rebelle with Tacomas and a manual transmission.

WHAT WAS THE EASIEST THING FOR YOU DURING THE RALLY?

ES: The easiest thing to do at the rally was meet new, motivated, fun people who have a passion for adventure.

LH: Taking care of my truck! It may be one of the older vehicles participating in the Rally (2004), but it's proven incredibly reliable, no matter the circumstance. I'm so lucky to have great help from family and friends ... I always feel reassured my truck is going to take care of me, because I've taken care of it.

WHAT WAS THE COOLEST PART(S) OF THE RALLY?

ES: The views! Emily [Miller] creates this rally around amazing scenery and they were nothing but beautiful.

LH: Truly amazing scenery! I love all the surprise views we come up on, plus, the camaraderie with the other teams. We're competing against each other and with each other. It's a very unique dynamic. The bond of being a Rebelle is a special thing.

WHAT DID YOU LEARN FROM THIS EXPERIENCE?

ES: We learned to stop second guessing ourselves and be confident. We would always second guess ourselves but our original idea would be right.

LH: I learned how much I value being able to control my emotions (most of the time) and appreciate when others can do the same. It shows a level of intelligence I really admire. There's not a tool I can think of more important than staying calm, cool, and collected—no matter the circumstance.





TEAM: #138 TEAM DMOS GOALDIGGER

Driver (sharing navigator duties): Susan Pieper (2018, 2019 Rebelle)

Navigator (sharing driver duties): Ashley Lee (2016, 2018, and 2019 Rebelle)

Vehicle: 2016 Toyota 4Runner TRD Pro

Build list:

Total Chaos control arms, sway bars

10" King Shocks

CBI Offroad Fab front and rear bumpers

Prinsu Design roof rack

Rigid Industries LED Light bars and rear spot lights

Air Raid cold air intake

60 amp plasma battery

BF Goodrich K02 tires

Returning Rebelles Ashley Lee and Susan Pieper teamed up together and decided to share driving and navigation responsibilities. Ashley, a California native, is a newly licensed realtor in Las Vegas and lives for adventure. She returned in 2019 to rally her third Rebelle competition.

Susan, who was land-locked as a kid, lived on both coasts where she pursued offshore sailing and yacht racing, but always had an affinity for



cars. It wasn't until moving to Jackson, Wyoming and starting DMOS Collective that Susan started off-roading. What was offshore sailing expertise now translated into land exploration.

ANY UNEXPECTED THINGS HAPPEN?

SP: The biggest shredded tire I've ever had. Gold Point Nevada wash just ate our tire (35 PSI was too high).

AL: It's not what happened but how [my teammate and I] came out on the other side. How to handle stress, circumstances, course changes IS what shaped us. I'm so proud of myself. I was able to course correct on so many issues I couldn't predict.

WHAT'S YOUR BIGGEST TAKEAWAY?

SP: Keeping my eyes up; line choice and throttle control are as applicable tips as a CEO of a shovel tool company as they are for being a driver.

AL: I can take on a lot more in my personal and professional life by my experiences on the Rebelle. It's

hard. It's gritty. It's pushed me to my boundaries and back. More than showing my strength it's exposed my vulnerabilities, but each time I have come away a stronger person for it.

HOW DID YOU DO DURING THE RALLY (HOW DID YOU PLACE, HOW DID YOU FEEL)?

SP: I was disappointed we didn't place higher in the rankings. In retrospect, feel we left something on the course. There were times we held back from trying for black checkpoints and even driving to known blue checkpoints due to confidence. Our prior experiences weren't as "serious" competitors. NOW we do feel confident ... I look forward to 2020.

AL: We placed 5th from the bottom. I feel fortunate and grateful for the experience. My skills improve every year. I face fears and personal growth opportunities without avail. This competition makes or breaks people; emotionally and physically. I feel stronger than ever.





TEAM: #107 TEAM LUNA

Driver: April Leone (rookie)

Navigator: Joanna Chen (rookie)

Vehicle: 2011 4Runner Trail Edition

Build list:

ToyTec Boss 2.5 rear/front shocks

OME/ToyTec lift

KMC headlocks with BF Goodrich KM3 tires

Total chaos UCAs

Domello Offroad front winch bumper

10k Smittybuilt winch

Allpro rock sliders

CBI rear plate bumper with swing-out tire carrier and table

RCI 3-piece full skid plate

Custom dual battery system from Bioenno power

Bioenno 100 amp hour lithium iron phosphate auxiliary battery

Bioenno MPPT charge regulator

Custom roof rack

ML solar 100w solar panel

Dometic CFX 50

Custom tire winch

Custom MAXTRAX holder

First-time Rebels April Leone and Joanna Chen have varied backgrounds that ultimately led them to have careers in software engineering and to the Rebelle Rally.



No matter if April, who grew up in Alaska, worked on commercial fishing boats, and lived in an old school bus while working 20 hours a day in a cannery, or Joanna (who now is an outdoors woman who enjoys sport kite flying and off-roading), this duo placed 12th overall and just missed the rookie of the year award by four points.

WHY DID YOU DECIDE TO COMPETE IN THE REBELLE RALLY?

AL: It looks like an ultimate adventure. I've been chasing adventure since I can remember.

JC: I've been following the Rebelle Rally since it began. It looked like an amazing adventure. I saw glimpses of the places that teams went to, unique remote places I would otherwise never have even heard of. I wanted to see those places and experience the journey that's Rebelle myself.

WHAT WAS THE COOLEST PART(S) OF THE RALLY?

AL: I got to wheel 10-11 hours every day and come home to a delicious meal.

JC: I'd say day one and some of the staff's reactions were the coolest parts of the rally.



WHAT DID YOU LEARN FROM THIS EXPERIENCE?

AL: I want to win next time.

JC: Roads on a map don't always match roads on the ground. Sometimes one has to trust one's gut instead of focusing on finding that road on the map. Also, I learned I didn't always have to know exactly where we were at all times in order to find the next checkpoint. Sometimes knowing where we wanted to get to was enough, and we could figure out if we were at the right checkpoint when we got there.

TEAM: #114 SAND CATS

Driver (sharing navigator duties): Maria Guitar (2018 and 2019 Rebelle)

Navigator (sharing driver duties): Debbie Bruen (rookie)

Vehicle: 1998 3rd gen Toyota 4Runner

Build list:

ARB rear air locker

ARB on-board air compressor

Icon Vehicle Dynamics suspension

Nitto Ridge Grappler tires

Rock sliders

Snorkel

Aftermarket front bumper

Mother daughter team Sand Cats paired up to run the Rebelle in Maria's 3rd gen 4Runner. Along with Team Goaldigger, Sand Cats shared driver and navigator responsibilities. Debbie Bruen, the mother, is originally from the Bronx, NY. She's lived all throughout the US. and was a missionary in the desert in Turkana, Kenya, for 12 years. There, they relied on their diesel-powered Toyota Hilux for transportation.

Maria, Debbie's daughter, grew up in Turkana and had an amazing childhood that afforded her many opportunities of varied experience. It helped shape her broad-world





view. Maria was an engine test engineer for Honda R&D Americas for the last 12 years and recently left to pursue starting her own businesses.

WHAT WAS THE MOST CHALLENGING THING DURING THE RALLY?

DB: Plotting points on the map. I ended up losing my glasses and couldn't see. But I wouldn't have been as precise as Maria anyway, so maybe that was a good thing.

MG: One morning, day 1, leaving out of Goldfield we were departing facing north, but we needed to head due south to our first check point. The only way to go south was to go back thru base camp, which felt very incorrect. I was second guessing our every move. I made mom stop multiple times so I could take a heading of the trail we were on. Thankfully, at each interval we chose the correct path, we soon found ourselves at our first checkpoint of the day. It felt really good and reassuring we had correctly navigated ourselves there without getting lost!

HOW DID YOU DO DURING THE RALLY (HOW DID YOU PLACE, HOW DID YOU FEEL)?

DB: We placed in 19th place, the top of the bottom third. I wished we had done a little better.

MG: I feel really good about what we accomplished, and I'm super proud of my mom for being my teammate and



really stepping out of her comfort zone to join me on this adventure!

WHAT'S YOUR BIGGEST TAKEAWAY?

DB: It was a great experience. Initially I did not like it at all. I thought "who does this crazy stuff?" Then, it slowly grew on me. It was cool finding my groove both personally as well as us as a team. I loved being Maria's teammate.

MG: As Emily Miller says, "If it were easy, everyone would do it." Often times, when I'm faced with an opportunity that sounds challenging but beneficial, I now think about those words and I push forward. I choose to not be a passenger to life, but to press on towards my goals.



TEAM: #120 LOST IN OVERLAND

Driver (sharing navigator duties):

Samantha Nielsen (rookie)

Navigator (sharing driver duties):

Tammy Battistessa (rookie)

Vehicle: 2005 Toyota 100 Series Land

Cruiser

Build list:

OME 2" Lift

ARB front and rear bumper

WARN winch

Safari snorkel

Front Runner rack

James Baroud rooftop tent

ARB awnings

ARB Intensity LED driving lights on front bumper

285-70-R17 Nitto Ridge Grappler tires

Method wheels

Slee rock sliders

Californians Samantha Nielsen and Tammy Battistessa are new to the Rebelle but also wanted to switch roles. Sam's boyfriend Alex sent them a text about the Rebelle Rally. Even though they were "complete rookies in every sense of the word" and hadn't heard of the Rebelle Rally; they decided to give it a go. They had only been off-road a couple of times but threw caution to the wind and jumped right in.

ANY UNEXPECTED THINGS HAPPEN?

SM: We did better than we thought we would!

TB: Our friends Ellie and Lisa from team #128, Wenches in Trenches!



WERE YOU PREPARED FOR THE REBELLE RALLY? IF NOT, HOW DID YOU COMPENSATE FOR THAT?

SM: We definitely were not as prepared as we thought we were. Not ever having done a rally before, it was challenging to even know how to prepare. Now knowing what to expect, there will be much more navigation practice in the year to come. We're going to be ready for those blacks!

TB: That would be a hard no! As the saying goes, you don't know what you don't know and prior to the rally we struggled with how to prepare. I think we did a great job adjusting and adapting by understanding our capabilities and limitations.

WHAT'S YOUR BIGGEST TAKEAWAY?

SM: You can do more than you think you're capable of. Look at us, we are your average Joes, and we DID it!

TB: If you take a leap, you just might surprise yourself! *10/1*

Every journey starts with Rhino-Rack



Before you go, visit us at rhinorack.com

  @rhinorackusa



RHINO-RACK



[FRAMED]

f/5 1/250s 24mm

Alstrom Point, Utah

PHOTO BY DAREN WELSH



A photograph of a misty forest with a red truck and a tent in the foreground. The truck is a red pickup truck with a ladder leaning against it. A tan tent is partially visible on the right side of the frame. The background is a dense forest of trees with some autumn-colored foliage, shrouded in mist or rain. The foreground is a grassy field.

[FRAMED]

f/4.5 1/100s 119mm

Merry Go Round Farm,
Covington, VA.

PHOTO BY CHRIS CORDES





[FRAMED]

f/4 1/200s 24mm

Cardinal River crossing on the
Ruby Falls Trail in Alberta, CAN.

PHOTO BY VILLIERS VAN DER MERWE





[FRAMED]

f/20 1/125s 16mm

Twin Creek, Colorado

PHOTO BY PHIL SWANSON





A beautiful laterite road to begin with in the wilderness of the French Guiana, South America.

A photograph of a dirt road winding through a dense tropical forest. The road is reddish-brown and leads into the distance. The forest is lush with green trees and foliage. The sky is blue with white clouds. The text 'WANDERINGS IN THE WILDERNESS' is in white, bold, sans-serif font. Below it, 'French Guiana' is in a large, white, serif font. The text 'TEXT: KARIN-MARIJKE VIS | PHOTOS: COEN WUBBELS' is in a small, white, sans-serif font. The text 'French Guiana is a tiny stretch of land tucked away' is in a bold, black, sans-serif font. The rest of the paragraph is in a regular, black, sans-serif font.

WANDERINGS IN THE WILDERNESS

French Guiana

TEXT: KARIN-MARIJKE VIS | PHOTOS: COEN WUBBELS

French Guiana is a tiny stretch of land tucked away in the northeastern corner of South America, bordering Brazil and Suriname. The combination of having your own wheels and going for hikes gives you a great combo to see the best of the country, particularly flora and fauna. The French are avid hikers and you can hike trails along the coast, through the savannah and marshes, and into the rainforest. French Guiana is where we saw the most wildlife animals that live in the Amazon, in particular sloths (and snakes, too). At the head of some of these trails are 'carbets'—open-sided huts, where you are free to hang your hammock or pitch your tent for the night.



A green tree snake crossing our path.



Rusted vehicles burned intentionally by the French police in an effort to curtail illegal gold mining.



Monkeys carefully watch our every move.



Clearing the path from overhanging branches.



Gorgeous vegetation in the Amazon.

Since it is an overseas territory of France, French Guiana is part of Europe and so, yes, the currency is the Euro. With it, you buy delicious French wine, good mustard, and better chocolate than anywhere else on the continent. Properly stocked up, we set out to check out one of the gorgeous parts of the Amazon Rainforest, les Chutes Voltaires (chutes = waterfalls), which lie some 30 or 40 miles from Saint Laurent de Maronie, the border town with Suriname.

We followed asphalt into the countryside. Along the side of the road, like everywhere in this country, lay rusted and burned out vehicles. Sometimes it looked like a car cemetery. Most of these cars had been stolen by illegal gold seekers who use them to take their gear to the edge of the forest from where they walk into the wilds, leaving the car behind. When the gendarmerie - the French



The Land Cruiser flexing a muscle in the jungle in one of the many ruts we encountered.

police—find one of these cars, they'll set it on fire so it can't be used again. The illegal gold mines are one of French Guiana's main causes of criminality. When one is discovered, the military will set it on fire and destroy everything on the site.

The mineworkers are mostly illegal Brazilians, who are sent back across the border to their own country. This generally happens without problems or violence. The Brazilians know they will be able to return within a few weeks and start from scratch; the French know that too but can't stop them. The forest is too big, too vast to control it all. The Chinese are part of this, too. A high-ranking person once told us how at one point, a big bulldozer had arrived by ship. Months later that bulldozer had been found back deep in the forest at an illegal gold mine. After the bulldozer had

been imported, it had been taken apart into the smallest possible pieces, carried into the forest, and been put together again. Where do you start tackling such problems?

Pushing the thought of illegal mine workers to the back of our minds, we focused on the green surroundings. The road meandered through a landscape that until a few years ago had been rainforest, but which now is being burned down to grow sugar cane and cassava (manioc). Asphalt became a laterite road until a turn off and another four miles to go to Auberge Voltaire. Vegetation thickened with bamboo, ferns and ravenalas - the latter is better known as traveler's tree (or palm). The nickname is the result of the sheaths of the stem holding rainwater, which can be used as an emergency drinking supply for travelers. Here

we encountered some technical off-roading. Apart from potholes, the forest path was deeply rutted and impassible during heavy rains. It had been dry for a couple of days and the soil had hardened. We were in luck.

The ruts caused the Land Cruiser to tilt and we had to make sure that the roof rack didn't hit trees or heavy branches. Coen steered with utmost concentration. It was time to get out our machete and ax. Some trees grew too far on a slant and we removed branches before being able to drive on. At one point a dead tree lay across the road, which we moved to the side to clear the path. It took at least two hours to cover four miles. The Land Cruiser squeaked, moaned, screeched, scraped and groaned with all movable, and possibly non-movable, parts. We rolled up the windows when thin

branches threatened to smash into our faces. We were on the alert for vines - some as thick as my upper legs - getting stuck behind the high air-intake, possibly damaging it.

We observed sapakaras and other types of lizards scuttling across the path while birds were watching us from above, sitting on branches. When we stopped and turned off the engine, we heard the cicadas scream.

At one of these points I walked ahead a bit, to see what we could expect behind a bend. There, for some twenty meters or more, the vegetation on the right side of the path was entirely covered with snow-white, fine spider silk. I had never seen anything like it. When

I touched the cobweb, I felt how strong it is, and my touch awakened hundreds of tiny spiders. This whole structure must be home to millions of them. Fascinating! But we didn't want them in the Land Cruiser and carefully removed the part hanging over the path to prevent it from getting stuck behind the roof.

At the auberge (inn) we parked the Land Cruiser, where it could stay for a couple of days. We packed our backpacks and walked into the forest, a few miles to the waterfalls. The trail meandered among 100 to 160-foot-tall forest giants, which they call 'telephone trees (pali oudou)', in neighboring Suriname. You hit a piece of wood against

the flat trunks when you're lost and people can hear where you are. In French Guiana, they call the trees 'bois cathedral' (cathedral trees) because of their elegant shapes.

At four-thirty, it started to get dark in the forest. Fortunately, we heard the waterfall and the trail was easy to walk. Not much later we arrived at some open huts where we hung our hammocks with a mosquito net around them, like the locals do. Here we had the world to ourselves, being lazy in our hammocks, reading, going for a swim, and for walks deeper into the forest until we were fully rested and ready to return to the world in search of our next adventure. *TCT*



Fruit we have never seen before.



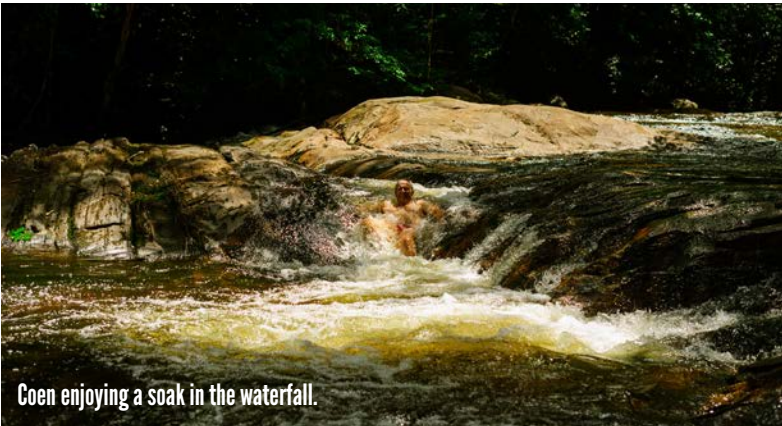
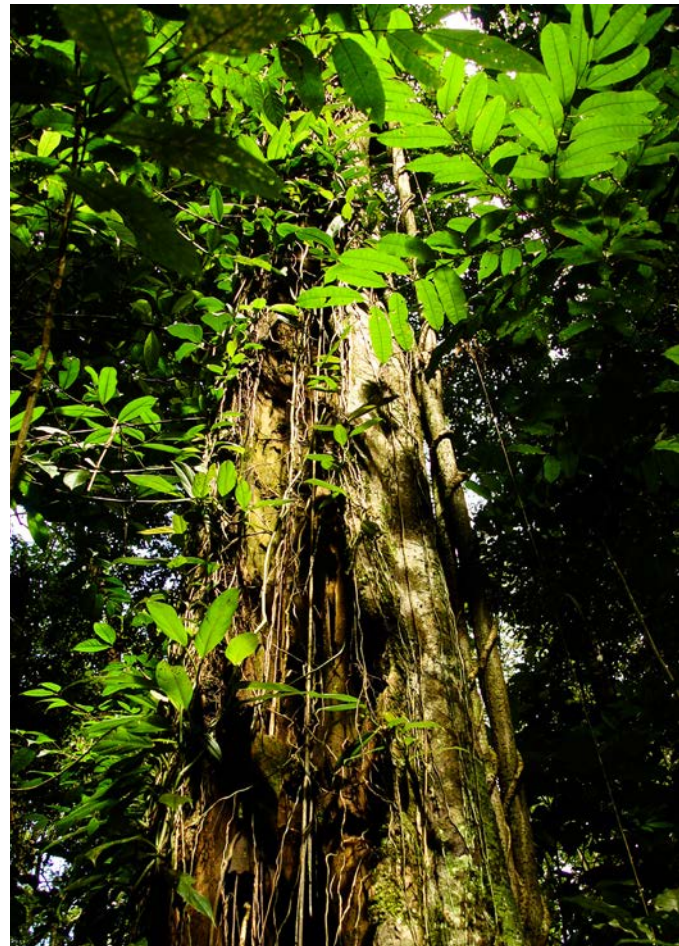
The author takes a drink of fresh water from the forest.



Time for a good read.



Hammocks with mosquito nets, local style.



Coen enjoying a soak in the waterfall.

TOYTEC® lifts

6765 FRANKLIN STREET DENVER, COLORADO 80229
 EMAIL: INFO@TOYTECLIFTS.COM PHONE: 303-255-4959
 WWW.TOYTECLIFTS.COM

- ARB**
4X4 ACCESSORIES
- h**
Racing & Performance
- ICON**
VEHICLE DYNAMICS
- SPC**
PERFORMANCE
- TRAIL KING**
TRAIL KING
- METHOD**
RACE WHEELS
- COMEUP**
WINCH
- KING**
OFF-ROAD RACING STROCKS
- OLD MAN EMU**
RACING STROCKS
- SPIDERTRAX**
OFF-ROAD



Snow Fun

A weekend run up the East Fork Valley with two vintage Land Cruisers

Snow wheeling in the San Juan Mountains of southwestern Colorado in autumn is about as good as it gets. In late October the fall colors and early snowfall make for a visually stunning and technically challenging off-road route. There is an old military road that follows the East Fork of the San Juan River near Pagosa Springs that is steep, rocky and narrow as it ascends towards the Continental Divide. I hooked up with a couple of local Toyota Land Cruiser enthusiasts in an attempt tackle the snow covered Elwood Pass (11,875 ft.) trail in two vintage rigs, a FJ40 and a FJ45-P. The adventure that followed proved to be far more difficult that we imagined.

In the late 1800's, a road into southwestern Colorado was needed as settlers and miners began to move into

the area. The military also needed a road connecting Fort Garland in the San Luis Valley and the soon to be built Fort Lewis in Pagosa Springs to help protect these people. Construction of a wagon road over Elwood Pass and down the East Fork of the San Juan River began by the Army in spring of 1879 for an appropriated cost of \$10,000. However, before the wagon road was completed, the Army abandoned it and had moved Fort Lewis from Pagosa Springs to a location west of Durango, called Hesperus. Today, the East Fork Road allows people access to a variety of jeep trails, forest access roads, and ghost towns. This is one of the few remaining hardcore off-road routes that crest the Continental Divide in the area.

I was anxiously awaiting their arrival when Don and

Mark rolled into the Hometown Market parking lot in their vintage Land Cruisers. I had met with Don a few weeks earlier at Wolfcreek Rodworks, a Land Cruiser restoration and build shop, to plan an off-road adventure in the San Juan Mountains. To my surprise, Don was driving a rare FJ40 and Mark was in a show worthy FJ45-P. It was late in the year and our goal was to head up the East Fork Road as far as possible in an attempt to drive over Elwood Pass. It had snowed a couple of days before and we were unsure if the pass was open or not. Earlier, I went on the US Forest Service website which said that it was closed. I discussed this with the guys and we decided to go as far as we could knowing that this part of Colorado statistically gets the most snowfall in the state. Off-roading in the high country is usually limited due to forest service closing the gates for the winter. We agreed that we were up for a challenge and headed east out of Pagosa on Highway 160 towards the junction of FS Rd 667 (East Fork Road).

We aired down at the entrance of the old wagon road in preparation of what was to come. Knowing that Wolf Creek Pass had received two feet of snow in recent days, we hoped that Elwood would be passable. The pair of capable rigs left the pavement and confidently headed up the winding snow packed road with Don in the lead in his FJ40. Mark and I felt comfortable with him in the front and happy that he would be breaking trail once we got to the deep snow.

As we continued up the valley, the road paralleled the river, then wound through large open pastures inhabited by curious cattle that occasionally blocked the road. A simple blaring of the horn usually motivated them to move out of our way. When the horn wasn't enough to spook the bovine...Don just stepped on the accelerator and hoped for the best. His 1965 FJ40 Toyota Land Cruiser was powered by GM small block 350 motor with throttle body injection coupled to a SM 420 transmission. As we moved up into the higher elevations, the steep and rocky road became less noticeable and Don had to break through 12-inches of fresh powder. Since his rig sits on 37-inch Trxus M/T tires aired down to 12lbs of pressure, he made quick work of navigating through the white stuff. The FJ60 differentials with 4:56 gears and ARB air-lockers front and rear helped keep Don on track as his rig slipped on the ice near the 200- foot

ravine bordering the trail.

We kept a steady pace upward and passed through huge forest of ponderosa pines. We could see the pass in the distance as we neared the Continental Divide. Not sure what lay around the next bend, Don continued to plow through the deep snow.

Mark and I followed Don up the white canyon in his 1965 Toyota Land Cruiser FJ-45P, SWB (short wheelbase) with a removable top. This rare and well-built Cruiser wasn't short on power and it muscled its way through the deep snow that we encountered along the way. I was impressed with its performance and couldn't wait to take a closer look to see what she was made of. During our lunch break, I gazed under the hood and noticed a 350 Crate motor with mild RV cam mated to a serpentine belt system, a 200-amp alternator, and ceramic-coated headers. A Howell throttle body fed from a bed-mounted stainless steel 34 gal fuel tank provided the juice. Underneath, a very capable drivetrain consisted of a 5-speed NV4500 tranny; 4 to 1 Orion transfer case and 4.56 gearing in the diffs for a 103 to 1 crawl ratio. Now I understood how we had motored up the snow-packed trail with such ease.

After lunch we drove the pair of vintage rigs very near to the summit where we came to an unexpected stop at a lock gate. Unfortunately, we weren't able to continue but were thrilled that we had made it this far in the extreme conditions. We reluctantly found a place to turn our rigs around to head back down and paused for a short time to take in the awesome views of the San Juan Mountains and valley below. As we drove back on the same route, we



LAND CRUISER

encountered a huge herd of elk that crossed the trail in front of us. These mighty creatures were an amazing site, as viewed them in silence in their high-country habitat. We followed our tracks for time and decided to take a side trail that Don noticed. It turned out to be a fun adventure as we broke trail once again through fresh snow in an area that hadn't seen any vehicles so far. With Don in the lead once again, we followed him through a couple of small water crossings that made for some really cool photo –ops. Afterwards, we found a spot to turn around and retraced our tracks to the main trail.

All in all, we agreed that the old wagon road leading to Elwood Pass was quite a good adventure. The recent snowfall made the trail technically challenging and the scenery at this time of year is unbelievable stunning. At the car wash back in Pagosa Springs, we made plans to get together in the spring after the snowmelt and complete the trip over Elwood Pass.

One thing is for certain: A Toyota Land Cruiser excursion up the East Fork Valley of the San Juan is a worthwhile adventure in any season.

SPECIFICATIONS:

965 FJ 40 LAND CRUISER

Owner: Don Haywood

Engine: GM Small Block 350, throttle body Injection

Radiator: Griffin aluminum cross flow, 2 inch, 19 in by 27 in core. Power steering cooler.

Power Steering; FJ 60 box

Overdrive: Ranger OD mounted between bellhousing and transmission

Transmission: SM 420

Transfer Case: Toyota case from Three Speed Transmission, beefed up nose cone (Twin Stick) Axles; FJ 60, sprung over, outboarded leafs. OEM front leafs, FJ 55 Rear Leafs. Spring hangers moved forward/rearward as far as possible. Wheelbase plus three inches

Differentials: Toyota FJ 60, 4:56 gears, ARB front and Rear

Brakes: 4W Disc Brakes

Batteries: Dual Optima Yellow tops

Radios: CB and Ham Radio 2 meters

Tire Carrier: Manafre

Tires: 37 inch Trxus M/T



Seats: Summit Racing

Dash: Custom Switching with Contura switches

Cage: 2 in Dom with frame ties.

1965 TOYOTA LAND CRUISER FJ-45P, SWB (SHORT WHEELBASE)/ REMOVABLE TOP

Owner: Mark Delaney

Engine and Drivetrain: 350 Crate motor with mild RV cam mated to a serpentine belt system, 200-amp alternator, and ceramic-coated headers; 5-speed NV4500 tranny; 4 to 1 Orion transfer case and 4.56 gearing in the diffs for a 103 to 1 crawl ratio; Howell throttle body fed from a bed-mounted stainless steel 34 gal fuel tank.

Chassis/Suspension: SOA (spring over axle) with FJ-45 stock springs and '78 FJ40 axles, Chromoly up front; ARB air lockers front and rear; Bilstein shocks all around; Howe hydraulic assist power steering system.

Brakes: Discs all around with V6 4-Runner caliper swap up front, FJ-40 dual diaphragm brake booster, and large bore master cylinder.

Wheels and rubber: Budnik 17 x 9 inch wheels with custom 3 inch backspacing, loaded up with 37 x 12.50/17 BF Goodrich KM2's.

Interior: One-off carbon fiber and epoxy steering wheel

by the owner's brother, molded from an '89 Toyota pickup wheel yet incorporating the original wheel's hub and spokes; reproduction stainless steel roof latches hand-made by owner's brother; Mastercraft Baja RS heated seats with lumbar support; frame-tied roll bar; Vintage Air heat/AC unit; Autometer gauge cluster.

Miscellaneous: Bed-mounted ARB 50-quart fridge/freezer, Extreme Outback Magnum on-board air, Custom front and rear bumpers, Warn 8274 winch, Custom full bed cage, Autohome Columbus rooftop tent, National Luna dual battery isolator *TCT*

CREDITS:

Wolf Creek Rod Works
329 Park Ave., Pagosa Springs, CO 81147
Tel: (970) 731-3838
www.wolfcreekrodworks.com

MICHAEL RUDD BIO:

Michael Rudd is a photographer, writer, adventurer, explorer and Land Cruiser enthusiast. His career as a photojournalist began in 1999 as the Features editor for Four-Wheeler Magazine. He quickly established a niche in the industry by covering off-road races, expeditions and



adventures in some of the most remote places on earth. His exploits have taken him from the heights of Khardung La, a mountain pass in northern India at 17,582 feet to Ushuaia Tierra Del Fuego, the southernmost city in the world. Michael's work has been published in Overland Journal, Four-Wheeler, Truck Trends, 4x4 Asia, Hawaii and Nevada Magazines.

Michael Rudd

Rudd fotos
Expedition Adventure Photojournalist
838 Cloud Cap Ave., Pagosa Springs, Co 81147
970-398-0640
ruddfotos@yahoo.com



Toyota Trucks & Trails is the definitive truck and SUV podcast for all Toyota fans. Hosts Jason, Rich and Andy walk and talk through everything from events, community spotlights, tech tips, trail repairs, recovery and more!

TOYOTATRUCKSANDTRAILS.COM

Toyota Trucks and Trails podcast is a podcast for the Toyota truck enthusiast. Listen for free on iTunes or Google Play.

Which Winch?



So, you've decided it's time to purchase a winch. Or, maybe it's time to replace your winch with something newer or stronger. Maybe there's a new feature you just can't live without!

Before we get started, let's set the stage; we're going to focus on 12 volt, consumer-grade electric winches for the purpose of light truck/SUV recovery. We're not covering hydraulic and PTO winches in this article. The winches we're discussing have planetary gear arrangements, use a "standard" mounting pattern, have some form of brake and will be sold more or less as kits ready to install and use.

Figure 1: A basic planetary gear diagram.

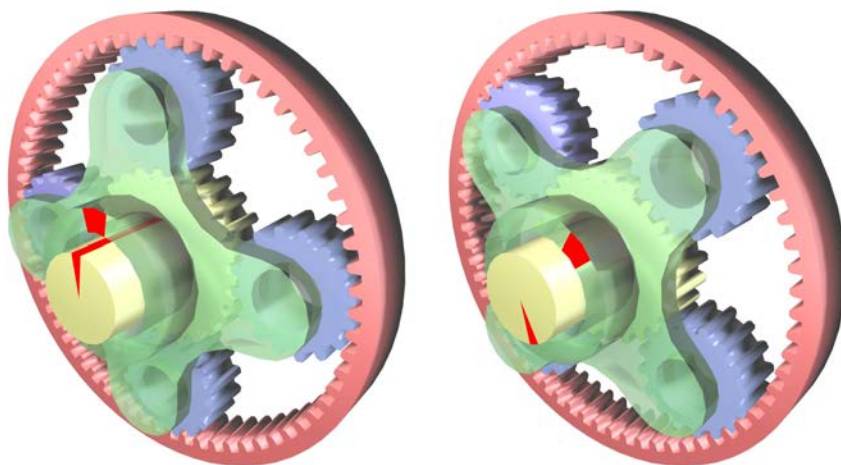




Figure 2: Measuring winch pulling power using a dynamometer

While this may seem over-generalized, these types of winches are what are most commonly encountered in the recreational 4x4 world.

DON'T BE B.A.D.

When selecting a winch, many people use the B.A.D. formula:

Brand recognition (You've seen this product)

Anecdotal (Somebody said it's good)

Display (It looks cool)

We're injecting a little humor here, but is the B.A.D. formula actually *bad*? Maybe not, because:

- We can't count out the well-known brands.
- We certainly can't discount the experiences of others.
- Fit and finish are important to many people.

This article aims to get you thinking outside of the B.A.D. box and looking at some of the finer points of these electric winches. We'll walk you through some of the terms and specifications that will better equip you to choose something suits your needs.

PULLING POWER

You'll notice that winches are often ranked by pulling power as their primary statistic. It's measured in pounds, and you usually see them rounded off in 500's or 1000's. So how do we decide how much power we'll need?

The popular "equation" for choosing a winch is to choose a winch that is rated at 1.5x your vehicles' GVWR* weight. For example, if you have a 5000lb vehicle, a winch rated for at least 7500lbs of pulling power should be sufficient.

ABOUT GVWR:

*GVWR (Gross Vehicle Weight Rating) seems easy enough, but I'm sometimes asked "What about GCWR**?" It's a great question. Remember that GVWR is a rating. It's a great guideline but it's not your actual weight! If you can get your fully loaded vehicle (and trailer, if applicable) weighed, you'll have a very clear idea of what a winch is going to be working with. This is overkill for most folks. However, knowing your loaded weight can be eye-opening for you gear junkies who are pushing the limits.*

SPECIFICALLY SPECIFYING SPECIFICATIONS

Not all winches are created equal! Many of them have competitive features but why is a 10k winch from Brand A costing \$500 less than a 10k winch from Brand B? They might even be made in the same factory overseas for all we know!

Look deeper at the specs! A good winch manufacturer has nothing to hide, and will disclose the specs of the inner workings. If you can't find the specs, ask or check in the manual. Many manufacturers have the manual available for download, for free, on their web site.

Here's a walk-through of what some of those specs are, and why they're interesting to us.

DUTY CYCLE

Duty cycle is a percentage of run time versus cool-down time. Simply put, how long your winch can run before it generates a potentially destructive amount of heat. Duty cycle depends on time and load.

A winch working near capacity for an extended amount of time will overheat faster than one that is simply spooling the rope in. You'll probably never (at least, not at the current level of technology) see an electric winch with a 100% duty cycle. That's stuff for hydraulic or PTO winches.

It's worth noting that improper rigging can make your winch work harder than it needs to. It's good to get some instruction on proper winching techniques to help preserve your investment.

LINE SPEED

Literally how fast it can pull—sometimes. There's always a catch, isn't there?

The speed that it can spool in is going to be faster than its speed under load. Deceptive marketing practices can make a winch appear faster than it really is. When you read the specs, check the speeds under load vs. the speeds unloaded.

Faster isn't necessarily better—but it sure is nice! Fast winches can get away from you sometimes. Often, fast winches have a longer run-on* time. For most folks, slow is just fine.

**Run-on is the term for when the winch continues spooling after you take your finger off the button. It's a natural state of affairs due to the way they're designed. Some winches run-on longer than others. The longer the run-on time, the further you should keep your fingers from the fairlead!*

AMP DRAW

Electric winches work off of... electricity! I bet you didn't see that coming.

Where does that electricity come from? Your battery.

What maintains your battery? Your alternator.

What turns your alternator? Your engine.

While this seems rudimentary, it's important to visualize the chain of power.

You've got this little piglet of an electric motor using engineering magic to pull thousands and thousands of pounds. It's going to work hard. It's going to get hungry. It's going to eat a great deal of amperage from your battery. Your alternator is going to be pushed to maintain that battery.

The amperage draw rating gives you an idea of how efficiently your winch is going to operate. For short pulls, this isn't as big of a deal but if you use your winch often, or in a professional capacity, it's worth comparing what different winches offer. The more efficient, the better.

It's worth mentioning that the winch motor will generate a great deal of heat as well—but we'll get more into that a little later —read on!

HOUSING

The housing that the winch is assembled into is important. The housing houses the components such as the motor, gears and drum while also providing a mounting point at the same time.

Many winches these days are offered with cast aluminum housings. Some are machined. Machined housings are stronger. They're also going to be more expensive.

Cast housings are weaker. They can shatter and break—sometimes by tightening the mount bolts too tight (installation error) or by misuse. Be sure to follow the installation instructions carefully and always spool your winch rope on properly!



Figure 3: The catastrophic result of cast housings and possibly improper use.

Figure 4: Cast housing failures are rare, but in extreme duty circumstances, can happen.



SOLENOID / CONTROL TYPE

You're going to see two types: solenoids or contactors.

Most (not all) modern winches aren't using solenoids—they're using contactors. Owners of older winches that use solenoids are upgrading to the modern Albright style contactors.

Albright type contactors are somewhat standard these days, and you should look for a winch that uses them—preferably the Albright name brand. Depending on the model of Albright contactor, they can be IP67 water/dust proof. They're also easy to find and replace should you have a problem outside of the warranty.

You'll still see manufacturers referring to the control type as a "solenoid" even if it's the newer Albright style of contactor. While it's technically incorrect, it's of no significance. Check the fine print!



Figure 5: Traditional 12v solenoid.



Figure 6: The "Albright" style of contactor.

CONTROL BOX

The "solenoid box" is properly named control box and is generally a housing for the solenoids or contactor(s) and their wiring, as well as that important plug for your wired controller. If there's any wireless transceivers or other features, they're usually inside the control box as well. It's common to see the control box mounted on top of the winch. It's a *separate control box* that can be re-oriented so things will fit different applications.

Sometimes, they are integrated into a water/dust-proof housing that's integrated with the winch housing. We refer to this as an *integrated control box*.

Your winch may not fit into your bumper with the separate control box attached, or with an integrated control box. It's important to check the measurements and dimensions of the winch and bumper/mount before you purchase. If it won't fit, you can sometimes relocate the control box.

INTEGRATED CONTROL BOXES AREN'T INTENDED TO BE RELOCATED.

Separate control boxes can be relocated. Relocating the control box is pretty easy for beginners. Many companies offer a kit with instructions, longer wires, brackets and hardware for this task. If you're concerned about the box fitting, or you simply want to move it, check into this before purchasing.

BRAKES

Most electric winches for off-road recovery have some form of dynamic braking. Dynamic braking means the

brake is automatic and often holds only in one direction. You'll run into a couple of different types of brakes, especially in planetary gear orientations.

Internal brakes are where the brake is located inside the drum. Since brakes generate heat, an internal brake can cause more heat inside the drum. This isn't a problem with steel wire rope, but fitting synthetic winch rope to a winch with an internal brake can cause the rope to break down or melt on the drum. Some heat guards or sleeves on synthetic rope claim to negate this, but they too are made of a synthetic material.

External brakes locate the dynamic brake outside of the drum, and generate lower amounts of heat. Winches with external brakes are becoming more and more popular as synthetic winch ropes gain mainstream adoption.

Mechanical brakes are something you won't run into as much these days, but winches such as the Warn 8274 are a great example of a one-way external mechanical brake.

SYNTHETIC VERSUS WIRE ROPE?

Point blank, I recommend a synthetic winch rope. Especially if you're new to working with winches.

I intentionally cut straight to the chase there—and that's because there are numerous articles written by my colleagues and others that detail the differences, the pros and cons, and the nitty gritty of working with one over the other. I'll give you an overview, but it's by no means comprehensive and I urge you to research this well-documented topic on your own.

Synthetic winch rope is lighter and easier to handle. It's easy to repair in the field (if you know how.) Under a load, it stores less energy than wire rope and is less apt to cause damage to people or vehicles in the event of a failure.

However, synthetic is prone to abrasion damage. It really doesn't like heat, and it doesn't take much heat to compromise its strength. It also doesn't like UV light, which will degrade its strength over time.

If synthetic rope is not wound neatly on the winch drum, it can bunch up and damage the winch or pinch in between its own wraps, causing it to "reverse directions" in a pull. Mud, dirt and dust in synthetic winch rope can also wear it over time. While it can be washed, it's tough to get all of the fine silt and grains out of it, which will abrade it over time and use.

Steel, on the other hand, is a great deal more resilient. It can drag over rocks, through mud and dirt and it's going to handle it much better. It is, however, more of a tangle to work with. If it's not wound on the drum properly, it quickly becomes a disorganized mess. It's not easy to repair in the field without special tools and training. Lastly, it stores a great deal of energy and in the event of a failure, it's a fast and deadly blur of whipping, razor sharp wires.

Figure 7: Some say you don't need to wear gloves with synthetic winch rope. Don't listen to them. You should always wear gloves when operating a winch.



All that said, no matter which you choose, please get some training and practice with what you choose before you attempt anything serious with it.

Synthetic winch rope is lighter and easier to handle. It's easy to repair in the field (if you know how.) Under a load, it stores less energy than wire rope and is less apt to cause damage to people or vehicles in the event of a failure.

FAIRLEADS

Most winches come with a fairlead. The old, and partially incorrect method of deciding used to be "roller for steel, hawse for synthetic." That doesn't tell the whole story, though. There's more to this, of course.

I prefer roller fairleads for my synthetic winch rope and I recommend the same. Rollers roll—and as we discussed above, synthetic winch rope doesn't like abrasion, friction and/or heat.

The cons on roller fairleads are that if they are damaged, they often stop rolling. They need some lubrication occasionally, especially if they are sitting outside. On some mounts or bumpers, they can stick out too much—reducing approach angles or sticking out too far, asking for damage.

In situations where you're using synthetic winch rope but need as much clearance as possible, a hawse is a great choice.

Figure 8: Synthetic winch rope with a roller fairlead.



Steel, on the other hand, is a great deal more resilient. It can drag over rocks, through mud and dirt and it's going to handle it much better. It is, however, more of a tangle to work with. If it's not wound on the drum properly, it quickly becomes a disorganized mess.

While synthetic winch rope can be used with either hawse or roller fairleads, wire rope (steel cable) is generally shipped with a roller fairlead. While steel hawse fairleads do exist for use with wire rope, they're usually a special order product.

REMOTE CONTROL

Controlling an electric winch via a hand held controller is the standard way to operate one. They generally have some sort of rocker or joystick style switch which will spool the winch in or out. Some have lights, audible alarms and other features built into them. Nonetheless, they do a job and should be easy to operate. They should be waterproof and well built.

Wired controllers are most common, and my personal

recommendation. Wires are quick to react and there's no chance of RF interference. You should take care with the plug and pins on both the control box and the controller plug so that they aren't bent, and are clean.

Wireless controllers have been around a few years, and have come a long way since the first ones hit the market. They offer the convenience of not having to connect a wired controller. There's no control wire to get caught on things or trip over. The cons can be scary. My colleagues and myself have firsthand witnessed wireless-enabled winches start running by themselves. Haunting, for sure.

We've seen wireless controllers operate someone else's winch. And then there's that guy who lost his wireless controller, and didn't have a wired controller as a backup. Don't be that person.

Many (not all!) wireless controllers can be slow to react. They don't always start when you want them to start and end when you want them to end. Some handle RF interference better than others, too.

Bottom line, I recommend wired controllers because they do what you tell them to do when you tell them to do it. They can often be repaired in the field. There are no batteries to go dead. There's no pairing process. They just work.

If you really want a wireless controller, I urge you to select a winch that also allows a wired controller to be used as a backup, and to carry that controller somewhere with you.

FOOT FORWARD

Some bumpers or mounts require winches to be mounted foot-forward. This means that the “feet” or bottom mounting surfaces of the winch chassis are mounting forward, against the front plate of the bumper or mount. This is a great design, as the winch isn’t relying on bolts to hold it to the mount. The bolts simply hold the winch in place while the load is put on the bumper.

Not every winch can be mounted this way due to clearance. If the winch has a top mounted control box, thus making it “taller”, when oriented for foot forward it may not fit in the bumper. Find out what your bumper requires before you select your winch.

CLOCKING

The clutch lever is your best friend on a winch. Its job is to engage or disengage the gears in the winch. This

allows you to pull winch rope off the drum by hand—called “free spooling.” Free spooling is important because it allows you to spool line off while not adding more heat and wear to the drum and brake.

In some mounting points or bumpers, when the winch is mounted, the clutch lever cannot be accessed easily. Some bumpers offer a hole or slot in which to access the clutch lever. If you mount the winch, and the lever doesn’t line up with the access hole, you probably need to *clock the winch*.

Clocking is a term for when you unbolt the gear housing from the winch assembly and rotate it in a way to reorient the clutch lever where it can be easily accessed. Because most of these winches are planetary gear arrangements, there’s more freedom to rotate the position of the housing.

Most winches you’ll run into can be clocked, and instructions are provided in the manual on how to do



Figure 9: This installation of a winch into a bumper was foot forward, therefore the winch had to be clocked to line the clutch lever up with the small access hole – and it’s still not easy to get to!

this. It's quite common. Be sure to check the specs and manual before you purchase.

WARRANTIES

I always say: warranties only work in your driveway. The warranty department of the winch manufacturer isn't going to be found flying out to you on the trail in a Chinook helicopter to recover your vehicle and happily replace the winch while you have a sandwich and watch them work.

A good warranty is important, but it doesn't make an inferior product superior. If it's a poor-quality product, it will let you down and it will be at the worst time. When you're stuck in the middle of nowhere, unable to recover yourself, a painful reflection on how great the warranty is will not make improve your state of mind.

Everything has a warranty these days, and most big-name winch manufacturers are good about support. Good quality products, known to be reliable and well made, are less apt to need that warranty, so choose wisely.

OTHER FEATURES

There's a good deal of other features we're seeing crammed into winches these days. Compressors, blue-

tooth controlled via phone app, overheat warning lights and buzzers, espresso makers...wait. I was joking about the espresso maker. Honestly, it wouldn't surprise me these days.

All comedy aside, the number of features can be overwhelming, and at times, useless.

You might not need (or want) bells and whistles. You might only use the winch a few times a year. You might not have a huge budget for something that is rarely used, but you don't want to be without. Sometimes, the most basic piece of machinery is the best. It's easy to get lost in features. Keep your feet on the ground and don't get caught up in the marketing hype.

CONCLUSION

There are a great many details hidden in the specs sheet of a winch. Wrapping your head around them not only helps you become a better winch buyer—it makes you a better winch operator. You're gaining understanding of how this piece of equipment works so that you can better apply it to a situation where it's needed.

I wish the best to you in your winching endeavors. Work safe, work smart, and don't forget to put your gloves on! *TCT*



The Magic Ride

Upgrading a 200 Series Land Cruiser Suspension



Magic Hour in Mojave National Preserve

"Turn the magic dial to two, please," I called out to my wife, Louise, on the other side of our Land Cruiser 200 Series.

"You said two, right?" She asked.

"You got it!"

I was traveling with my daughter, Lilly, and my wife deep in the Mojave National Preserve exploring this land of Joshua Trees and Mojave Desert secrets. We continued east on the Mojave Road; Louise immediately noticed the difference in the truck's ride.

"Why is the ride so much softer and smoother? The truck just floats over the bumps," Louise commented.

"It's the Magic Dials." I responded.

The first vehicle modification many overland and off-road enthusiasts pursue is a suspension upgrade. The stock suspension is designed and engineered for everyday use on pavement and the occasional off-road adventure. However, overlanders frequently use their vehicles to carry gear for camping and adventures on long distances off road. Overlanders generally make additional vehicle modifications such as bumpers, winch, roof racks, and larger tires, thus increasing the vehicle weight. A stock suspension just

won't support the weight.

Over the past several year, the suspension technology available from top manufacturers has evolved and continues to advance. I was lucky enough to work with ICON Vehicle Dynamics on the suspension build for my Land Cruiser 200 Series. I had recently sold my Land Cruiser 100 Series and knew exactly what the build on my new 200 Series would involve. I planned to add weight with bumpers, winch, roof rack, and larger tires—not to mention drawers and a refrigerator inside. So, an upgraded suspension was required.

ICON SUSPENSION

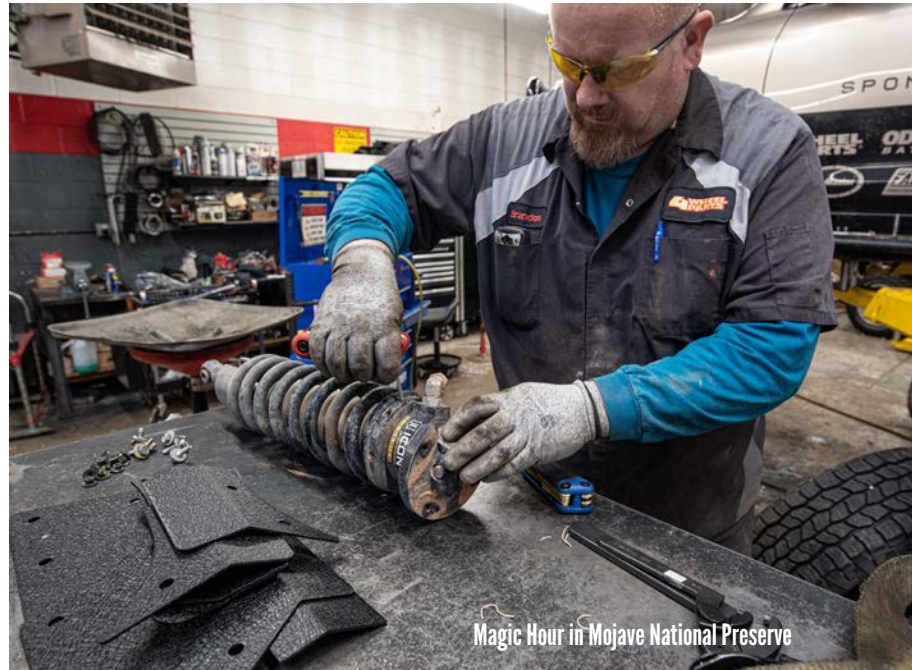
ICON Vehicle Dynamics have been designing and engineering suspension components for years. Their home base in Riverside, California offers ICON ample opportunities to test their product line in such places as Death Valley and the surrounding Mojave Desert. ICON produces numerous suspension components for a wide variety of trucks and SUVs. Everything from a Dodge Ram to a Toyota Land Cruiser, ICON has you covered.

"Wow, look at these beauties! The craftsmanship is evident," said Colen Duffey, the manager of 4 Wheel Parts in Salt Lake City, Utah. As he looked over the ICON Stage 6 suspension components, he continued, "The fit and finish are outstanding."

I almost hated taking them out of the box to be mounted. ICON creates different "stages" for their suspension packages. The different suspension packages range in price point and the specific vehicle needs. Depending on what the vehicle owner has planned for the vehicle and the intended purposes, ICON can guide a buyer in the appropriate direction.

Colen and his associates started removing the stock suspension of the Land Cruiser. After 120,000 miles, the stock suspension showed use and abuse. Luckily, I bought the Land Cruiser in Texas, so the absence of rust made relatively quick work for the guys at 4 Wheel Parts.

The ICON Stage 6 kit included everything that I needed to replace and upgrade my Land Cruiser's suspension for its intended use—a comfortable, capable overland vehicle. I wanted a vehicle able to tackle difficult off-road tracks like Mengel Pass in Death Valley, or the White Rim Trail in southern Utah. The kit



Magic Hour in Mojave National Preserve



Brandon adjusting the front coilovers for a little vehicle height.

LAND CRUISER



ICON neoprene coil/shock cover prevents dirt, salt, and grime to impact the system.



The complete front ICON system, just add tires and go!

included rear shocks, front coil over shocks, rear trailing arms, front upper control arms, and the "Magic Dials," — ICON's CDC Value (Compression Damping Control). What's great about an ICON suspension is that each component has been engineered to replace the stock components without any tweaks or hassles. Simply plug and play.

PERFORMANCE

We pulled off the Mojave Road in southern California and stood and basked in the warm sun. A nice little winter break from our mountainside home in Park City, Utah. Lilly and Louise helped change the "Magic Dials" on each of the shocks to a softer setting of two. I shifted the Land Cruiser into drive and headed east. We immediately felt the settings changes to a softer or stiffer setting. At faster speeds, the ICON suspension truly shines and the ride becomes even smoother. Yes, the ICON suspension likes speed!

The whoop-de-dos that make the Mojave Road famous were soaked up by the suspension. ICON's CDC Values can be adjusted to nine different settings. Each setting either softens or stiffens the ride. At first, I thought it was a gimmick. Was I wrong! I usually change the dials to a setting of two or three for rougher terrain and off road.

When I am back on the tarmac, I change the shocks to a stiffer setting of eight or nine. It's all personal preference. You get to decide. We all enjoyed the comfortable ride to our campsite as "magic hour" shined over the Mojave National Preserve.

The ICON's CDC Values can be changed easily. I don't need to climb under the vehicle and get dirty. I don't need any extra tools or a wrench to change the settings. Would I do so if they required it? Probably not. The simplicity of changing the settings is a notable and important feature. I just knew that if it was much more difficult, I wouldn't do it. Get out and crawl under the vehicle on a rain-soaked road? Nope. Try to find the wrench or tool in the back of the vehicle to make the change? Nope. Get in my vehicle, find the dial, and twist the dial to the specified setting? Yep. Thanks ICON!

I have used the suspension on notable roads from Utah to California. Whether it's the ruts and washboard of the Hole in the Rock Road in Southern Utah, or a dirt road in the Owyhee Canyonlands of Oregon, the suspension has handled everything astonishingly well. The CDC Values are paired with the enormous 3.0 front shocks and 2.5 rear shocks. The remote reservoir shocks offer plenty of dampening and support at speed. The billet aluminum upper control arms allow for maximum

tire articulation. I want my vehicle's tires to stay on the dirt when off road and the upper control arms allow this to happen. With the rear trailing arms, the new suspension is responsive, smooth, and adjustable. My Land Cruiser is a pleasure to drive.

TWEAKS

"We can certainly raise it up a bit," Colen replied.

"How high?" I asked.

"Well, how much lift do you want?" asked Colen.

The ICON front coilover shocks can provide up to 3.5-inches of lift and come with an adjustable collar to raise and lower the overall height of the vehicle. I desired a one-inch lift. The 200 Series sits a little lower than the older 100 Series to which I was accustomed, so raising it an inch was advantageous.

Brandon Lloyd, service manager of 4 Wheel Parts, got to work by removing the front coilover shocks and rotated the collar to tweak the height. The inch of desired height was achieved. The ease of which the overall height can be adjusted is an outstanding feature. It allows the vehicle to sit at a height that is appropriate for an individual's application. Brandon showed me how easily the vehicle's



The rear 2.5 shocks and trailing arms



The ICON Suspension not sweating Mengel Pass in Death Valley at all. The ICON upper control arms allow for tires to stay in contact with dirt and rocks.

LAND CRUISER

height can be tweaked and adjusted. He also wrapped the front shocks and coils with ICON's new neoprene shock/coil covers.

Watching a professional do the work was fun and eye-opening. The ICON system just made sense and listening to Brandon explain this-and-that made the entire system come alive. Brandon relocated one of the CDC Values for me to make it even easier and then told me, "Go drive it. Go drive it fast! It can handle it without an issue."

FINAL THOUGHTS

In today's world of overlanding, the consumer has many excellent options to upgrade a suspension. The many options have many different price points. We all know that Toyota vehicles are engineered well and can last a lifetime. However, if you ever find your vehicle in need of an upgrade to handle your overlanding, off-roading adventure, I encourage you to give the ICON

suspension a consideration. You might even enjoy turning the dials and making your ride a little "magical." Happy Trails! *167*

NOTES:

Check out ICON's website at iconvehicledynamics.com for all the latest and greatest. ICON offers an outstanding set of wheels for many Toyota models as well. My Land Cruiser 200 currently rides on ICON's Six Speed wheels—functional and appealing.

1 (951) 689-ICON [4266]

4 Wheel Parts is a national retailer that carries and sells ICON components. The stores offer installation services by trained technicians. The technicians "have been there, done that" so they can spot problems right away and make sure you drive away confident—ready to tackle your next trail.

Find a store near you. 4wheelparts.com 1-877-474-4821



EXPLORE THE ROAD NOT TAKEN

When you have engineered protection, it doesn't matter if you're fording rivers, blasting through dirt, or scaling near vertical ledges. ARB accessories give you the freedom to play harder and explore farther. The ARB Summit Bumper is available for a variety of makes and models including Tacoma, 4Runner, Land Cruiser, and Tundra.

#NEVERCOMPROMISE

ARB pioneered the multi-fold upswept and tapered wing design, which provides an enormous amount of strength and maintains an optimum approach angle.

The Summit Bumper features 60.3mm mandrel-formed steel tubing providing increased frontal protection.

Press-formed top pan and cover panel has been utilized to create a stronger center pan that features smooth, continuous edges.

The wide, split pan design provides greater airflow to the radiator and the two-piece grille.

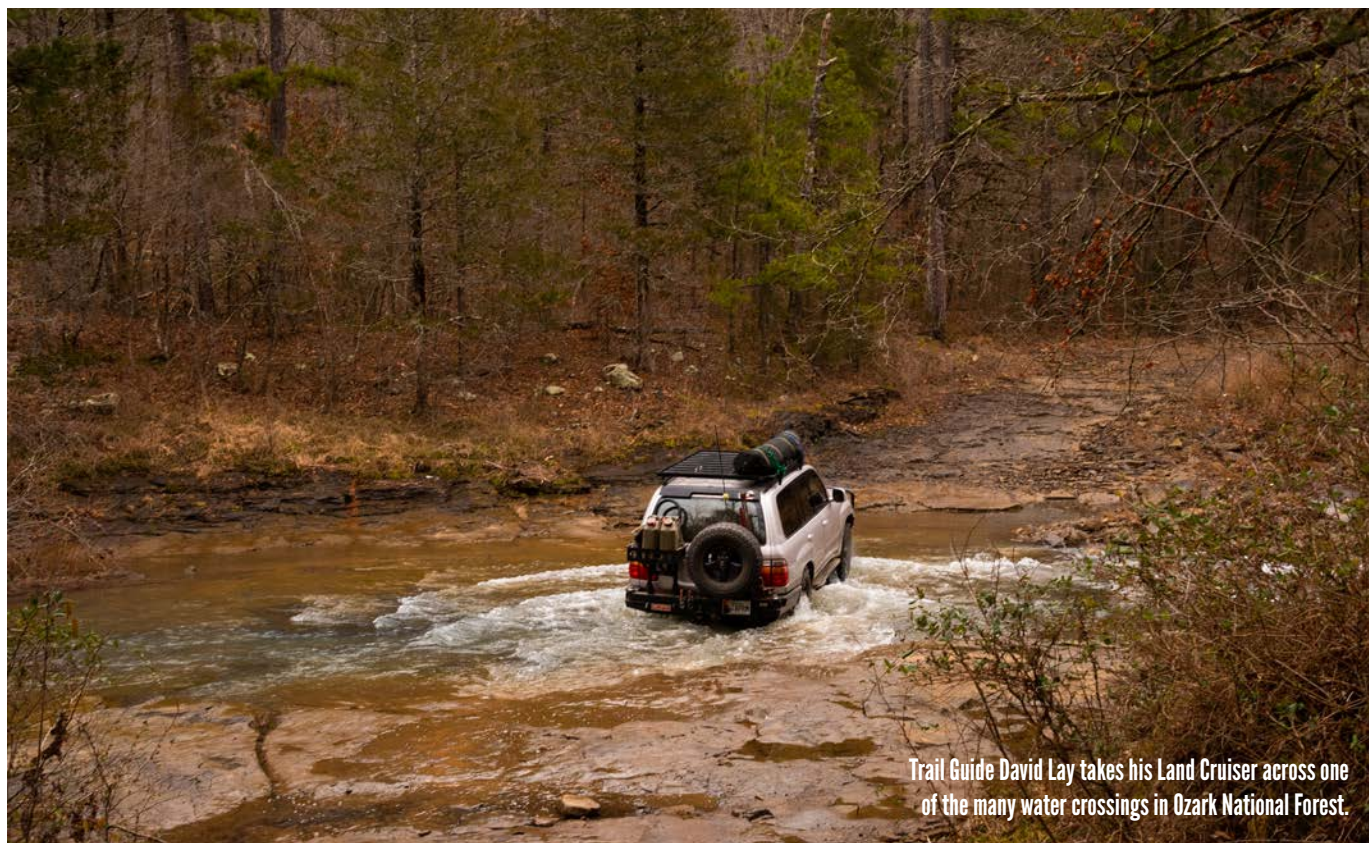
ARB assesses each vehicle's frontal crush characteristics and replicates the crush rate into the design of each airbag compatible bumper and its mounting system. This achieves maximum vehicle and passenger protection without affecting the crash pulse.

ARBUSA.COM

©2019 ARB USA, all rights reserved.

ARB
4X4 ACCESSORIES

Ozark Water Crossings with Kenda Klever R/T Tires

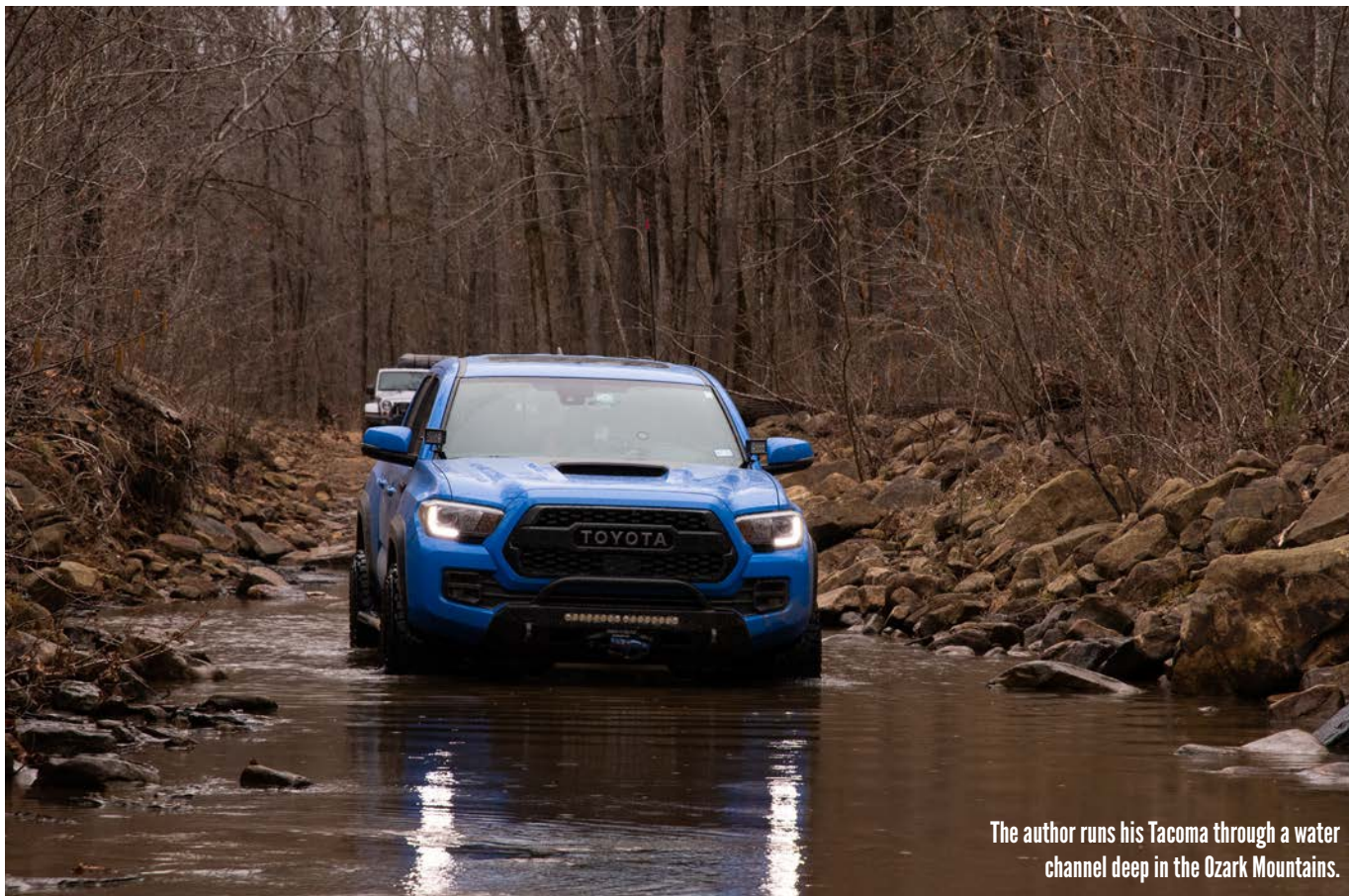


Trail Guide David Lay takes his Land Cruiser across one of the many water crossings in Ozark National Forest.

Testing the Kenda Klever R/T tires through the water crossings of the Ozark National Forest

Arkansas is home to the beautiful 1.2 million-acre Ozark National Forest. Three major rivers flow through the old-growth forest, resulting in hundreds of streams, waterfalls, and emerald pools. A network of forestry roads wind through the forest and intersect with the water ways. Bridges exist for many of the main roads, but the less traveled roads require water crossings. I reside in the Dallas, TX area, so Arkansas is my nearest off-road playground. The Ozark National Forest is five hours away and well worth the drive.

It was the destination of choice for testing the new Kenda Klever R/T KR601 E-rated 10-ply tires. I first encountered these rough terrain tires at the SEMA 2019 Kenda booth. Having owned numerous all-terrain and mud-terrain tires on my previous off-road rigs, I was intrigued by the concept of tires that had features from both standard terrains. The Triple Threat 3-Ply sidewall, aggressive styling, and promise that it handles on the road like an all-terrain had me intrigued. I obtained a set of 265/70-17 for my 2019 TRD Pro Tacoma. At this

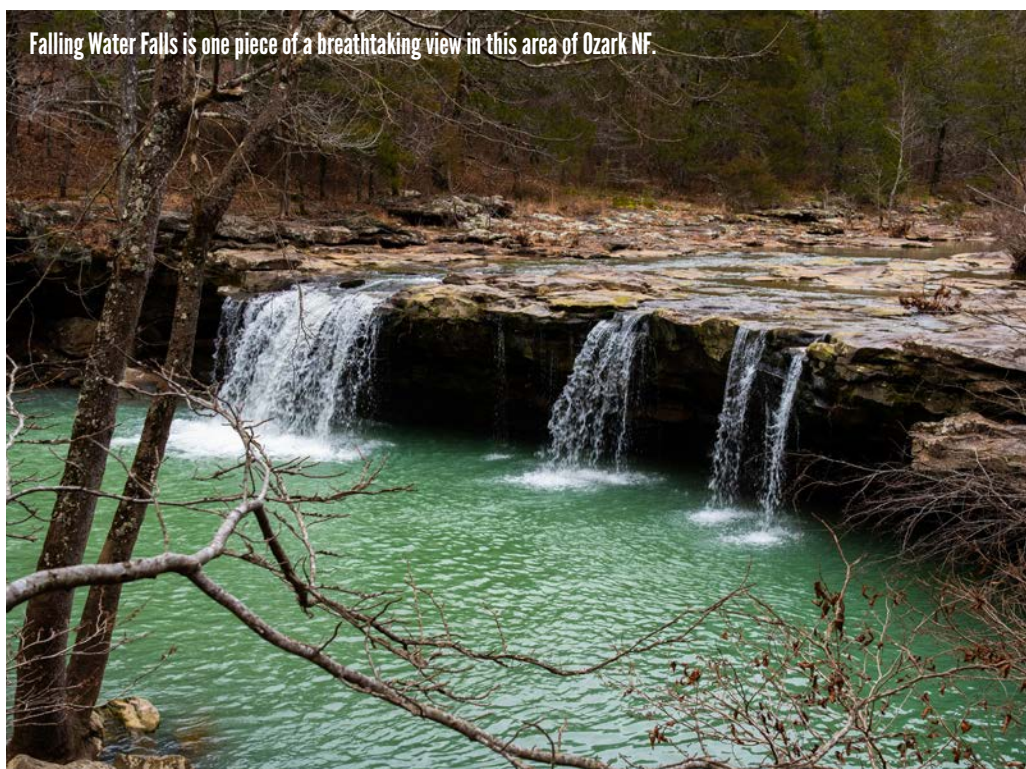


The author runs his Tacoma through a water channel deep in the Ozark Mountains.

Having owned numerous all-terrain and mud-terrain tires on my previous off-road rigs, I was intrigued by the concept of tires that had features from both standard terrains.

size, the tire diameter is 32-inches. I placed these on a set of Fuel Vector 17x8.5 wheels with -6 offset.

Kenda describes the R/T sidewall as "three full carcass plies of polyester to ensure the best amount of protection from impact damage and punctures. Aggressive sidewall tread not only gains you traction, but protects against cutting, tearing and abrasions."



Falling Water Falls is one piece of a breathtaking view in this area of Ozark NF.

TACOMA



On a cold weekend in February, I met up with a group of guys from the Little Rock, AR area. I've done trips with some of these guys in the past and am appreciative of their knowledge of the Ozark NF 4x4 trails. With leaves missing on the trees, I experienced improved visibility of the water ways and mountain range. Yes, mountain range. The tree-covered mountains are known as Boston Mountains, but are usually referred to as Ozark Mountains. While these mountains don't compare in size to the Rockies or even the Rockies, they do indeed qualify as mountains.

With record rain falls and snow hitting Arkansas during the winter, it was no surprise that water levels were higher than usual in February. We encountered muddy trails and



David Lay found the optimal route across a deep and swift river. I went next and had no difficulty navigating the same zig zag route. Todd Richardson managed to cross safely in his 4Runner while pulling his vintage aluminum military trailer.



Squeezing through the trees on one of the narrow, yet fun trails.

Between the two days of off-roading, we hit about a dozen water crossings and an additional dozen muddy flooded areas.

displaced rocks from rushing waters. For me, this was a great way to get introduced to the capabilities of my new tires. Between the two days of off-roading, we hit about a dozen water crossings and an additional dozen muddy flooded areas.

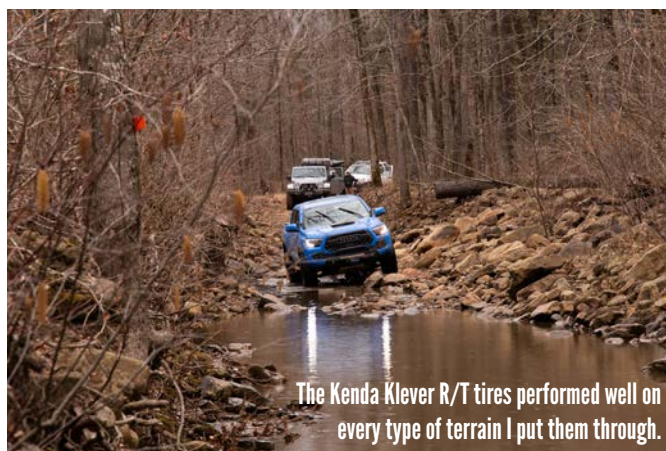
When the option presented itself, I always chose the more technical path. The tires handled everything I put them through. No slipping and sliding, never got stuck, and best of all, the mud cleared quickly from the slotted tread. Rocky climbs were conquered with ease.

On pavement, the tires handle great for heavy-duty truck tires. They do produce a high-pitched whine that becomes noticeable at 75+ mph, but no where near as loud as mud-terrain tires. These weigh in at 55-pounds. The aggressive styling provides for an aggressive stance.

This is an initial review of the Klever R/T. Throughout 2020, I will be taking these tires to Big Bend NP and Guadalupe NP trails, Escalante National Monument trails, and Colorado trails. I am eager to see how they perform on the various types of terrain. I will also be trying these on the difficult technical trails at Lone Star Toyota Jamboree.



Encountered another group originating from Missouri.



The Kenda Klever R/T tires performed well on every type of terrain I put them through.

The future of Toyota 4x4

Lockers before Lights...

That's just one of the terms you see on social media and forums when it comes to how someone should modify their brand new \$40,000+ vehicle. It's almost as common as the question "How much lift for 35's". Ahhh... perhaps I've been doing this too long.

To get to the point though: Many of us were quite disappointed when February came and went without any new 4x4/off-road or adventure related announcements from Toyota. As long-time enthusiasts that literally started a publication because of the forward thinking (for 2006) FJ Cruiser, it has been a long time since we've seen something truly innovative.

FOR THOSE THAT ARE NOT UP TO SPEED ON CURRENT TOYOTA GENERATIONS:

4Runner: 5th Gen released in 2010, updated in 2014 (6 years ago)

Land Cruiser: 200 Series released in 2007, updated regularly (13 years ago)

Tacoma: 3rd Gen released in 2016, the newest truck (4 years ago)

Tundra: 2nd Gen released in 2007, refreshed in 2014 (13 years ago)

Earlier this year, a photo leaked on the internet showing the supposed future of Toyota vehicles:



From this photo and other rumors, we hear that the Lexus LX will become the flagship luxury SUV for Toyota, and that North America will get a '5 passenger, lower cost' Land Cruiser sometime around 2023. We can only hope.

Also earlier this year, Toyota officially became the majority stakeholder in Subaru... for what it's worth.

Finally, Toyota Highlander and RAV4 sales worldwide are two of the most popular SUVs

that have ever sold. The RAV4 now offers a TRD Off Road version (LINK: <https://tctmagazine.net/latest-news/the-2020-rav4-trd-off-road-a-worthy-awd-explorer>) that may actually be useful for many people who want to 'overland'.

What it comes down to is the simple fact that Toyota, as the largest global automotive manufacturer, doesn't need to refresh our old-school body-on-frame vehicle to make ends meet.

We would like them to give us newer technology, higher performance, and better fuel economy. We would love to see OEM lockers, solid axles, diesel engines, and everything else under the sun. We are unlikely to see many (or any) of those options in North America.

The reality is that as an 'overland' industry, we're going to see more tents on top of small RAV4/Subaru crossover SUVs. Overland type events will continue to grow, and with any luck so will our publication. We will eventually get updated Tundras, 4Runners, and Land Cruisers. Maybe someday we'll even see a next-gen version of the FJ Cruiser. What I know for certain: Your new-model Toyota vehicle will be as reliable as you would expect.

As a long-time enthusiast and increasingly opinionated publisher, I welcome those that are new to the hobby, and hope that everyone finds some fun and adventure in the great outdoors. *TCT*





FORUM | REVIEWS | LOGISTICS



THE WORLD'S LARGEST COMMUNITY OF VEHICLE-BASED ADVENTURERS.

EXPEDITIONPORTAL.COM



IH8MUD.COM - Since 1992

YOUR RIGS

IT'S NICE TO SHARE!

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

» tctmag.us/myrig or tag [#thetoyotamag](#) on social.



FJC IN THE SQUEEZE

Elephant Hill Trail, Canyonlands NP, UT
From Flynn B.

62 SERIES LAND CRUISER
Courtesy of Summit 4x4 Company,
tagged on [Instagram](#).



CHIMNEY ROCK, NC

Stretching his 5th Gens
Legs a bit.
From Thomas J.