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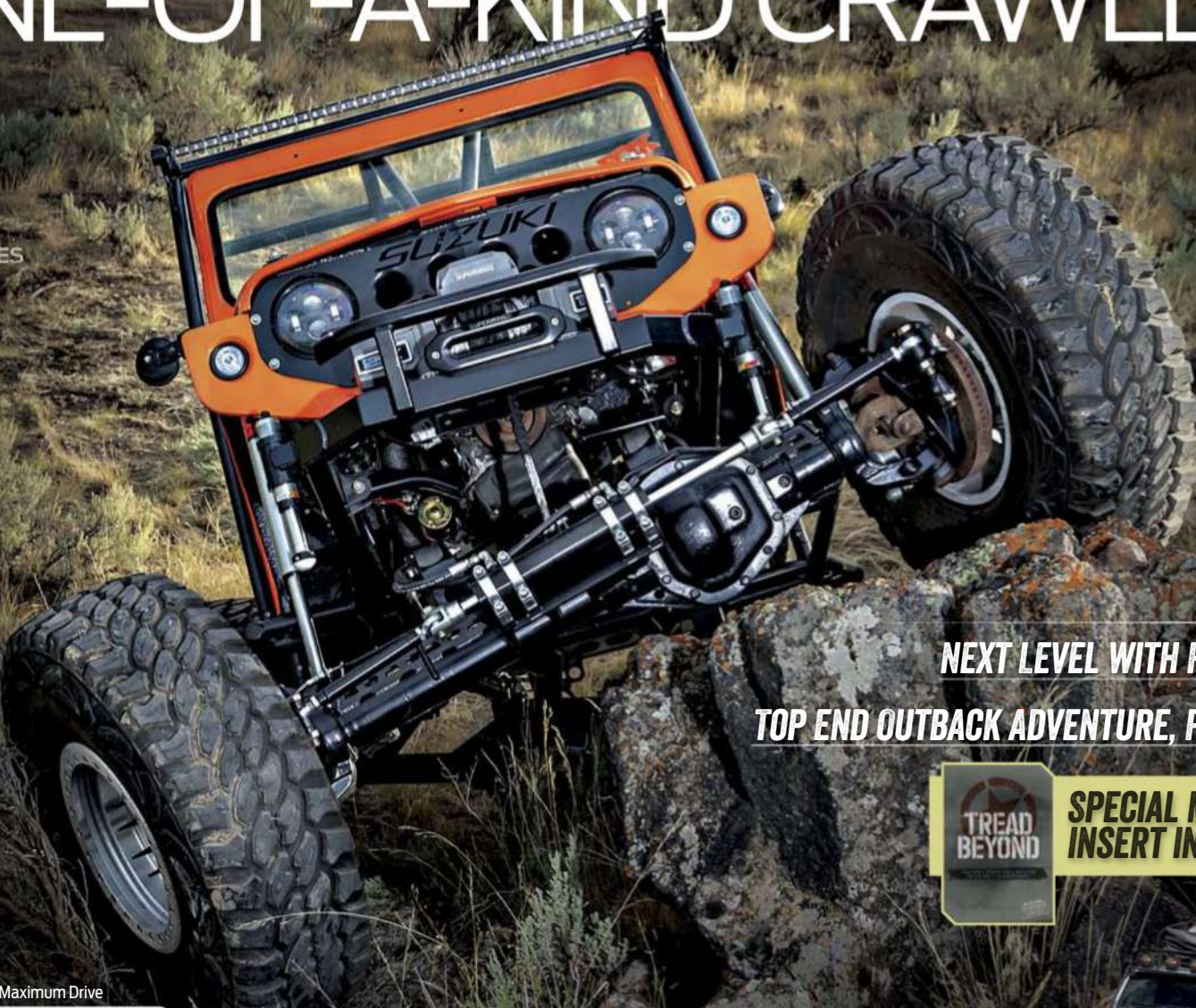


2024
NOVEMBER/DECEMBER
ISSUE

A GUIDE TO AUTOMOTIVE ADVENTURE & OUTDOOR LIFESTYLE

LJ10 JIMNY ONE-OF-A-KIND CRAWLER

TECH
GEAR
GUIDES
HOW TO
TECHNIQUES
REVIEWS



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VOLUME 10 ISSUE 5
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TREAD

BUILD RAD STUFF & EXPLORE MORE!

We are headed into my favorite time of year: LATE FALL! That means cool crisp mornings rolling into the perfect temp mid-day, and crisp evenings sitting around the campfire in a puffy jacket with friends chatting about the day's adventures.

This time of the year, I spend a lot of time hanging around Swan Valley on the South Fork of the Snake fishing and making plans for fall and winter steelhead trips around the PNW.

Where have your adventures taken you so far this year? Have you been staying close to home or getting out and exploring new places? Do you have something epic planned? Let us know—and send us your pictures and share your stories with us!

Our November/December issue has a little of everything. You will find an article from the Centerforce Adventure Run, Part 2 of "The Top End in the Outback," and much more. You'll meet Jake Winterton's one of a kind LJ10 Jimny, a fully outfitted Tundra, ARB's purpose-built 4Runner, and a wild desert-raced F-2000.

We've also got a great highlight on a Roush-built F-150, a massive amount of tech articles, and a special mini-magazine for your page-flipping pleasure.

And don't forget about all our great columns, including Made the Cut, Tread on Trails, Outfitted, and Gear Box. They each feature the latest accessories you need when you're out on the road (or trail) and highlight a great place for your next off-road adventure.

Thank you all for being a part of the TREAD community! If you have some amazing trip pics to share, go to Tread.com to upload photos, memorable moments, and more! Now BUILD RAD STUFF & EXPLORE MORE!

Please feel free to reach out to me directly as well if you have an epic build or adventure planned. Email dence@engaged.media and share what you have!

Happy trails,
Devan Ence



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OUTFITTED

A Roundup of the Latest Automotive Accessories

COMPILED BY TREAD STAFF



↑ 04

↓ 01



↑ 05



↓ 03

01. DEEPSLEEP/ OVERLAND SOLO CAMPING MAT

If you're looking for the comfort of home with high performance and durability for rugged outdoor adventures, take a look at Deepsleep's Bronco bed, an in-vehicle sleep system. Founded in 2016, Deepsleep released its "Solo Mat" camping bed in 2022. It's designed to fit new 6th Gen two- and four-door Broncos like a glove. Specs that make this bed system popular and unique include:

- » It is designed to contour around wheelwells and extend past the console area, optimizing use of space for 6-foot, 4-inch sleep length.
- » Self-inflating air and foam construction offers one of the highest R-value ratings available for comfort and great packability.
- » You can purchase a single (solo) size for one, still leaving room for fridges/gear; or purchase two to fit together as a set for two adults and a child or pup.
- » The optional leveling mat piece is a convenient fix to level up the rear cargo drop for an even sleeping surface.

MSRP \$189 (Range starts)

deepsleepoverland.com



02. HUSKY LINERS/ RVL FENDER FLARES

Husky Liners RVL Fender Flares not only feature an integrated LED running light/turn signal, but they also seamlessly transition into a mud flap at the rear, giving you double-duty protection that perfectly blends with the contours of your make and model. The RVL Fender Flares are available in a smooth, matte black, paint-ready finish and are backed by Husky's limited lifetime warranty.

MSRP - \$499.99

huskyliners.com

03. TIMBREN/ 2024 TOYOTA TACOMA SUSPENSION ENHANCEMENT REAR KIT

Unstable loads while towing and hauling don't just make for a comfortable ride. Difficult handling, rear sag, and corner sway create dangerous driving conditions for you, your passengers, and other vehicles. Whether you're towing your RV across the country or hauling hay down the highway, the Timbren SES kits level your load. It makes for a safe, controlled ride that's so smooth, you might forget you're towing altogether.

MSRP \$316.90

timbren.com

04. ICON/ 2024 TOYOTA TACOMA STAGE 3 SUSPENSION SYSTEM

ICON Vehicle Dynamics 2024 Toyota Tacoma Stage 3 suspension system includes vehicle-specific tuned 2.5 Series coilover shocks, featuring internal reservoirs for exceptional cooling properties and ICON-engineered coil springs for superior vehicle "feel" through the range of travel. These coilovers are height adjustable from 1.25-3 inches of front lift height over stock, allowing the use of larger, more aggressive wheel and tire combinations. The combination of front differential drop brackets and ICON's specifically designed coilover lengths maximizes the available front suspension travel and prevents CV bind. Additionally, polyurethane differential mounting bushings replace the soft OE bushings to help limit differential movement under load. The system is an excellent choice for those drivers looking to enhance the capabilities of their pickup on the road as well as in the dirt.

MSRP \$3,643.20

iconvehicledynamics.com

05. KC HILITES/ GRAVITY TITAN

The saga of Titan started with the Gravity Pro6—a game-changer at a time when nothing else came close. Leveraging KC's rich experience, the company took the nostalgia for classic round lights and the demand for LED light bars, and infused all of that together with cutting-edge GRD optic technology. This move didn't just light up trails; it sparked a revolution in off-road lighting. Titan stands as a testament to KC's commitment to push boundaries and fuel off-road adventures.

MSRP \$1,149.99 (Range starts)

kchilites.com



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www.AB2Fabrication.com

GEAR BOX

Supplies for Life Off the Beaten Path

BY TREAD STAFF



01. DJI POCKET 3

The all-new Pocket 3 features a powerful 1-inch CMOS sensor that puts detail-rich imaging right in the palm of your hand. With a 2-inch rotatable touchscreen and full-pixel fast focusing, go horizontal or vertical for more precise awareness and control. Features like 4K/120fps, three-axis mechanical stabilization, and a host of intelligent options make Pocket 3 ready for any moving moment.

MSRP: \$519

www.dji.com

02. GRAYL 24OZ GEOPRESS PURIFIER

This water purifier requires no setup time and makes 24 ounces of clean drinking water in a blazing fast 8 seconds (5L/min) for stealth on-the-go filtration and purification. Covert Edition bottles discreetly provide clean drinking water anywhere on Earth with unrivaled ease, speed and convenience. It's a highly coveted everyday carry—sip or chug, fill a hydration reservoir, fill another water bottle, or use for backcountry cooking.

MSRP: \$99.95

www.grayl.com

03. VORTEX CROSSFIRE HD 10X50 BINOCULARS

You know what they say about people who assume you can't get HD optics, rugged performance, and high end form-factor in a value-priced binocular? They clearly haven't checked out the Crossfire HD. Add in the included GlassPak binocular harness for quick optic deployment in the field as well as superior protection and comfort. The Crossfire HD truly is a rare find.

MSRP: \$259.99

www.vortexoptics.com

04. VOORMI MEN'S PUFFY

Redefining winter warmth, the VOORMI puffy jacket elevates the classic down jacket with nature's finest. It combines 750-fill-power goose down for exceptional warmth with Voormi's innovative dual surface wool liner that wicks away moisture and regulates temperature, keeping you dry and comfortable on any adventure is all in a day's work for this jacket.

MSRP: \$449

www.voormi.com

05. KORKERS NEO FLEX ANKLE BOOT

The "world's most comfortable rubber ankle boot" features all-weather utility for muck, rain, cold weather, and boat fishing. Most rubber ankle boots are made with a hard rubber midsole, which leads to discomfort and pain after a long day on the boat. Korkers' Neo Flex ankle boots are constructed using Cush-Tech EVA, which is designed to provide shock absorption and rejuvenating energy with every step.

MSRP: \$119

www.korkers.com

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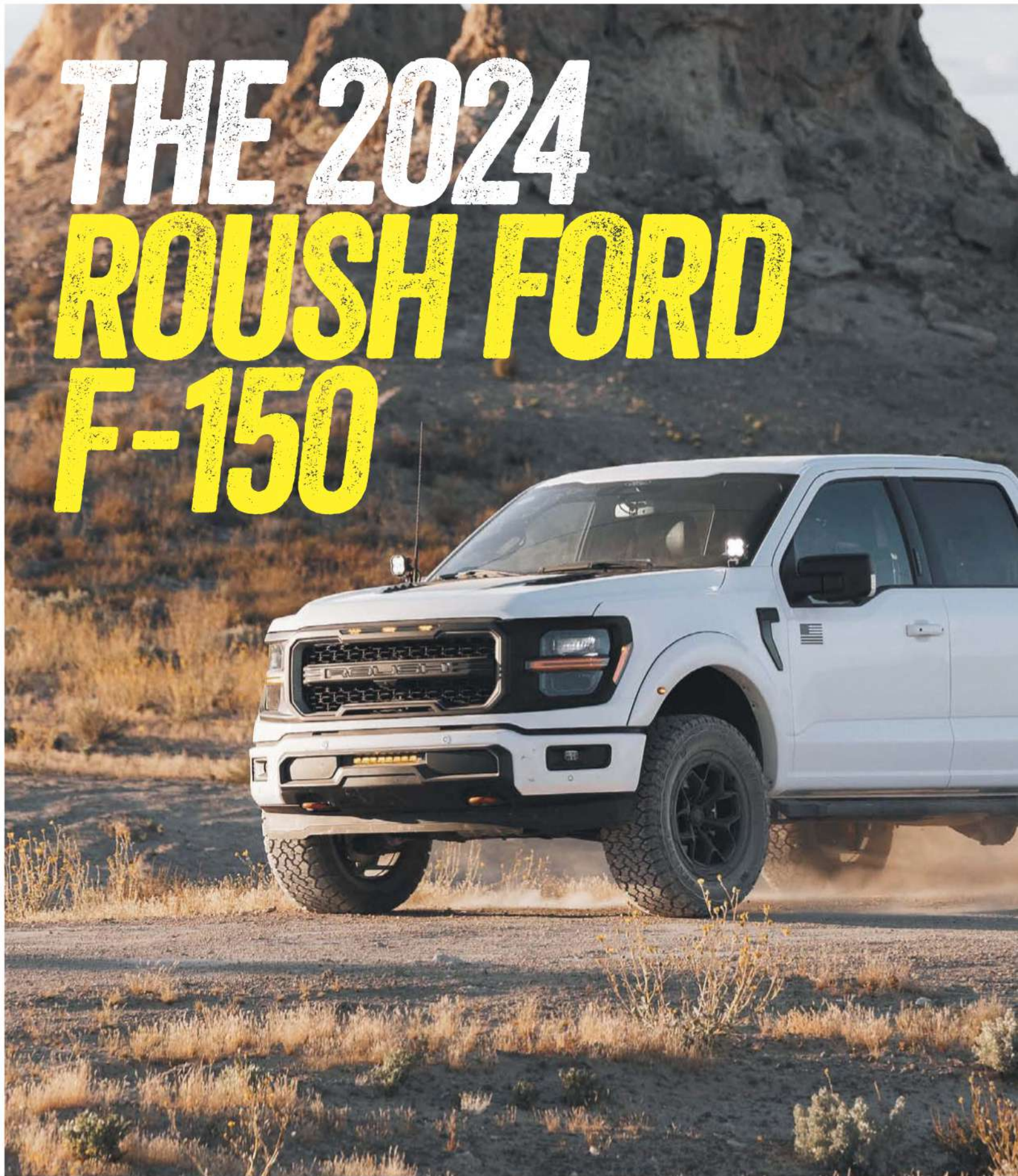
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THE 2024 ROUSH FORD F-150





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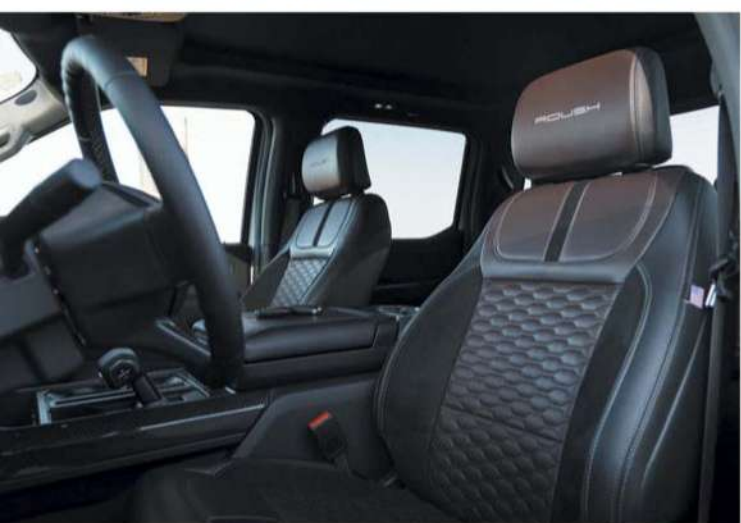
WORDS AND PHOTOS BY KAHN MEDIA

For some, building a vehicle is as much fun as actually using it. They enjoy the process of diving deep into the details to research and find the right aftermarket parts for their rides.

After that step, the tools come out to carefully install those parts to begin transforming a stock vehicle into what they envision. Long nights in the garage are finally rewarded with a more capable vehicle that can take on challenging terrain.

Others just want to get out in the dirt and hit the gas. For them, wrenching on a vehicle is more of an arduous task that usually results in lots of cursing, broken tools, and busted knuckles. Some simply don't have the spare time to burn trying to build a vehicle. While that process could always be outsourced to a shop, finding a reliable one that will work within the right timeframe can always be a roll of the dice.

If you are part of this latter group that doesn't have the time or will to build their own vehicle, there is another enticing option. You can walk right into a Ford dealership and buy a Roush Performance



vehicle that is built and ready to go. Best of all, Roush Performance vehicles have been carefully crafted by the experts at Roush, with high-quality components chosen and engineered to expand capability. Topping that is Roush Performance vehicles come completely backed by warranties and can be financed directly through a dealer. You really can have your cake and eat it, too.

Another plus? Roush Performance vehicles are pretty damn sweet. Roush's latest 2024 Ford F-150 is a perfect example, as it tastefully blends well-thought-out modifications with the rugged and aggressive look that Roush is known for. It is not over the top or gaudy but functional, clean, and vastly more capable than a stock F-150.

Roush begins transforming the F-150 from stocker to dirt-capable with a Roush Performance coilover suspension. The new dampers





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Built upon decades of off-road racing victories, the Eibach PRO-TRUCK-LIFT combines a series of PRO-LIFT-KIT springs and PRO-TRUCK Sport shocks to create a perfectly tuned suspension system engineered for both on and off-road performance. The Stage 1 kit features adjustable clip heights for either lift or leveling.

PRO-TRUCK-LIFT Stage 1 Available for the 2023-2024 GMC Canyon & Chevrolet Colorado



eibach.com



Eibach®



boost the front of the truck by 2 inches for a leveled look and provide more rebound and compression control in uneven terrain. With the extra altitude of the nose, clearance is made for 33-inch General Tire Grabber A/TX tires wrapped around 20-inch matte black wheels.

Anyone who has ventured into the wild at night knows that additional off-road lighting is essential. Providing extra illumination for the 2024 Ford F-150 is a Roush Off-Road Lighting System that cleanly integrates a light bar into the front grille and reverse lights into the rear bumper. Optional ditch lights from Diode Dynamics are ideal for widening the field of light and seeing off to the sides of the F-150. All of the lighting and additional accessories are controlled by the Integrated Overhead Auxiliary Switch Panel, which strategically places switches within easy reach.

The Ford F-150's Roush High-Flow Grille visually separates it from a more pedestrian model. The grille's unique design allows more



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airflow to the radiator, while its illuminated badging provides visual flair. Roush Hood Heat Extractors help evacuate the additional airflow from the engine bay while adding to the rugged look. Painted fender flares, a new front bumper cover and optional graphics packages further elevate the clean, functional and aggressive look of the 2024 Roush F-150. Beyond visual appeal, a Roush Performance Active Exhaust System with swanky laser-etched tips lets you hear what your right foot is doing.

A host of optional packages is available for those looking to differentiate their Roush F-150 further. While the inside of the truck is already swathed in Roush carbon-fiber trim and aluminum pedal covers, it can be further upgraded with coffee brown or black leather seating. Audio enhancement is also available via the Roush Performance Audio System by Alpine, which provides a crystal-clear sound experience. The handy Roush Ready Package adds function with a center console vault for securing valuables, a utility kit and a jump starter.

Roush takes the latest generation of America's favorite truck and adds to its already impressive capabilities with a carefully crafted list of modifications backed by a warranty and decades of experience. For those looking to bypass the sometimes-fraught build-it-at-home experience, it offers a much easier path to off-road capability combined with peace of mind. 📍



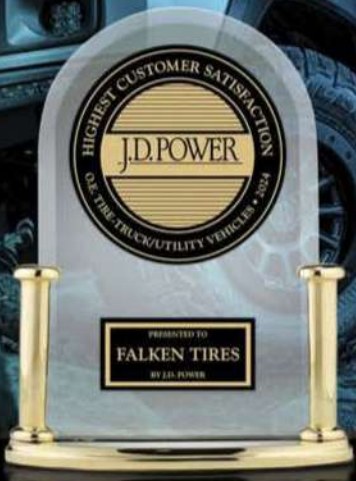
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RARE AND BUILT RIGHT



The Story Behind Jake Winterton's 1972 Suzuki LJ10 Jimny

STORY BY DEVAN ENCE
PHOTOS BY BART CEPEK

When it comes to unique builds, few can top what Jake Winterton has done with his 1972 Suzuki LJ10 Jimny. Painted in House of Kolor's Tangelo Pearl Orange, this rare off-road machine is something you don't see every day. According to Jake, "No one has built one the way I have," and that's a statement backed by one-of-a-kind modifications and creative fabrication. Only three of these models were imported into the USA, and this one is setting a new standard.

From the start, the goal was clear. Jake wanted to build something entirely custom, from the frame to the drivetrain. A full-body stretch of 24 inches and bead-rolled sides that match the factory body lines was just the beginning. Backyard Customz handled the bodywork, and the result is a unique fusion of factory aesthetics with modern touches. The stock fenders were customized, and the addition of JW Speaker black LED projector headlights and a custom LED chase bar round out the lighting package.





Under the hood, this Jimny is anything but stock. Jake opted for a 2.4L K24 engine from a 2004 Acura TSX. To make the engine fit, he hand-built engine mounts and used a Fabbot billet adapter to mate the engine to a Chevrolet TH350 transmission. The custom swap was a challenge, but the outcome speaks for itself. The engine features a top-mount turbo manifold, a hand-built intake, and a Hondata Racing ECU, controlled through a Carrot Top Tuning harness. Exhaust is routed through a 2.25-inch system, also hand-built by Jake.

The transmission setup is just as custom as the engine. The TH350 transmission, fitted with a reverse manual valve body, is paired with a custom-built torque converter and TCI shift kit. A 10x12 rear-mounted transmission cooler keeps things in check during those





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tough climbs. Power is sent to an Atlas 4-speed transfer case with a low-range ratio of 10:1, giving the LJ10 serious rock-crawling capabilities.

For axles, Jake sourced a Ford Super 60 and Sterling setup from a 2013 F-350. Both axles run 5.38 gears and are locked with spools, making this little rig ready for the toughest trails. Tom Woods shafts with 1350 U-joints ensure the drivetrain is as solid as the rest of the build. The braking system includes stock F-350 brakes and a Wilwood dual master cylinder for precise stopping power.

The custom work doesn't stop at the drivetrain. Jake fabricated a full custom frame, extending the wheelbase to 117 inches. The suspension is a 4-link setup both front and rear and features Fox 2.0 air shocks all around. With 40-inch Pro Comp Xtreme MT2 tires



Heartbreak Ridge

Distance: 4.4 mi

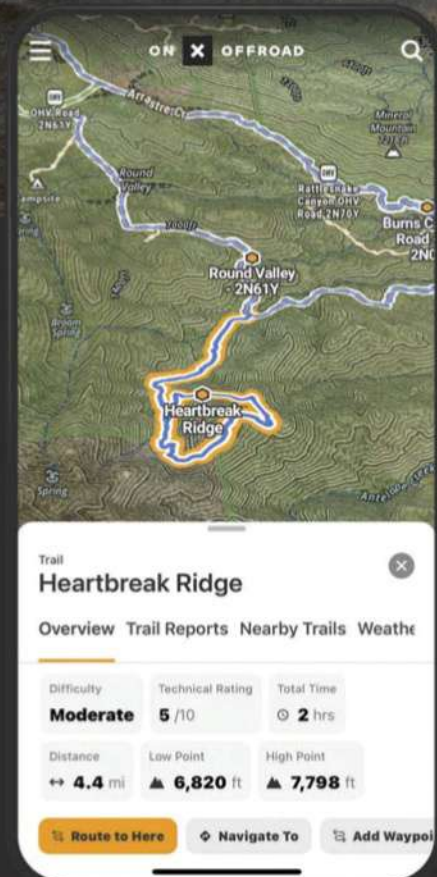
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ON  OFFROAD





wrapped around 17x10 MG aluminum beadlock wheels from Sidetracked Offroad, the Jimny is well-prepared to handle whatever terrain it faces.

Inside, the build is all about functionality. The Jimny features Mastercraft suspension seats in black cloth,

ensuring comfort on and off the trail. The fully lined interior makes cleanup after a muddy day in the mountains easier. A full exo-cage, fabricated by Backyard Customz, ensures the safety of everyone inside while giving the Jimny a rugged, trail-ready appearance. Instrumentation is simple and effective,

safeguard your adventures



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with a Speedway steering wheel leading the way.

The journey for Jake and his Suzuki hasn't been without its challenges.

"Nothing was easy with how small it is," Jake admits.

Getting all the parts to work together in such a compact vehicle took time and effort, but the result is a one-of-a-kind build that's turning heads wherever it goes.

Already showcased at the Snake River Truck Show, Jake's Jimny is gearing up for events like Winter 4X4 Jamboree and other rock-crawling events across Utah. Despite the success, Jake is already thinking ahead, with plans to add a turbo soon to boost the performance even further.



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For anyone looking to attempt a build like this, Jake offers some simple advice: "Best of luck." With a truck this rare, there are no shortcuts. "I wish I had found some," Jake jokes, but in the end, every custom-built part and every hour spent in the garage was worth it.

Jake's Suzuki LJ10 Jimny is not just a truck—it's a piece of off-road history, reimagined and rebuilt for the modern age. It's the rarest of builds, combining old-school charm with cutting-edge off-road capability. 🏠

UPGRADES



1972 Suzuki LJ10 Jimny

OWNER:

JAKE WINTERTON
SOUTH WEBER, UT

ENGINE & DRIVETRAIN:

ENGINE: 2.4L K24 FROM A 2004 ACURA TSX; CUSTOM ENGINE MOUNTS, FABBOT BILLET ADAPTER; CHEVROLET TH350 TRANSMISSION; REVERSE MANUAL VALVE BODY, TCI SHIFT KIT; ATLAS 4-SPEED TRANSFER CASE (10:1 LOW RANGE); TOM WOODS DRIVESHAFTS WITH 1350 U-JOINTS; FRONT AXLE: FORD SUPER 60 FROM A 2013 F350, 5.38 GEARS, SPOOL; REAR AXLE: FORD STERLING FROM A 2013 F350, 5.38 GEARS, SPOOL

SUSPENSION:

CUSTOM 4-LINK FRONT AND REAR; FRONT SHOCKS: FOX 2.0 AIR SHOCKS; REAR SHOCKS: FOX 2.0 AIR SHOCKS; WHEELBASE: 117 INCHES

WHEELS & TIRES:

TIRES: 40/13.5R17 PRO COMP XTREME MT2; WHEELS: 17X10 MG ALUMINUM BEADLOCKS FROM SIDETRACKED OFFROAD

BODY & ARMOR:

24-INCH BODY STRETCH; BEAD-ROLLED SIDES TO MATCH FACTORY BODY LINES; JW SPEAKER BLACK LED PROJECTOR HEADLIGHTS; LED CHASE BAR; FULL CUSTOM EXO-CAGE BY BACKYARD CUSTOMZ

INTERIOR & ACCESSORIES:

MASTERCRAFT SUSPENSION SEATS; FULLY LINED INTERIOR; SPEEDWAY STEERING WHEEL

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ADDING A SPARE

**We Install an Exterior
Tire Rack to Our Bronco**

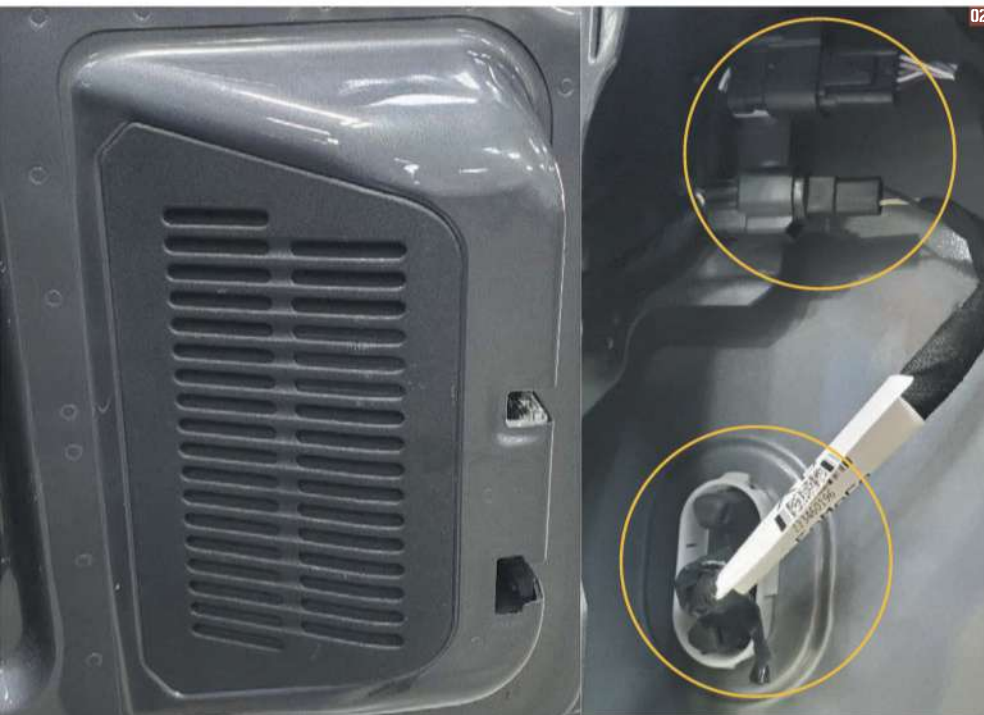
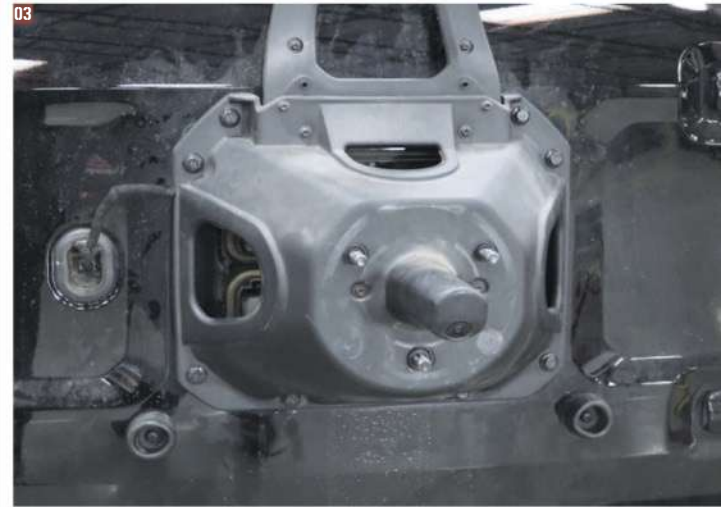
WORDS AND PHOTOS BY SMITTYBILT

Being able to carry an oversized spare tire on the exterior tailgate is important, and the new Smittybilt Bronco HD Pivot is up to the task. Made of monoblock aluminum material, the single-action component bolts on quickly and easily, strengthening the tailgate while allowing up to a 40-inch spare. The tire mount is adjustable, thanks to chromoly mounting brackets, and maintains the easy, single-action opening and closing of the tailgate. The auxiliary accessory mount eliminates tailgate sagging and rattles that would likely occur with an oversized tire attached to the stock bracket. The design allows the third brake light and backup camera to continue to function with the oversized tire in place.

Off-roaders who favor larger size tires will appreciate having a full-size spare attached to the exterior of their Bronco, providing them with the security if a replacement is needed in remote locations. The Smittybilt HD Bronco Pivot will strengthen the Bronco tailgate and remove the stress placed on the vehicle's exterior structure. Let's install it! 

Step 1: Remove the spare tire from the factory tire carrier using a 19mm socket and ratchet wrench.

Step 2: On the inside of the swing gate, remove the plastic cover and disconnect the three connectors.



Step 3: Using a 13mm socket, remove the eight bolts that secure the carrier to the swing gate. Then, carefully remove the carrier. Remove the two bump stops using a Phillips head to remove the outer screws, and then remove the bumper stops by pulling outward.

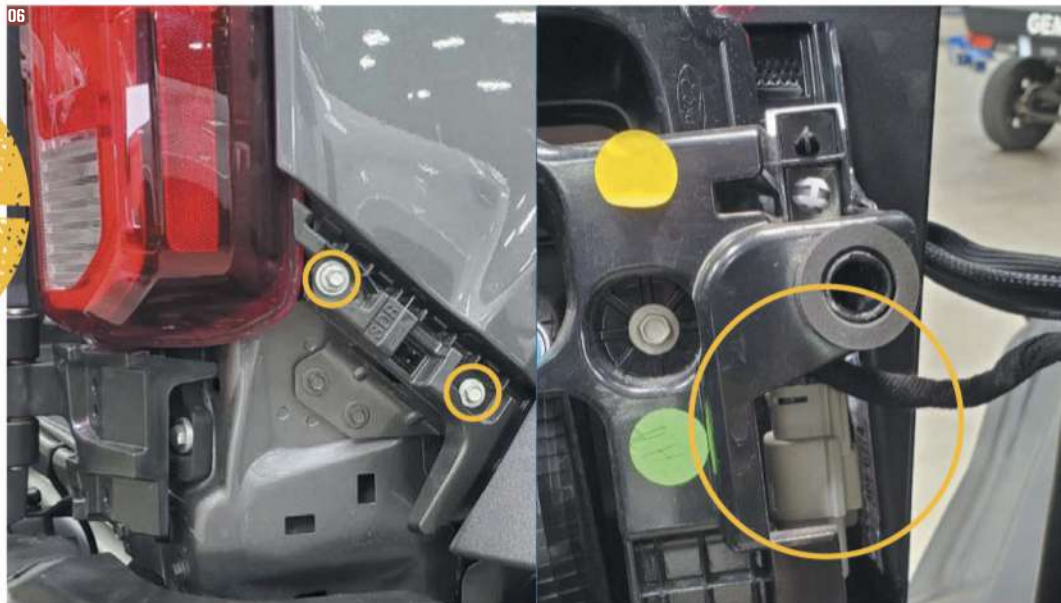
Step 4: With the swing gate open, remove the four Phillips push pins. Then, remove the two 10mm bolts and remove the plastic/rubber panel cover.



Step 5: Remove the two 8mm bolts. Then, use a plastic pry tool and pry the lower panel out starting from the left corner. Continue to slowly pull the panel out to access the remaining two screws.

Step 6: With the panel removed, remove the two 10mm bolts, and then disconnect the taillight plug prior to pulling out the taillight.

Step 7: Prior to continuing, disconnect the shock from the swing gate, and then close the swing gate. Next, insert a small block of wood (with a rag wrapped around it) between the swing gate and the bumper. This will prevent the swing gate from sagging when removing the hinge bolts. Next, using a T40 socket, remove the four bolts from the swing gate and use a 13mm socket and wrench to remove the six bolts that hold the hinges to the body.



Step 8: Install the HD Pivot Carrier where the stock hinges were mounted using the included six M8-1.25x40mm bolts. Leave the hardware loose. Then install the included four M8-1.25x50mm bolts to the swing gate. Leave this hardware loose as well to allow for adjustment.



Step 9: Install the stock carrier to the HD Pivot Carrier. Use the included spacer behind the driver side of the carrier. Then, install the eight M8-1.25x35mm bolts making sure not to pinch the wire harness during reinstallation. Leave the hardware loose for now.

Step 10: Adjust the swing gate making sure the body lines match. Once satisfied, tighten all the hardware and torque to spec. Reconnect the wire harness and reinstall the rubber grommet.

Step 11: Reinstall the bump stop using the factory push pins and the included bump stop spacers.



Step 12: Reinstall the spare tire and torque the lug nuts to spec. Installation is now complete.

INSTALLATION TOOL LIST

- 1/4-INCH AND 3/8-INCH RATCHET WRENCH
- SCREWDRIVERS, FLAT AND PHILLIPS HEAD
- PLASTIC PANEL PRY TOOL
- T40, 10MM, 13MM, AND 19MM SOCKETS
- 8MM, 10MM, AND 13MM WRENCH



The beautiful backcountry of Arizona provided the stunning backdrop for the Centerforce Adventure Run.



Centerforce Marketing Manager Trent McGee's well-sorted 1964 International Scout proves you don't need a modern vehicle to journey deep into the backcountry reliably.



A Backcountry Ode to the Manual Transmission

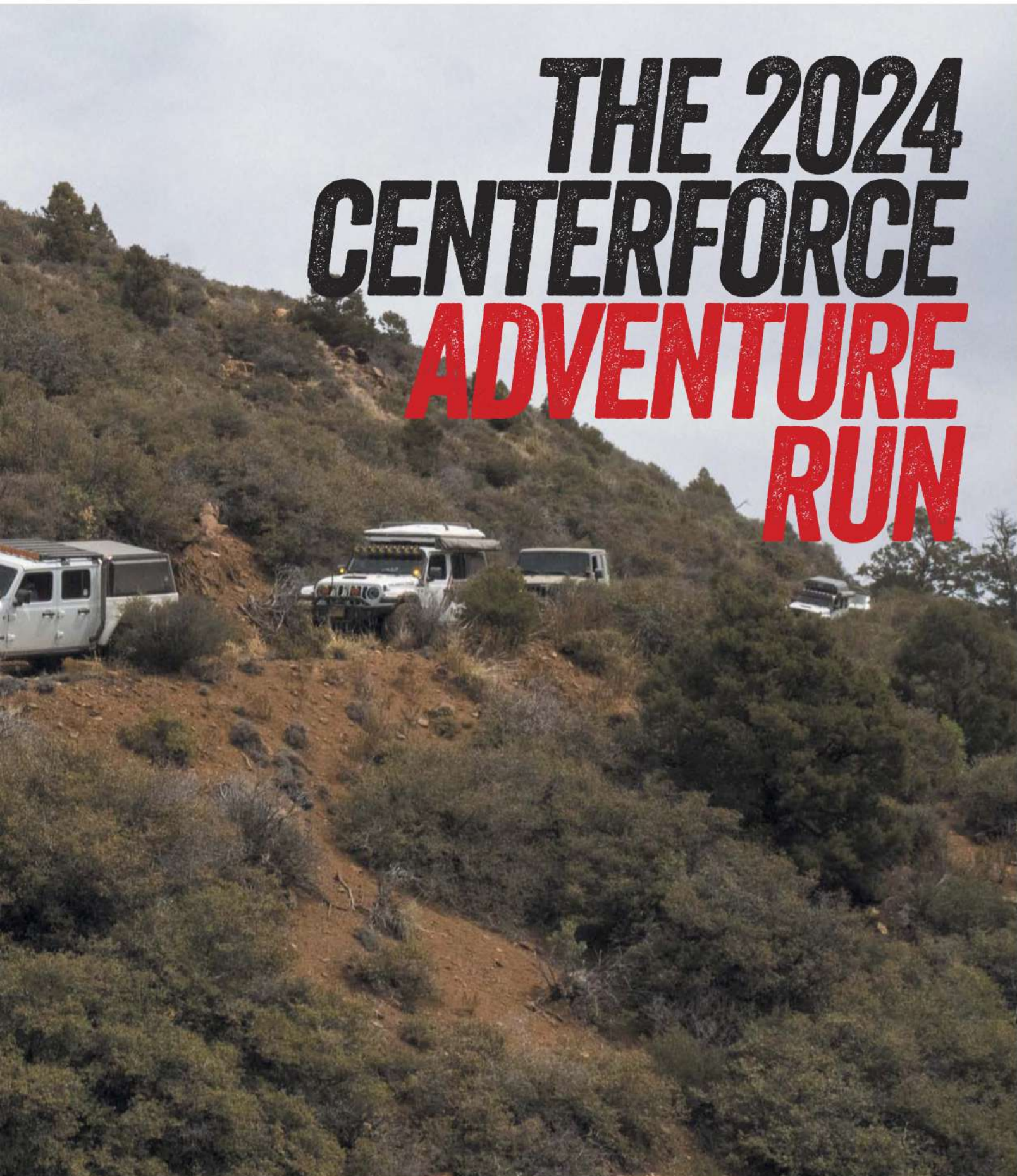
WORDS AND PHOTOS BY KAHN MEDIA

Like buffalo, manual transmissions once roamed in great numbers across this beautiful land. Preferred for their simplicity and ruggedness, they were found in everything from one-ton work trucks to Jeeps to sports cars. With less heat generation and complexity to deal with, manual transmissions were often the choice of off-road adventurers exploring the wilds of Moab, the Colorado high passes, and the Sierras in the 1950s, '60s and '70s. As a bonus, their lower first gears made them better for technical trails, and they were usually cheaper, too.

Three-pedalers are sadly now a dying breed. Currently, only 36 vehicles are available in the United States with a manual transmission. Of those 36, the vast majority are sports cars, and only four really matter: the Ford Bronco, Toyota Tacoma, Jeep Gladiator and Wrangler. Every year, that list gets shorter as more people forget the joy of manually rowing through gears and the feel of a clutch pedal under their left foot. Still, a select group of individualists buck



THE 2024 CENTERFORCE ADVENTURE RUN



Another awesome example of capable older iron on the Centerforce Adventure Run was Tim Jackson's 1968 Jeep M175.



Some of the slot canyons were tight squeezes for full-size rigs on the run, like Georgia Jackson's nicely built Dodge Ramcharger.



that trend and prefer manual transmissions over automatic slush boxes.

Centerforce Clutches is intimately familiar with the joys of using a manual transmission. Since 1982, it has manufactured high-performance clutches for a wide variety of applications. An innovator in using centrifugal force and weights, its first clutch was patented as the Centerforce Weighted Clutch System. The unique design increases clamping loads while still maintaining easy pedal efforts. Products like the Centerforce I, II, and Dual Friction clutches quickly became popular among off-roaders for reliability under harsh conditions without the excessive pedal forces usually associated with high-performance clutches.

On the second day of the run, participants would encounter the most challenging terrain as they made their way to Gold King Mansion.



For the fourth time, Centerforce gathered a group of stick-shift enthusiasts for the Centerforce Adventure Run. The goal of the three-day trek isn't to tackle the toughest terrain but rather to explore the beautiful backcountry of Arizona. Most think only of deserts and heat when it comes to the Grand Canyon State, but there is so much more to Arizona than that. Rugged mountains, pine forests, abandoned mines,



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Jeff McAllister's trusty Jeep Cherokee shows you can have a solid rig for exploring without blowing budgets.



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Liz and Avis brought their 2019 Toyota Tacoma on the Centerforce Adventure Run as a shakedown for competing in the upcoming Rebelle Rally.



The desert floor gave way to the pine trees and cooler temperatures of Arizona's many mountain ranges.



slot canyons and epic scenery can be found throughout the state, and the Centerforce Adventure Run would feature all of them.

The 300-mile journey started on the desert floor and made its way deep into the Hualapai Mountains before overnighting at the abandoned Boriana Mine complex. On the second day of the Centerforce Adventure Run, participants explored deeper into the Hualapais and tackled some of the adventure's most challenging terrain on the way to the Gold King Mansion. The higher elevation brought cooler temperatures and numerous pine forests to meander through before stopping for the night in the Prescott National Forest.

On the final day, the group would turn south and make their way out of the forest to conclude the epic trek at Centerforce's Prescott headquarters.

The Centerforce Adventure Run was about more than seeing the sights of Arizona. It formed a bond between participants in a way that only multiple days of off-road exploration and adventure can. A tight-knit group of stick-shift enthusiasts was brought even closer together with a shared love of manual transmissions. While smaller in number every year, they keep the manual alive as their preferred transmission. Long live the manual transmission. 🚗



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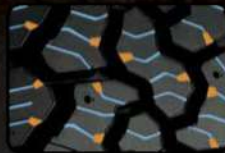
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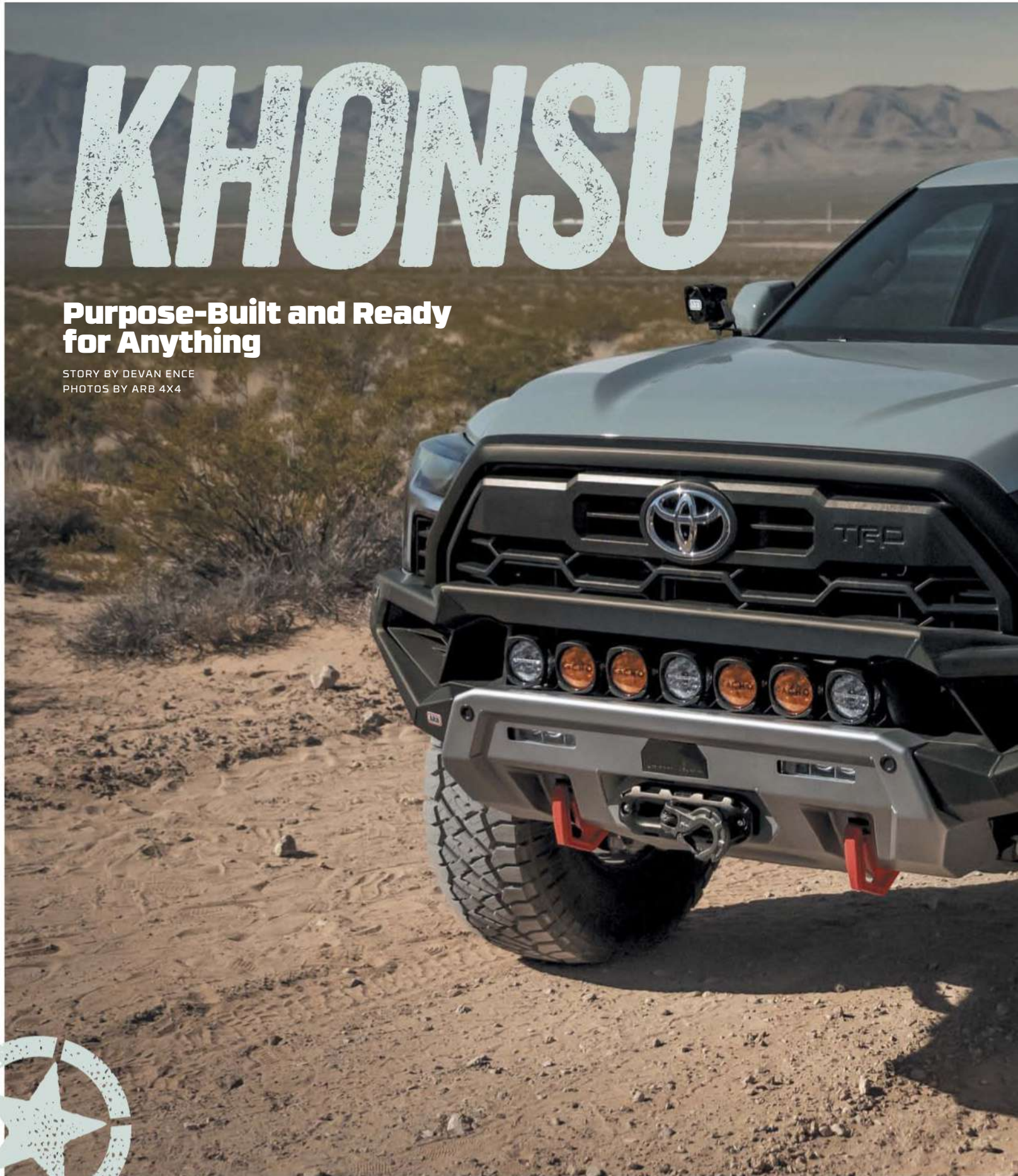


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**Purpose-Built and Ready
for Anything**

STORY BY DEVAN ENCE
PHOTOS BY ARB 4X4







The 2023 Toyota Tundra, finished in Lunar Rock paint, is more than just a truck—it's a carefully crafted machine built to conquer whatever lies ahead. Owned by ARB 4x4, this Tundra has been meticulously outfitted with a range of upgrades designed to maximize its potential.

Under the hood, the Tundra houses a 3.4L twin-turbo V-6 engine that reliably delivers power. While the engine remains largely stock, it's the carefully selected modifications that elevate this truck's performance, making it a true off-road contender. The transmission and transfer case, both factory-installed, work in tandem to provide seamless power delivery and traction management, but it's the addition of ARB components that truly set this build apart.





At the front, the ARB Desert front bumper immediately catches the eye. It's a practical upgrade, offering both protection and functionality. Mounted to this bumper are Nacho Quatro lights, positioned on both the bumper and the A-pillars, ensuring that no matter the time of day or night, the path ahead is always well-lit.

Suspension is the backbone of any serious off-road build, and this Tundra doesn't disappoint. The entire system has been upgraded with Old Man Emu (OME) MT64 components, including front and rear springs, as well as front and rear shocks. This setup not only provides the necessary lift but also enhances the truck's ability to handle rough and uneven terrain. With this suspension, the Tundra is ready to take on any challenge, from rocky trails to deep ruts.



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Tires are crucial for off-road performance, and this build features Nitto Ridge Grapplers in a 37/12.5R17 size. These tires are mounted on Method Race Wheels, specifically the 318 Method Bronze model in a 17-inch size. Together, the wheels and tires offer the grip and durability needed to tackle the toughest trails, ensuring that the Tundra remains firmly planted on the ground.

ARB Air Lockers are another key addition to this build. These lockers give the driver the ability to control traction by locking or unlocking the differentials as needed. Whether navigating loose gravel or crawling over boulders, these lockers provide the extra control necessary to keep the Tundra moving forward.





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Inside, the Tundra has been equipped with a host of ARB accessories that make it as functional as it is formidable. An ARB bed rack, combined with a BASE rack system, provides a solid foundation for carrying all the gear needed for extended off-road adventures. Attached to the rack are ARB side steps, a shovel holder, Pelican cargo boxes, and an ARB Elements Fridge Freezer, making this truck a true mobile basecamp.

The ARB LINX interface ties it all together, allowing the driver to control various accessories from a single, convenient unit. The inclusion of an ARB portable twin air compressor ensures that tire pressure is never an issue, whether inflating tires after a day on the trails or powering air tools in the field.

This Tundra has already made its mark at major events, including SEMA 2023 and Overland Expo West. These showcases are where the best of the best come to prove their mettle, and this build has held its own among the elite. Every modification has been put to the test, proving that this Tundra isn't just built to look good—it's built to perform.

Building a truck like this isn't just about adding parts—it's about making the right choices. For the owner, the easiest part of the process was knowing what he wanted to achieve. The challenges that arose were met head-on, with solutions found through careful planning and the use of high-quality components.

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In the end, what sets this Tundra apart is its cohesiveness. Every element, from the suspension to the interior accessories, has been chosen with a

specific purpose in mind. This isn't just a collection of bolt-ons—it's a well-thought-out build that's ready to tackle whatever the trail throws its way. 🛞

UPGRADES



2023 Toyota Tundra

OWNER: ARB 4X4

AUBURN, WA

ENGINE & DRIVETRAIN: ENGINE: 3.4L TWIN-TURBO V-6; ARB AIR LOCKERS; TRANSMISSION: FACTORY; TRANSFER CASE: FACTORY

CHASSIS & SUSPENSION: LIFT: OLD MAN EMU (OME) MT64; FRONT SPRINGS: OME MT64; REAR SPRINGS: OME MT64; FRONT SHOCKS: OME MT64; REAR SHOCKS: OME MT64

WHEELS & TIRES: TIRES: 37/12.5R17 NITTO RIDGE GRAPPLER; WHEELS: 17-INCH METHOD RACE WHEELS, 318 METHOD BRONZE

BODY & ARMOR: BUMPER: ARB DESERT FRONT BUMPER; LIGHTS: NACHO QUATRO, BUMPER/A-PILLAR

INTERIOR & ACCESSORIES: ARB BED RACK WITH BASE RACK; ARB SIDE STEPS; ARB PORTABLE TWIN AIR COMPRESSOR; ARB ELEMENTS FRIDGE FREEZER; ARB LINX INTERFACE; PELICAN CARGO BOXES



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Installing AERO6-DM Direct-Mount Front Brake Kits from Wilwood

WORDS AND PHOTOS BY WILWOOD DISC BRAKES

When truck enthusiasts hear the term “bolt-on” or “easy installation,” many will roll their eyes and may even back away from the claim, as they know it’s seldom true. While some performance brake kit installations can be a bit difficult and time-consuming, we want to show you in this installation that the AERO6-DM front kits from Wilwood Disc Brakes are not that difficult and do not take too much time at all. Besides some possible backing plate trimming (varies depending on the application) and brake line bleeding to finish the installation, they truly are bolt-on.

AERO6-DM 6-piston calipers were designed to directly mount to OE spindles to provide a large-capacity brake torque solution with large diameter well-vented rotors for heavyweight and

extreme-duty vehicles. These direct mount kits for trucks and SUVs provide enhanced braking power with improved pedal feel and confidence to better handle towing and overlanding gear weight. Kits will fit most 17-inch (or larger) wheels and even bigger tire upgrades that aid your off-roading prowess.

The kits are fully compatible with OE master cylinder output and work with ABS setups. Wilwood’s OEM-style one-piece rotors provide maximum cooling for sustained-high-heat durability for those wanting to take advantage of added gear to make camping and overlanding safer and more enjoyable.

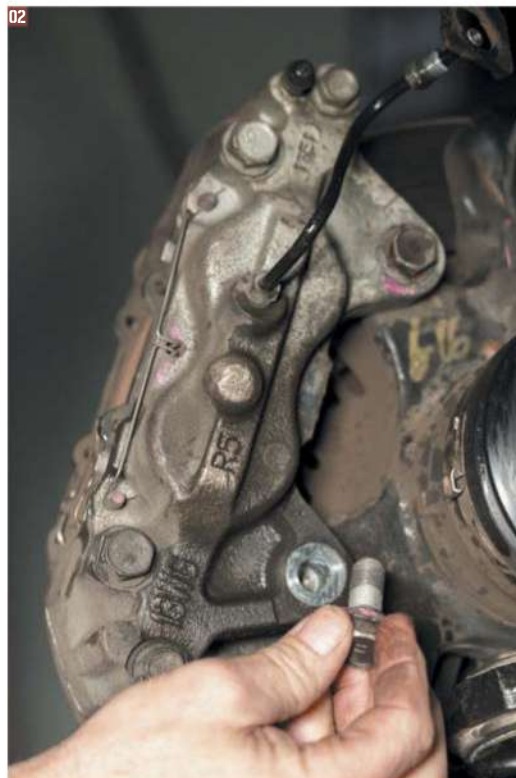
Follow along as we show you the key steps to install the AERO6-DM brake kit on a 3rd-generation Tacoma. Check out the many other year, make, model fitments for 4Runner, FJ, Lexus GX, Ford and Chevy trucks, Bronco, Jeeps, and SUVs at the Wilwood website. [🔗](#)

BEFORE BEGINNING, VERIFY WHEEL CLEARANCE USING THE DIAGRAM PROVIDED.

1. Wilwood Aero6-DM Brake Kit Parts List: Calipers, rotors, pads, SS flexlines, and step-by-step install instructions. Calipers are available in 26 powdercoat color options.



2. With the vehicle properly secured according to the manufacturer's instructions, remove the wheel, disconnect the brake line at the chassis hard line and plug to prevent dripping, and then remove the OE caliper and brake hose.
3. Remove the OE rotor. Use bolts (not included) in any available threaded rotor holes to help break free stubborn rotors from the hub.



4. Remove any nicks or burs on the hub, upright, dust shield, and caliper mounting bosses. Clean and de-grease to provide smooth, clean surfaces.
5. Depending on the vehicle model, the dust shield may require trimming to provide adequate clearance. (The assembly instructions will provide details.)
6. Slide the rotor onto the hub, ensuring it is flush to prevent rotor runout. Install three lug nuts, and hand-tighten them to hold the rotor in place temporarily.





SEMA SOUTH HALL BOOTH #
44053
SHOW

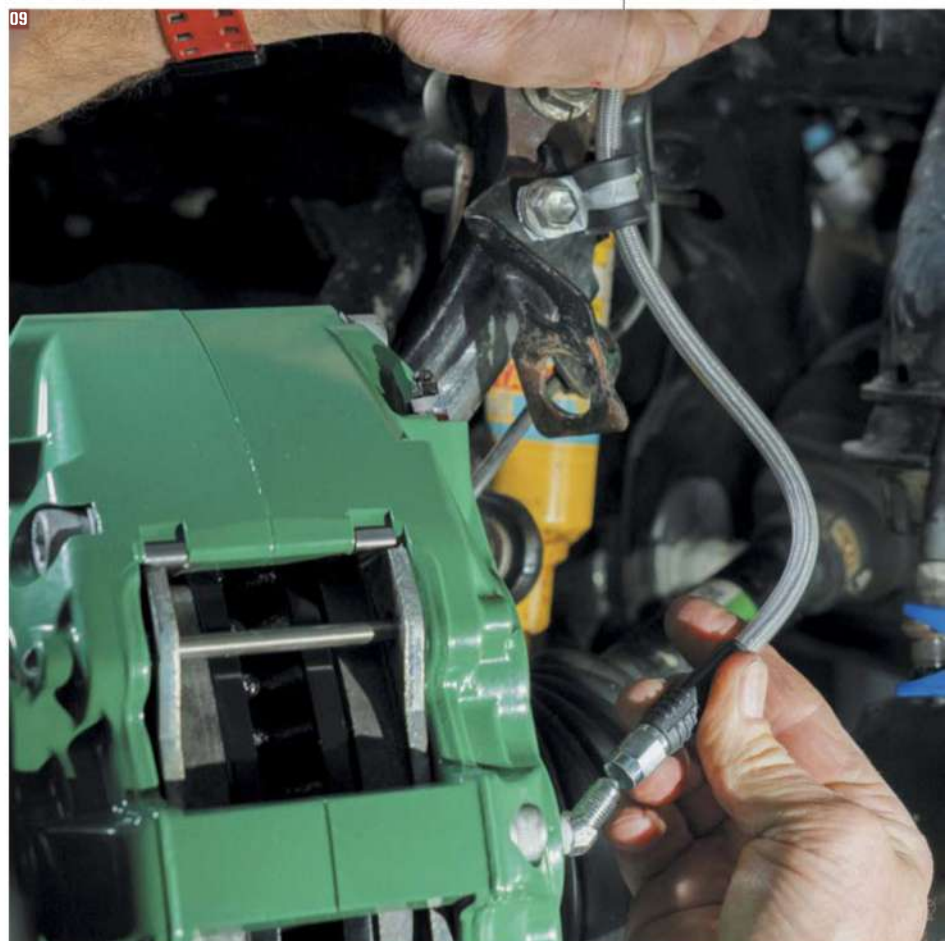
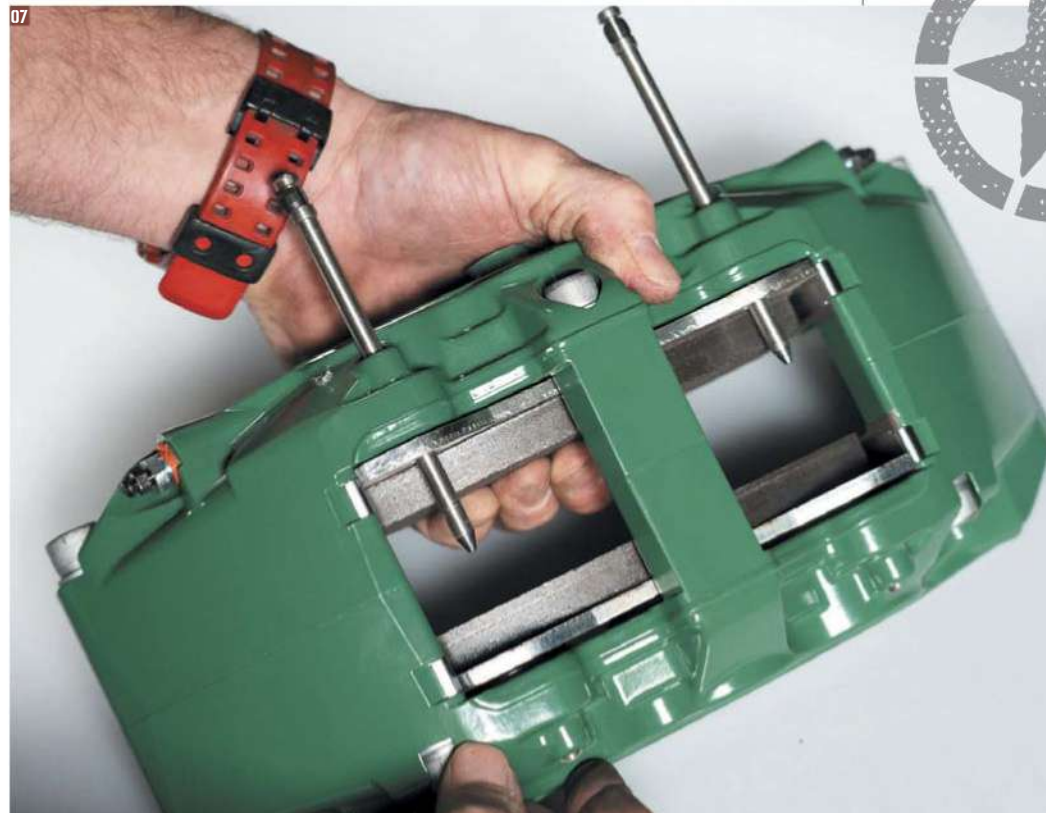


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7. Insert the brake pads into the caliper (friction material facing rotor, yes, this needs to be said) and slide in the pad retaining pins to hold pads in place. Use a small punch and hammer to tap in the pin heads until fully seated.
8. Mount the proper left-hand or right-hand caliper (largest piston is at rotor exit in forward rotation) onto the mounting bosses of the upright using bolts and washers provided, apply red Loctite 271 and torque to provided value. Next, temporarily mount the wheel and torque to manufacturer's specs and ensure the wheel rotates freely.
9. Attach the provided Wilwood flexlines to the caliper (note: OE rubber lines generally cannot be adapted to Wilwood calipers), and route to the existing hardline as shown in the instructions using the provided hardware. NOTE: Ensure hoses are routed to prevent contact with moving suspension, brake, or wheel components.



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Replace your damaged or rusted stock oil pan with the PPE Cast Aluminum Oil Pan for superior cooling and performance. Its thick A356.0-T6 aluminum construction surpasses stamped steel, featuring deep exterior fins for efficient heat dissipation. Cast gussets enhance durability, and we've upgraded the drain plug to include our exclusive PPE Neodymium Magnet Equipped Billet Hardened Stainless Steel Drain Plug. This powerful magnet removes harmful ferrous metals from your oil, unlike the factory plug. Elevate your vehicle's performance, aesthetics, and quality with this simple upgrade.

Available in: Raw (214052200)

Brushed Black (214052210)
Black (214052220)

2016-2022 Jeep Grand Cherokee w/ ZF-8 Speed Transmission - Transmission Fluid Thermal Bypass Valve

The PPE Transmission Fluid Bypass Valve enhances protection, boosts fluid flow to the transmission cooler, and increases cooling capacity with its easy-to-install billet aluminum design.

Available in: Black Billet Aluminum (225065200)

2012-2022 w/ ZF-8 Speed Heavy-Duty Cast Aluminum Transmission Pan

Avoid costly factory pan replacements during ZF 8-speed transmission servicing with PPE's removable filter and durable cast aluminum pan. Just drain, change the filter, and reinstall. The aluminum pan holds an extra quart of fluid and features cooling fins for better heat dissipation, enhancing lubrication, extending transmission life, and reducing costs. The PPE Heavy-Duty Aluminum Transmission Pan also includes a Neodymium magnet-equipped drain plug to protect the transmission from harmful ferrous contaminants.

Available in: 2012-2022 Jeep Grand Cherokee
3.0 Liter Engine w/Turbocharger
6 Cyl. 3.6L
8 Cyl. 5.7L Hemi
8 Cyl. 6.4L

Available in: Raw (228053400)
Brushed (228053410)
Black (228053420)



SCAN TO LEARN MORE!

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10. Bleed the brake system at the upward-facing bleed screw on each caliper. Refer to the installation instructions for proper procedure and double-check for leaks as instructed.
11. Install the wheels and torque the lug nuts to manufacturer's specifications. Bed in the brakes according to the instruction sheet.



INSTALLATION SHOULD ONLY BE PERFORMED BY PERSONS WITH EXPERIENCE INSTALLING AND PROPERLY OPERATING DISC BRAKE SYSTEMS.



RIGID



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RIGID introduces the all-new 360-Series family of LED lights. The optimized beam pattern project up to 23,232 raw lumens and are protected by an aluminum housing, that features a blacked-out circuit board, prominent RIGID branding, and limited lifetime warranty. Making them the most robust and useful round lights on the market. Choose between a 4-inch, 6-inch or 9-in light, all offering a 17 degree beam pattern. The Amber Pro series is only available in Spot beam pattern. RIGID's 360-Series round lights seamlessly integrate into multiple OEM applications and makes it easier than ever to Own The Night. Harness sold separately.

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*As a manufacturer of high-quality LED lights, we take immense pride in our work and stand behind our products. All RIGID products feature a non-transferable limited lifetime warranty.

FROM DREAM TO REALITY







The Twin-Turbo 1969 Ford F-100 Race Truck

STORY BY DEVAN ENCE
PHOTOS BY EVAN WALSH

For John Yeiser, building a 1969 Ford F-100 wasn't just a project—it was the realization of a dream inspired by the 1960s Indy 500 race cars, fighter planes, and modern design elements. After eight years and \$700,000, this silver metallic F-100 is now a race truck that stands out not only for its performance but also for its unique approach to combining classic inspiration with cutting-edge technology.







This build didn't happen overnight. It began with a vision to create a race truck unlike any other. The foundation was a complete ground-up build, starting with a custom tube frame chassis designed to handle the demands of both high-speed racing and rugged off-road terrain. The original Ford frame was replaced, and everything from the suspension to the drivetrain was meticulously planned and executed by some of the best in the business.

Under the hood, the F-100 boasts a Ford 460 ci V-8 engine, built by Norm Sappenfield at NCP460. This engine is anything but stock. It features Trick Flow heads, a Comp Cam, and JE pistons, all working together to deliver power and reliability. The engine is also equipped with twin Turbonetics turbochargers, dual Aeromotive intercoolers, and quad Turbonetics waste gates. These components push the engine's output to over 1,000 horsepower, making it a true powerhouse on the track. The exhaust system, complete with Borla mufflers, ensures that this truck sounds as fierce as it performs.



The transmission is equally impressive. A Culhane Racing C6, built in 2006, handles the massive power from the V-8. It's been outfitted with custom ratios (4:12) and a Fluidyne transmission cooler to keep temperatures in check. The truck's drivetrain is finished off with a Sany Cone 9-inch front drive axle and a fully locked rear axle, both designed to deliver the torque needed to tackle any terrain.

The suspension setup on this F-100 is a testament to the amount of thought and engineering that went into this build. With 28 inches of front travel and 36 inches of rear travel, this truck is ready to handle everything from the highway to 4-foot whoops in the desert. The suspension is managed by Sway-A-Way shocks, providing the necessary control and stability.

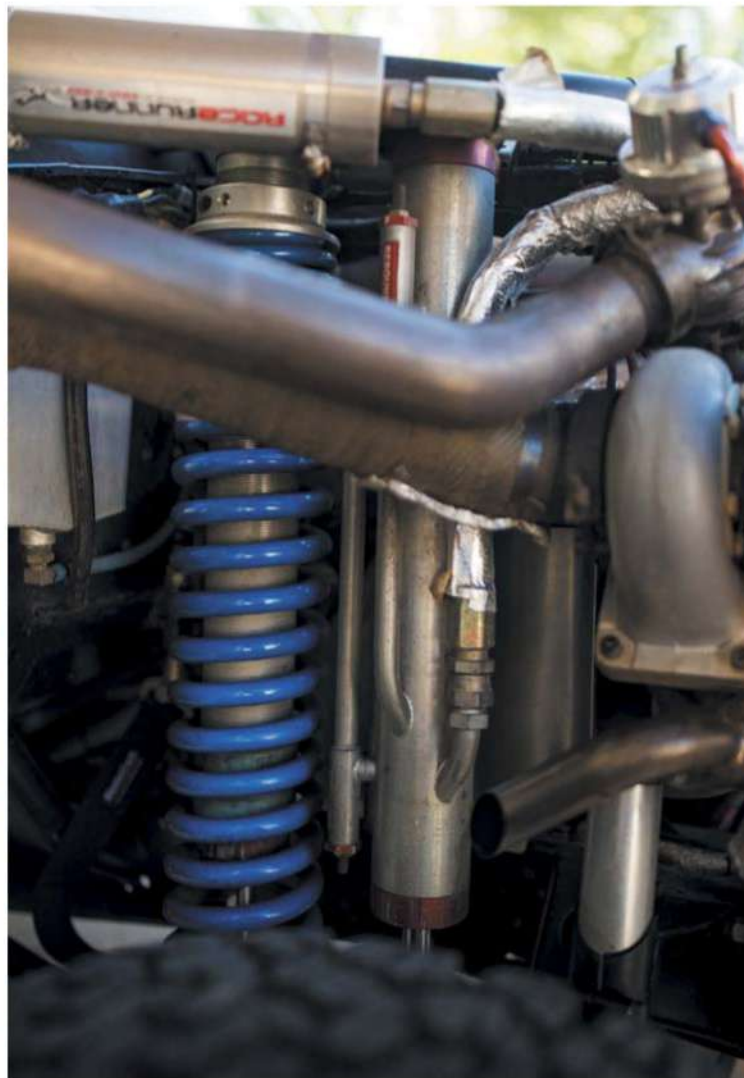
Bodywork on the F-100 was no small feat. All custom fiberglass panels were designed and molded by Dan Ellis and Peter Morley of Prototype Concepts, with final production handled by Fiberwerx in San Diego. The entire



truck is finished in a striking Silver Metallic, painted by Ruley Paint in San Diego. This custom bodywork not only gives the truck a sleek, modern look but also pays homage to the design inspirations that fueled the build.

Inside, the F-100 continues to impress. The interior features custom-designed components that complement the Mastercraft seats. The dashboard, inspired by early 1960s Corvettes, is crafted from raw aluminum, keeping the design clean and functional. All switches are located on the top visor, with gauges placed strategically on the dash for easy access during races. The result is an interior that's as functional as it is stylish, providing everything needed for high-speed performance.

John's F-100 has seen its share of action, having competed in the NORRA 1000 twice, finishing once. It's also taken on numerous trails in the California desert, including the Mojave Trail between Barstow and Needles. But for John, the journey doesn't end here. With a brand new custom-built NCP572 ci Eliminator engine waiting to be installed, the next phase of this truck's life is already in motion.





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Building this truck wasn't easy. From the challenges of fitting twin turbos in the engine bay to ensuring the truck could handle both off-road terrain and highway speeds, every step required precision and ingenuity. But for John, every minute, every dollar, and every challenge was worth it.

"Have fun building your dream," he says. "I started with a \$2,000 budget. Fifteen years

later and two separate builds, the truck is finished."

John's 1969 Ford F-100 is more than just a race truck—it's a testament to the power of persistence, creativity, and the pursuit of a dream. With over 1,000 horsepower and a design that draws from the best of the past and the innovations of the present, this F-100 is truly one of a kind. 🚛

UPGRADES



1969 Ford F-100

OWNER:

JOHN YEISER
SANTEE, CA

ENGINE & DRIVETRAIN:

ENGINE: 460 CI V-8, FORD; TURBO: TWIN TURBONETICS; INTERCOOLER: DUAL AEROMOTIVE; EXHAUST: CUSTOM WITH BORLA MUFFLERS; TRANSMISSION: CULHANE RACING C6 (2006); FRONT DRIVE AXLE: SANY CONE 9-INCH; REAR DRIVE AXLE: FULLY LOCKED

SUSPENSION:

FRONT TRAVEL: 28 INCHES; REAR TRAVEL: 36 INCHES; FRONT SHOCKS: SWAY-A-WAY; REAR SHOCKS: SWAY-A-WAY

BODY & ARMOR:

BODY: CUSTOM FIBERGLASS PANELS BY FIBERWERX; PAINT: SILVER METALLIC BY RULEY PAINT, SAN DIEGO

INTERIOR & ACCESSORIES:

SEATS: MASTERCRAFT; CUSTOM RAW ALUMINUM DASHBOARD INSPIRED BY 1960S CORVETTES; ROLL CAGE: CUSTOM CHROMOLY

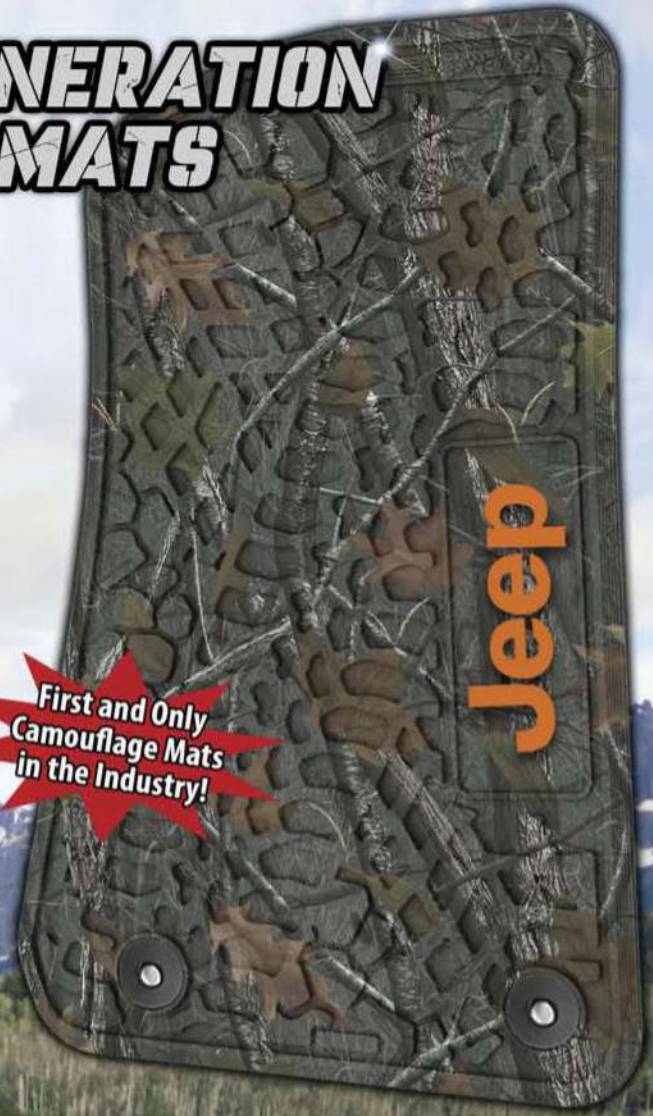
EVENTS:

NORRA 1000 (COMPETED TWICE, FINISHED ONCE); MOJAVE TRAIL BETWEEN BARSTOW AND NEEDLES

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EDC Blades to Add to Your Wish List

COMPILED BY COREY DECKER
PHOTOS FROM MANUFACTURERS

COAST PRODUCTS CONTRA

The CONTRA features a sleek Wharncliffe-style blade crafted from 7Cr17 steel, coated with a flat black titanium nitride for superior corrosion resistance. Designed for piercing, cutting, and slicing, this blade maintains a sharp edge over time. Its robust construction ensures reliable performance, whether in everyday carry (EDC) situations or more demanding tasks. Compact yet powerful, the CONTRA is perfectly sized to fit comfortably in your pocket while delivering exceptional functionality and durability.

Specifications:

Blade Length: **2.5"/6.35 cm**
Blade Material: **7Cr17 steel**
Handle Material: **Stainless steel**
Length Closed: **3.75"/9.53 cm**
Length Open: **6.25"/15.88 cm**
Weight: **6.4 oz/181.4 g**
MSRP: **\$29.99**
coastportland.com



FALLKNIVEN GPTW WITH JUMA TAC WOODLAND HANDLE

The GPTw is a traditional-looking pocketknife that features modern materials and high-tech design. It boasts laminated cobalt steel, which ensures a sharp edge, and a Juma Tac Woodland handle for durability and style. The liner-lock system is highly reliable and easy to use, making the knife simple to clean—just rinse with warm water and let dry. The blade's inertia can be adjusted with a threaded bolt, and the knife's joint requires no lubrication, as oil attracts dirt. A shackle at the end of the handle allows you to secure the knife and prevent loss.

Specifications:

Steel: **Lam. CoS**
Hardness: **60**
Edge: **Flat ground**
Handle Material: **Juma Tac Woodland**
Blade Length: **78 mm**
Blade Thickness: **3 mm**
Total Length: **180 mm**
Total Length, Folded: **100 mm**
Handle Material: **G-10**
Locking: **Liner-lock**
Weight, Knife Only: **96 g**
MSRP: **\$273.66**
fallkniven.se



KERSHAW LAUNCH 16

Enter the tactical cutting world with the Launch 16, featuring a partially serrated tanto blade and extremely high edge retention. This automatic opener withstands the toughest cutting tasks with a thick blade profile and high-end M4, a balanced super steel with superior hardness and toughness. Trac-Tec handle inserts, oversized jimping, and a finger choil offer a secure grip. This push-button rocket is all stealthy with a black anodized handle and a black Cerakote blade. Carry it on the go with a reversible deep-carry pocket clip.

Ingalls Specifications:

Blade Length: **3.45" (8.8 cm)** Blade Material: **CPM M4** Hardness: **63** Blade Finish/Coating: **Black Cerakote** Blade Thickness: **0.16" (4.1 mm)**
Closed Length: **4.95" (12.6 cm)** Handle Material: **6061-T6 aluminum, Trac-Tec inserts** Handle Finish/Coating: **Black anodized**
Handle Thickness: **0.55" (14 mm)** Overall Length: **8.4" (21.3 cm)** Weight: **4 oz (113 g)** Made in the USA MSRP: **\$249.99**
www.adeptknives.com





GIANT MOUSE GMFI-XL IN GREEN CANVAS

Designed to offer the same exceptional ergonomics and utility as the original GMFI, the GMFI-XL steps up with increased size and enhanced features, such as a strategically placed lanyard hole and handle scales for improved functionality and grip. For those who prefer a skeletonized handle, simply remove the scales and wrap paracord through the holes for a custom, tactical look.

Specifications:

Blade Steel: **N690 Cobalt high performance steel with a fine stonewashed finish**

Handle: **Green canvas Micarta**

Hardness: **60**

Sheath: **Leather handcrafted in Italy**

Blade Length: **3.47" (88.24 mm)**

Blade Thickness: **0.15" (3.96 mm)**

Handle Length: **3.12" (79.31 mm)**

Overall Length: **6.5" (165.1 mm)**

Weight: **3.3 oz (96g)**

Origin: **Italy**

MSRP: **\$195**

sharpthingsokc.com



COAST PRODUCTS F40I

Designed to be a companion for both outdoor and professional use is a full-tang fixed-blade knife designed with a 4-inch drop-point blade made from high-carbon 9Cr13MoV steel. Its handle, crafted from layered blade and brown G10, offers exceptional durability and easy cleaning after heavy use. The flat-ground blade features a corrosion-resistant titanium nitride coating. It fits securely into a sheath equipped with an injection-molded nylon liner for safe and convenient carry. This all-purpose knife, designed by Doug Hutchens, Lead Knife Designer, is a reliable tool that's essential for any task.

Specifications:

Blade Length: **4"/10.2 cm**

Blade Material: **9Cr13MoV stainless steel**

Handle Material: **G10**

Handle Length Open: **9"/22.9 cm**

Weight: **6.4 oz/181.4 g**

MSRP: **\$49.99**

coastportland.com



FI ELMAX ANNIVERSARY SET

To celebrate its 40th anniversary, Fällkniven AB released a special edition FI Pilot Survival Knife featuring premium Elmax Swedish powder steel. The FI's story began in 1987 when the Swedish Air Force requested a new survival knife for the JAS 39 Griffin system. First delivered in 1995 to the Swedish Armed Forces, the FI quickly gained popularity for its advanced, rust-resistant steel and ergonomic handle. This knife marked a shift from old technology to high-quality materials, setting the standard for modern survival knives. Fällkniven's expertise ensures durability and longevity, reflecting the company's commitment to resource efficiency.

Specifications:

Steel: **Elmax** Hardness: **61-62** Edge: **Convex** Tang: **Protruding broad tang** Handle Material: **Thermorun** Sheath: **Zytel** Weight, Knife Only: **149g**

Blade Length: **98 mm** Blade Thickness: **4.5 mm** Total Length: **213 mm** Coating: **Satin finish** MSRP: **\$231.49**

fallkniven.se

“SPEND ENOUGH TIME IN ANY CAREER AND YOU’LL BEGIN TO TWEAK AND ADJUST YOUR TOOLS TO SUIT YOUR UNIQUE NEEDS. SURVIVAL AND BUSHCRAFT ARE NO DIFFERENT.”

With so many knives available, which are the ones the survival instructors choose as their go-to blades?
Author photo.



KNIVES OF THE INSTRUCTORS

DID YOU EVER WONDER WHAT THE PROS CARRY? HERE'S A LOOK.

STORY BY JIM COBB, PHOTOS COURTESY OF THE INSTRUCTORS

Like many KI readers, every time I see a social media post from one of my favorite survival or outdoors instructors, I'm checking to see what gear they have with them. I love to see their pocket dumps and pack unloads. Of course, the sharps always get close attention. What blades are they using?

Deciding finally to just go directly to the sources, I consulted five survival teachers to see what they carry most often when they head into the field. While some of them routinely evaluate knives for manufacturers and such, I wanted to know what they relied on

when they could just grab what they wanted from their collections.

As their responses began filtering in, I wasn't surprised to learn that more than one carried a knife they'd designed themselves. Spend enough time in any career and you'll begin to tweak and adjust your tools to suit your unique needs. Survival and bushcraft are no different. Even the full customs, though, bore some commonalities with regard to size and blade shape.

Let's take a closer look at the knives instructors choose when they hit the trail.

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GREAT Gift Idea!



Craig Caudill's favorites are the Shamanese (L) made by LT Wright and the Headstrong from Filo Bladeworks.



CRAIG CAUDILL

"My choice of blades to carry is two-fold. I carry a custom Headstrong by Filo Bladeworks for my EDC. This blade is primarily a self-defense tool and is carried from that perspective, although it is used to do minimal day-to-day tasks at home and in the field. The handle materials and styling were put together to make it easy to deploy from the front pocket and use under stress but to also carry easily without being uncomfortable.



Craig Caudill

"My woods-carry blade is the Shamanese designed by me and built by LT Wright Handcrafted Knives. I designed it to be used by a proper woodsman (read: used, not abused) to handle wood and game, including the ability to filet fish and process game from field to fork. It is inspired by the carry blades of the frontiersmen.

"As such it can be used as a fighter, wood processor (including as a draw knife), and handle all the general woodcraft tasks one would expect in mixed hardwoods forests similar to those found in the Appalachia Mountain chain. Shamanese is a Shawnee word meaning 'long knife,' as many of those men's blades were adapted from broken swords and kept long for their use."

Instructor Bio:

Craig Caudill is the owner/director of Nature Reliance School in Central Kentucky. He is a professional backcountry skills instructor and a certified master naturalist. You can find out more about his survival, tracking and navigation classes, podcast, and books at NatureReliance.org.

"MY WOODS-CARRY BLADE IS THE SHEMANESE... DESIGNED... TO HANDLE WOOD AND GAME... IT IS INSPIRED BY THE CARRY BLADES OF THE FRONTIERSMEN."—CRAIG CAUDILL

SPECS

HEADSTRONG

MAKER: FILO BLADEWORKS
 OVERALL LENGTH: 7.0 INCHES
 BLADE LENGTH: 2.75 INCHES
 STEEL: 21000
 FILOBLADEWORKS.COM

SHEMANESE

MAKER: LT WRIGHT HANDCRAFTED KNIVES
 OVERALL LENGTH: 12.0 INCHES
 BLADE LENGTH: 6.75 INCHES
 STEEL: AEB-L
 LTWRIGHTKNIVES.COM

BUSHCRAFT BLACKBLADE

MAKER: MORAKNIV
 OVERALL LENGTH: 9.1 INCHES
 BLADE LENGTH: 4.3 INCHES
 STEEL: CARBON STEEL
 MORAKNIV.SE

TENACIOUS

MAKER: SPYDERCO
 OVERALL LENGTH: 7.76 INCHES
 BLADE LENGTH: 3.39 INCHES
 STEEL: 8CR13MOV
 SPYDERCO.COM



Tony Nester favors the Spyderco Tenacious (top) and the Bushcraft BlackBlade from Morakniv.




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TONY NESTER

"I've used some variation of the venerated Mora blades since 1990 and they have held up well during extended survival courses for camp chores as well as field dressing game, carving deadfalls, bows, spoons, and other items. Until recently, I was spending around 180+ days in the backcountry and the Mora Bushcraft blade or the Mora 840 Clipper was all I used. The Moras can take a beating and hold an edge like few other blades and have become trusted companions on the trail.



Tony Nester

"For day-to-day use back home or in the city, I rely on my EDC Spyderco Tenacious folder to which I've added some skateboard tape to provide easier deployment from the pants pocket. Spydercos have a great ergonomic design and a folding mechanism that has never let me down despite continual abuse."

Instructor Bio:

Tony Nester is the author of the "Knife-Only Survival Book." For the past 28 years, he has been teaching survival courses in the desert and mountain regions of Arizona and Colorado. He worked as a consultant for the film "Into the Wild" and regularly conducts training for the military special operations community. For further information, visit Apathways.com.

"SPYDERCOS HAVE A GREAT ERGONOMIC DESIGN AND A FOLDING MECHANISM THAT HAS NEVER LET ME DOWN DESPITE CONTINUAL ABUSE."—TONY NESTER

KEVIN ESTELA

"The Polaris is 'my knife.' That is, it's my ideal and my design. Back in 2009, I asked Scott Gossman to make me a knife based on the average specs of the knives I'd used for the previous 10 years. I sketched it out on paper, then on cardboard, and sent it to him. He made me one and I used it while operating as lead instructor for the Wilderness Learning Center.

"Over a decade later, I still use the knife on courses and trips all over, but Scott sent me one with upgraded 4V steel to use instead. Scott reports that design is one of his most popular and when he posts one for sale online, it sells out in minutes.

"As for the Victorinox Ranger, I carry that daily. It is paired with an Exotac fireROD, and when I throw it in my pocket, I know it can and will handle whatever I need it to on a daily basis in all settings. It blends in, it has the same rough handle size as my Polaris for carving, and it reminds me of my childhood watching MacGyver. I've carried a Swiss Army Knife in my pocket for well over two decades religiously.

"With these two knives, I've built countless fires, cleaned animals from the woods and water, cut plenty of cordage, and lots more."



Kevin Estela
(Nick Roush photo)



Kevin Estela's favored fixed blade is his own design, the Polaris (L), made by Gossman Knives. He also carries the Ranger model Swiss Army Knife.

"I'VE CARRIED A SWISS ARMY KNIFE IN MY POCKET FOR WELL OVER TWO DECADES RELIGIOUSLY."
—KEVIN ESTELA

SPECS



POLARIS

MAKER: GOSSMAN KNIVES
OVERALL LENGTH: 8.25 INCHES
BLADE LENGTH: 3.9 INCHES
STEEL: 4V
GOSSMANKNIVES.COM

RANGER

MAKER: VICTORINOX SWISS ARMY KNIVES
OVERALL LENGTH: 5.86 INCHES
BLADE LENGTH: 2.28 INCHES
STEEL: STAINLESS STEEL
VICTORINOX.COM

Instructor Bio:

Kevin Estela is the Director of Training for Fieldcraft Survival in Heber City, Utah, and has been teaching bushcraft and survival skills professionally since 2007. He is the author of "101 Skills You Need to Survive in the Woods," numerous magazine articles and online blogs, and he is featured on multiple podcasts across the web. He is a lifelong outdoorsman, traveler, and martial-arts enthusiast.

FÄLLKNIVEN

40 YEARS!



40
YEARS
1984-2024

F1 Elmax

Phantom

40 year anniversary

In connection with Fällkniven celebrating 40 years as a business on 03/12/2024, we launched two anniversary models.


F1 Elmax Anniversary Set

First up is our immortal classic F1, now with the Swedish super steel Elmax. This is another step in the development of one of the best-selling survival knives of all time. This set includes our new Zytel sheath and a DC4 sharpener.


Phantom Anniversary Set

Then the Phantom, a brand new mid-sized folding knife model with liner lock, leather case, desert ironwood handle sides and also equipped with the Elmax steel and convex edge. This set includes a new folding knife leather case.

Visit www.fallkniven.com for more information.

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info@fallkniven.se

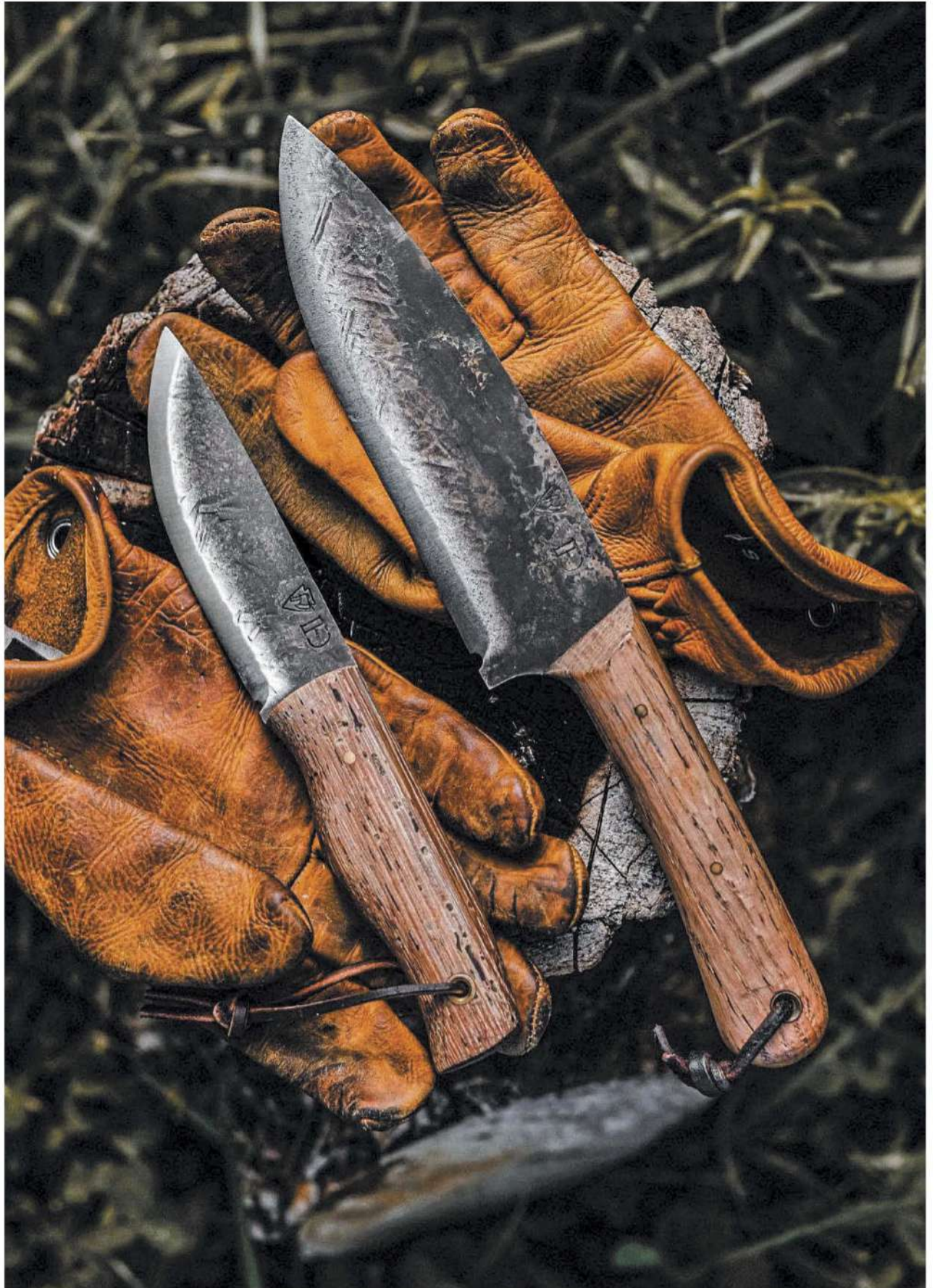
 FallknivenSweden



US distributors:
www.blueridgeknives.com
www.jboutman.com



Jason Hunt designed two knives, the Raider (L) and the Colonel, and carries both of them regularly.





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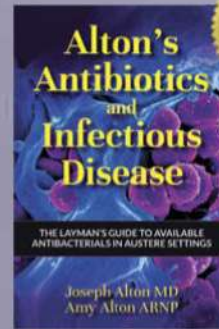
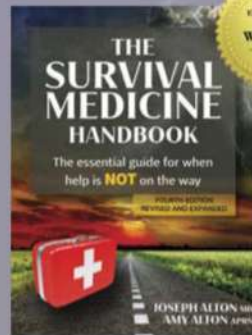


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JASON HUNT



Jason Hunt

“The two knives I carry into the woods are the Colonel and the Raider. The Colonel is the first knife I ever designed and was based upon a frontier era kitchen knife supposedly in the Daniel Boone family. I sized the blade to my hand, and it served me for several years as my one-tool-option survival knife.

“The wide blade nests in my palm perfectly for shaving and carving chores, and the length leaves plenty of meat at the end for when I choose to baton through a 4-inch cedar pole in the rain to make a fire. Its name comes from the fact that I, like Daniel Boone, am a Kentucky Colonel, so it seemed a proper name for my first survival knife.

“I have always made it regular practice to carry a smaller carving knife or multipurpose backup blade. The last few years I’ve found that I stick to fixed blades and the Raider has been my preferred model to carry for the past year. It is a knife designed by Dan Ferguson and myself.

“Our objective was an Appalachian Puukko. The blade is as long as my palm is wide and has a swell in the handle, so it locks into your grip. The blade belly permits smooth carving and skinning. Both of these blades are easy to hone in the field due to the 1095 steel. The beautiful textures present in the stabilized oak handles add warmth and character to each knife.

“I like these knives because they’re suitable for the majority of my outdoor tasks. I’ve built primitive shelters, carved notches and

“I HAVE ALWAYS MADE IT REGULAR PRACTICE TO CARRY A SMALLER ... MULTIPURPOSE BACKUP BLADE. THE LAST FEW YEARS ... THE RAIDER HAS BEEN MY PREFERRED MODEL TO CARRY. IT IS A KNIFE DESIGNED BY DAN FERGUSON AND MYSELF.”—JASON HUNT

cups, and used them to skin game of all sizes found throughout the Eastern Woodlands. These blades are also a bit lighter than similar-sized blades due to the wood handles, making them an excellent choice for my woodland needs.”

Instructor Bio:

Jason Hunt is the owner of Campcraft Outdoors, an outdoor school, and outdoor gear manufacturer based in Kentucky. Jason primarily leads classes throughout the Eastern Woodlands. You can learn more by visiting CampcraftOutdoors.com.

SPECS



THE COLONEL

MAKER: DAN FERGUSON/BLUE DOG BLADES/
JEFF WHITE BLADESMITHS

OVERALL LENGTH: 11.25 INCHES

BLADE LENGTH: 6.0 INCHES

STEEL: 1095 CARBON STEEL

CAMP-CRAFTOUTDOORS.COM

THE RAIDER

MAKER: DAN FERGUSON/BLUE DOG BLADES/
JEFF WHITE BLADESMITHS

OVERALL LENGTH: 8.5 INCHES

BLADE LENGTH: 4.25 INCHES

STEEL: 1095 CARBON STEEL

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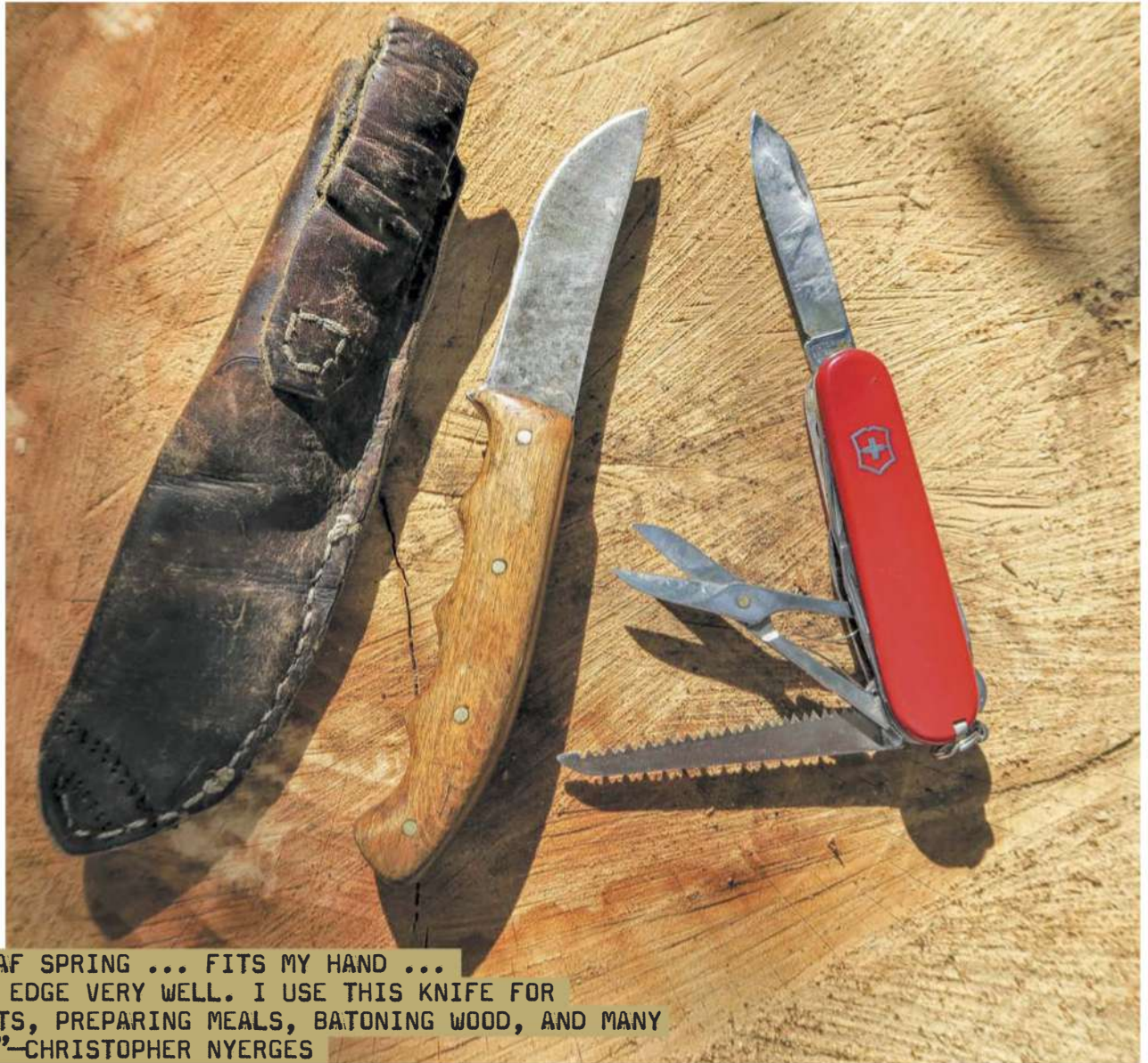


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spartanblades1

The fixed blade Christopher Nyerges carries is a custom make he called Elijah's Leaf Spring. Here it is next to his favorite Swiss Army Knife, the Officier Suisse model.



“ELIJAH’S LEAF SPRING ... FITS MY HAND ... AND HOLDS AN EDGE VERY WELL. I USE THIS KNIFE FOR CUTTING PLANTS, PREPARING MEALS, BATONING WOOD, AND MANY OTHER TASKS.”—CHRISTOPHER NYERGES

CHRISTOPHER NYERGES

“Though I have many sheath knives that nearly always go into my pack, most often I use a knife that was sent to me by a reader of one of my articles named Elijah. It was only the second knife he’d ever made. I thought he’d made it from a recycled leaf spring from a car, so I called it Elijah’s Leaf Spring. I found out later that it was from a recycled sawmill blade, but the name still stuck.

“It fits my hand well, and because it’s carbon steel, it holds an edge very well. I use this knife for cutting plants, preparing meals, batoning wood, and many other tasks. It always performs well. Plus, because this is not an expensive and ‘slick’ knife, I never hesitate to reach for it, not worrying whether I might damage its cosmetics. This knife has never failed me. Elijah has since gone on to further pursue knifemaking, though for now the one I carry is a full custom one-off.

“I always carry a Swiss Army Knife in my pocket, and I prefer the Officer (Officier Suisse) model. It has two blades, a saw which I use a lot, and scissors. Those are the main tools I use on this knife, as well as occasionally the awl. I sometimes use the tweezers, too. I can’t speak highly enough about a little tool which I hardly notice is in my pocket and which can do so much. I use it at least once every day.”


Instructor Bio:


Christopher Nyerges has been teaching ethno-botany and general survival skills in the field and in the classroom since 1974 through the School of Self-Reliance that he co-founded. He lives in Southern California and the majority of his classes occur there. He has authored nearly two dozen books including “How to Survival Anywhere” and “Guide to Making Fire Without Matches.” More information can be found at SchoolofSelf-Reliance.com.




Christopher Nyerges

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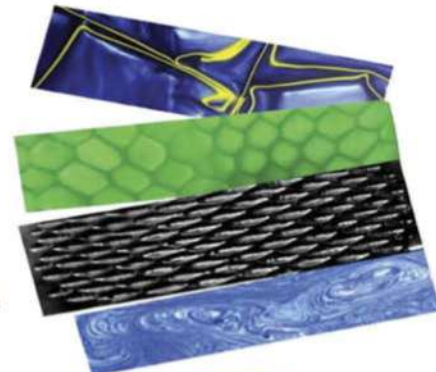
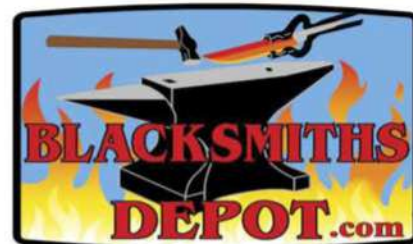
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JIM COBB

Yes, that's me. The Dan Tope Covert Field Scalpel is a nearly perfect pocket carry knife. It is a fixed blade, so there's no worry about problems opening or closing, even under pressure. There are also no concerns with fouling the mechanism with whatever it is you're doing with the knife, such as food prep.



The author, Jim Cobb

The blade is short enough that it won't raise eyebrows anywhere you go, but there's plenty of steel to get the job done. I have gorilla mitts for hands, so most smaller knives result in a three-finger grip, which I don't like. Here, there's enough real estate to get a full hand on, for both comfort and safety. It is not sold with a sheath, so I contacted Delta Sheath in Michigan to get that squared away.

For a belt knife, I've tried dozens and dozens of them over the years, but I keep returning to the Fox River EXT-1 from Bark River Knives. The original Fox River model has been one of the company's most popular knives, along with the Gunny. Jason Thoun at DLT Trading had the idea of combining the two, using the blade profile of the Fox River and the Gunny handle. The result is a knife that just simply works. No bells, no whistles, nothing fancy at all. With a 4-inch blade, it is perfectly suited for just about any routine task and the ergonomics are phenomenal. While it is available in a range of handle materials, I went with basic black canvas Micarta.

Instructor Bio:

Jim Cobb is a recognized authority on disaster preparedness. He is a frequent contributor to many publications, including Knives Illustrated and American Outdoor Guide. Jim has also authored several books about prepping and has traveled the country teaching classes at various expos. 📍

The author's own favorites, the Fox River EXT-1 from Bark River Knives (top) and the Covert Field Scalpel from Dan Tope.



SPECS

OFFICIER SUISSE

MAKER: VICTORINOX SWISS ARMY KNIVES

OVERALL LENGTH: 5.86 INCHES

BLADE LENGTH: 2.28 INCHES

STEEL: STAINLESS STEEL

VICTORINOX.COM

ELIJAH'S LEAF SPRING

OVERALL LENGTH: 7.5 INCHES

BLADE LENGTH: 3.25 INCHES

STEEL: CARBON STEEL (RECYCLED SAWMILL BLADE)

FIRECREEKFORGE.COM

ELIJAH'S LEAF SPRING

OVERALL LENGTH: 7.5 INCHES

BLADE LENGTH: 3.25 INCHES

STEEL: CARBON STEEL (RECYCLED SAWMILL BLADE)

FIRECREEKFORGE.COM

COVERT FIELD SCALPEL

MAKER: DAN TOPE

OVERALL LENGTH: 6.5 INCHES

BLADE LENGTH: 3.0 INCHES

STEEL: CPM 3V

FACEBOOK.COM/OTOPEKNIVE

FOX RIVER EXT-1

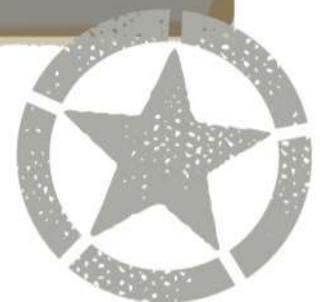
MAKER: BARK RIVER KNIVES

OVERALL LENGTH: 8.65 INCHES

BLADE LENGTH: 4.1 INCHES

STEEL: CPM 3V

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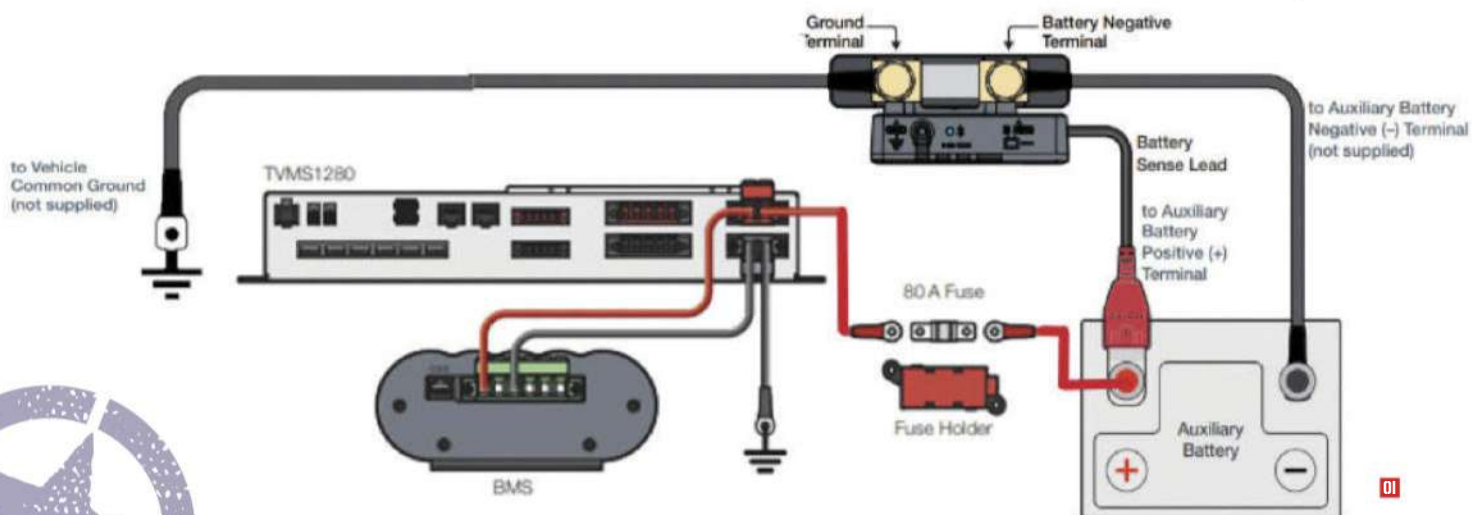
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BATTERY POWER

INSTALLING A REDARC SMART BATTERY MONITOR AND DUAL BATTERY CHARGER IN A 2018 RAM 1500

WORDS AND PHOTOS BRANDON HOFFNER

01. This simple diagram from REDARC helped me immensely. I have the REDARC BCDC1225D in-vehicle dual battery charger instead of the TVMS1280 and BMS.



01



recently installed a REDARC smart battery monitor in my 2018 RAM 1500 Laramie 4x4.

The installation process should have been relatively straightforward, as the instructions provided by REDARC were clear and easy to follow—but I made it harder. We'll get to that.

While this article is primarily about the easy-to-install REDARC smart battery monitor, I also had to install a REDARC BCDC1225D dual battery charger. This 12-volt, 25-amp in-vehicle DC-DC battery charger is designed to charge secondary battery banks to 100% while on the move. It's solar-ready and suitable for a wide range of battery types, including lithium, AGM, GEL, standard lead acid, and calcium. I needed this setup to power an ARB compressor and auxiliary lights with an auxiliary battery. Eventually, I connected the monitor to my auxiliary battery to keep track of its voltage, current, power, and state of charge.

Now for the "I made it harder" part.

At this point, the rig is pulled into the garage, half torn apart, and I need to add bumpers that have been sitting on the shelf for a year. I also have to add lights and remove the foldable tonneau cover so that the "new to me topper" can be mounted on the bed. All this frantic construction is all happening as Christmas approaches, the day I will load up the family, hook on the Taxa Mantis trailer, and head to Baja for 14 days. Oh, and beyond the vehicle work, I must ensure all of my family's travel paperwork is in order.

The REDARC equipment shipment was delayed (Pro tip: Order the REDARC FK40 40-amp fuse kit if you are installing the charger), so the rush was on. The first install attempt was a bit hasty, probably (definitely) sloppy, and due to an installation error, the smart battery monitor and charger did not function correctly on the Baja trip. Luckily, the demands on the battery were minimal, and I had enough power to get through the trip without figuring out an alternative charging method.



02. Make sure that you have cleaned the ground area to bare metal to ensure good contact. This is a critical step for wherever you choose to ground. Here, you can see I installed it near my driver-side seat.



03. Now that we covered the important diagrams and most critical steps, let's back up. While REDARC does provide a few connectors, I needed enough connectors and 8- to 10-gauge wire to make mistakes, run wire from my main battery to the auxiliary battery, and connect the battery monitor and charger. I also needed shrink fit and a heat gun, connector crimping tools, wire cutters, a multi-meter (mine was handed down to me by my grandfather and it still works great), and an assortment of hand tools, cordless drills, and wrenches (not pictured) to attach fasteners. Also pictured is a six-way fuse block, 12V blade fuse, and 6-circuit ATC/ATO waterproof fusebox holder with LED indicator and waterproof cover that I purchased off Amazon. The various connectors and tools were also purchased off Amazon. The fuse block allowed me to keep the installation clean as I ran various lights and compressors to my auxiliary battery.

INSTALL TAKE 2

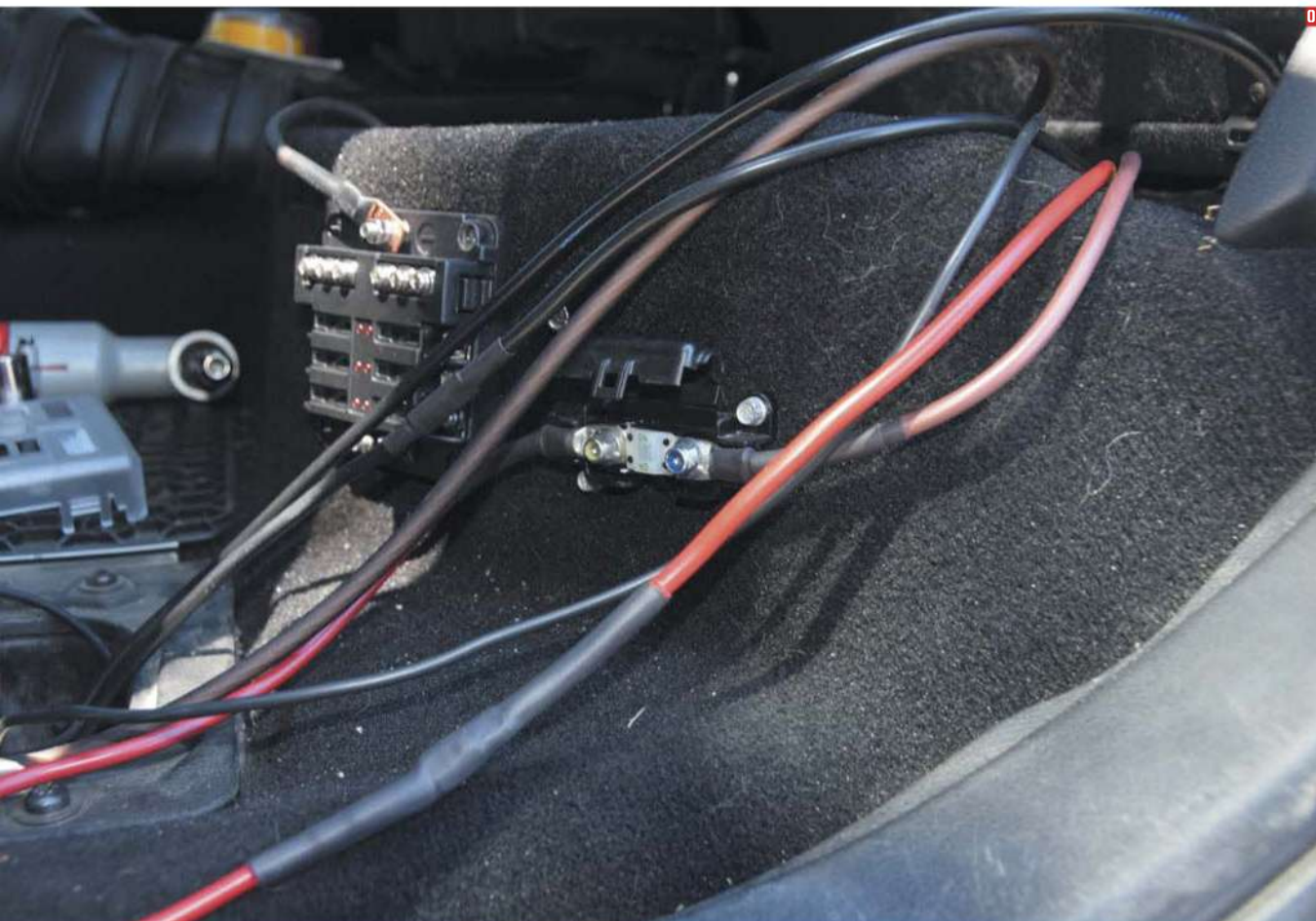
As the weather warmed up after a cold winter, I tore into the project once again. I wanted an final install that would allow my daughters use the entire back seat. Because of that, I don't have the available space for an electronics board—that's what you will see in the photos—so I utilized the underfloor storage space in the RAM to hold the 55ah AGM battery and the space under the seats to host the REDARC smart battery monitor and BCDC1225D in-vehicle dual battery charger.

As I went through troubleshooting and gathering additional information from REDARC, I found my first issue. The ground I chose needed to be cleaner. Remember the hurry to prepare for the Baja trip? While fixing that, I went back through all the connections and wiring diagrams. I'll outline the items you should be looking for in the photo captions. You will see how I tackled the installation to hook up auxiliary items, charge the auxiliary battery, and monitor the auxiliary battery.

I'm confident that the REDARC smart battery monitor will be a game-changer for monitoring the health of my auxiliary battery, especially when using it to power accessories while camping or off-roading. I'm particularly impressed with the monitor's accuracy and reliability, which have provided me with invaluable insights into my vehicle's electrical system. 🛠️



04. I mounted the REDARC smart battery monitor and the REDARC BCDC1225D in-vehicle dual battery charger under the rear seat of my RAM 1500. The wiring is mocked up to run to the battery in the underfoot storage. The directions that come with the battery monitor and the charger will be critical to ensuring proper installation using the correct wire gauge and length of various wires.



05. I chose to mount the REDARC FK40 40-amp fuse kit (needed for the battery charger install, but not needed if you are only installing the battery monitor on a single battery) and the fuse circuit underneath the seat overhang and easily visible for future diagnostics.



06. Another 40-amp fuse was located on the positive cable running between the main battery and the dual battery charger. I ran the wire from the rear seat, under the kick plates, through the firewall and into the engine bay.



07. The location of the dual battery charger makes it a bit difficult to see the indicator lights on the left of the charger, but the routing of wires in the correct direction was more important to me.



08

08. I tested everything out prior to final cleaning and organizing. Everything is now working as it is designed to. The app provides a full suite of information.

09. Everything cleaned up and functioning.

10. This install allows for full use of the backseat while allowing for dual batteries. The auxiliary battery powers the ARB compressor and rear lights and is easily accessible for other power needs using alligator clips.

11. Modification of the storage box was necessary to fit the 55ah AGM battery.



09



10



11

MAJOR TAKEAWAYS

Here are the most important things you need to know before installing the battery monitor and charger.

- If you aren't an experienced electrical builder, review online resources about building wiring connections.
- The REDARC smart battery monitor (shunt) monitors all current going in and out of your battery, allowing the battery percentage to be accurate on your display or device via the RedVision app. You have to download the RedVision configurator and the RedVision app to get things working properly.
- You need to ensure that all your devices (lights, fridge, inverter, charging sockets, battery charger, etc.) have the ground wire connected to the ground terminal (GND) side of the shunt assembly.
- You should only have one wire connected to the battery negative terminal (BNEG) side of the shunt, which will connect to the battery negative terminal. This will ensure all current travels through this shunt. There should only be one wire on the negative terminal of the battery in a single auxiliary battery install.
- Ensure the cable from BNEG to battery negative terminal is a suitable size to carry all loads combined, inverter often being the main load here.
- Note: Any ground wire that bypasses the BSEN500 smart battery monitor will result in inaccurate battery percentage.

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Belltech's first release for the 2024 Land Cruiser will be this rear anti-sway bar. Belltech sway bars are engineered and manufactured in Clovis, California, with cold-formed solid steel. It offers three-hole adjustability to fully customize your preferences whether you're traveling on pavement or on the trail. This bar improves safety, quick maneuverability, and enhances overall handling. 🛠️



OE SWAY BAR REMOVAL

1. Park the vehicle on smooth, level ground. Lift the rear of the truck using a jack, secure with properly rated jack stands, and then remove the rear driver-side wheel.
2. Using your 17mm socket wrench, remove the four nuts and four washers from both pivot bushing brackets, and then remove the brackets.
3. Remove the nut and washer from the lower end link on both sides of the bar.
4. Carefully remove the bar over the driveline, through the control arm, and out the driver side.



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BELLTECH SWAY BAR INSTALLATION

1. Lubricate the inside of the new bushings with the provided grease pack.
2. Place the bushings on both sides of the sway bar, near the positions of the original equipment sway bar. Rotate the bushings slightly to evenly spread the lubricant.
3. Carefully maneuver the sway bar through the control arm and over the driveline back into position, resting it on the rear differential.
4. Install the new pivot bushing brackets using the OE nuts and washers, and then torque to 72 lb-ft.



KIT COMPONENTS



1/8-INCH REAR ADJUSTABLE SWAY BAR
TWO PIVOT BUSHINGS
TWO PIVOT BUSHING BRACKETS
GREASE PACK



5. Reinstall the end link assemblies using the OE hardware to the desired setting, and then torque to 55 lb-ft.

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SPEED CRUSH







Evolving Through the Trails: The Journey of ARB's 2020 Toyota 4Runner

STORY BY DEVAN ENCE
PHOTOS BY MATT HARDINGE

The 2020 Toyota 4Runner, wrapped in a bold green, has seen more transformations than most vehicles experience in a lifetime. As part of ARB 4x4 Accessories' fleet, this 4Runner has gone through three different build stages—each designed to keep pace with the latest products and shifting market trends. From the original red paint to its current green wrap, this vehicle has been a canvas for innovation and a tool for exploration across some of the most challenging terrains.





ARB has always been at the forefront of off-road enhancements, and this 4Runner stands as a testament to their commitment. At the front, the vehicle is equipped with an ARB Summit front bumper—a component that not only provides protection, but also serves as a platform for additional lighting. The bumper, along with the Nacho Grande and Quatro lights mounted on it and the A-pillars, ensures that the path ahead is always visible, no matter the conditions.

This 4Runner's evolution includes practical modifications like a body mount chop, essential for accommodating the larger BFG KO2 A/T tires. These 285/70R17 tires are paired with 17-inch wheels, offering the grip and durability needed for off-road adventures. The suspension system has been upgraded with Old Man Emu (OME) MT64 components, including front and rear springs and shocks. This setup provides the lift and stability required to handle rough and uneven terrain,





making the 4Runner capable of tackling the most demanding trails.

Under the hood, the 4Runner remains true to its stock origins, with a factory engine and transmission. However, it features a Safari Armax Snorkel, ensuring the engine breathes clean air even in the dustiest or wettest environments. ARB Air Lockers have been added to both the front and rear axles, providing the 4Runner with the ability to maintain traction in the most challenging conditions.

The underbody of the vehicle is protected by ARB 4x4 skid plates, shielding vital components from damage during off-road excursions. These skid plates, along with the robust suspension and drivetrain enhancements, ensure that the 4Runner is not just capable of surviving harsh conditions but thriving in them.



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880245



880243



880240



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More Information Available at
AutoMeter.com



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Inside, the 4Runner is equipped with features that make it more than just an off-road vehicle. ARB has outfitted it with a range of accessories designed for extended adventures. The ARB Fridge Freezer and twin air compressor ensure that whether the journey is long or short, the essentials are always within reach. The BASE roof rack offers versatile storage solutions, while the Esperance RTT (rooftop tent) provides a convenient and comfortable sleeping arrangement for overnight trips. For those moments when the going gets tough, the Warn Zeon 10-S winch is ready to pull the 4Runner out of any sticky situation.

This 4Runner has been a regular on trails throughout the Pacific Northwest and the Southeast, demonstrating its capability time and again. As part of ARB's 4x4 fleet since 2020, it has been tested and proven in various conditions,



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from rocky mountain passes to muddy forest trails. It's not just a showpiece; it's a vehicle built to work, explore, and overcome.

The journey of this 4Runner is a story of continuous improvement, a reflection of ARB's dedication to pushing the boundaries of what's possible in off-road engineering. Each stage of its build has been a step forward—a response to the demands of the trail and the needs of the market. As it stands now, wrapped in green and equipped with the latest from ARB, this 4Runner is ready for whatever comes next. 🚗

UPGRADES

↑

2020 Toyota 4Runner

OWNER:
ARB 4X4 ACCESSORIES
AUBURN, WA

ENGINE & DRIVETRAIN:
ENGINE: STOCK; TRANSMISSION: STOCK; INTAKE: SAFARI ARMAX SNORKEL; FRONT AXLE: ARB AIR LOCKER; REAR AXLE: ARB AIR LOCKER

SUSPENSION:
LIFT: OLD MAN EMU MT64; FRONT SPRINGS: OLD MAN EMU MT64; REAR SPRINGS: OLD MAN EMU MT64; FRONT SHOCKS: OLD MAN EMU MT64; REAR SHOCKS: OLD MAN EMU MT64

WHEELS & TIRES:
TIRES: BFG KO2 A/T, 285/70R17; WHEELS: 17-INCH (BRAND NOT SPECIFIED)

BODY & ARMOR:
BUMPER: ARB SUMMIT FRONT BUMPER; BODY MODIFICATIONS: BODY MOUNT CHOP; SKID PLATES: ARB 4X4

INTERIOR & ACCESSORIES:
ARB FRIDGE FREEZER; ARB TWIN AIR COMPRESSOR; BASE ROOF RACK; ESPERANCE RTT; WARN ZEON 10-S WINCH

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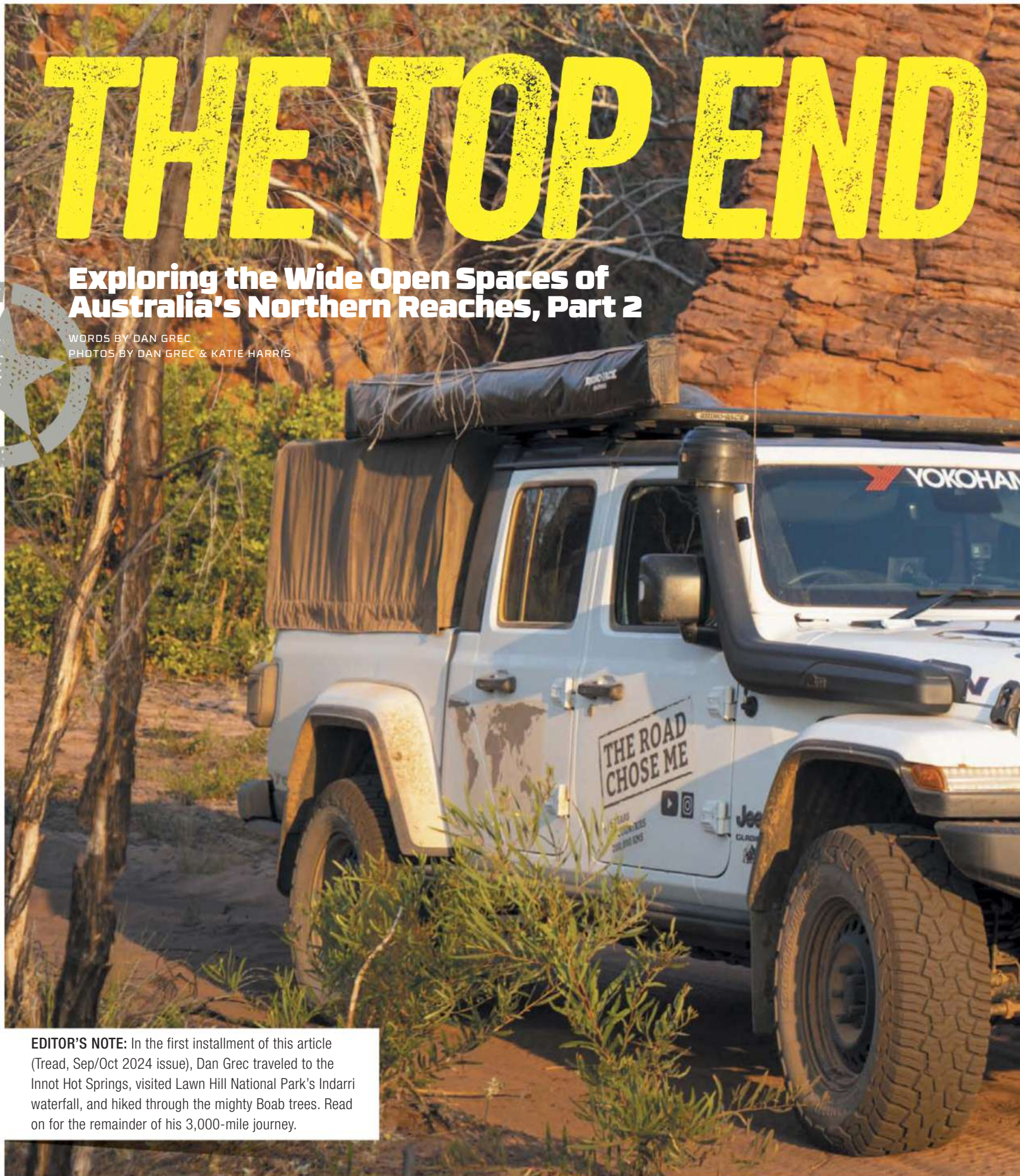
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Exploring the Wide Open Spaces of Australia's Northern Reaches, Part 2

WORDS BY DAN GREC

PHOTOS BY DAN GREC & KATIE HARRIS



EDITOR'S NOTE: In the first installment of this article (Tread, Sep/Oct 2024 issue), Dan Grec traveled to the Innot Hot Springs, visited Lawn Hill National Park's Indarri waterfall, and hiked through the mighty Boab trees. Read on for the remainder of his 3,000-mile journey.



Sunset in Australia brings out the red iron ore in the dirt and rock.



Amazingly preserved in cave overhangs, aboriginal rock paintings date back 20,000 years.

After a quick visit to a ranger station, we get the code to a combination lock that grants access to the Western Lost Cities—an enormous rock formation well off the beaten path in remote Limmen National Park. The access track is slow going, with sandy seconds, dry sandy riverbeds, and plenty of corrugations to rattle our teeth. I aired down to 22psi all around not so much for added traction, but instead to dampen the vibrations and make travel easier on man and machine.

Formed roughly 1,500 million years ago, these giant sandstone pillars were part of an ancient seabed that cracked and split as it was exposed. Millions of years of erosion from wind and water have carved the incredible pillars, which defy belief. Each pillar is a stunning display of various colors caused by the mineral deposits in the sandstone and millions of years of sun exposure. We spend hours wandering around



Hiking through the lost cities shows just how enormous the rock formations are.

the entire site, discovering hidden aboriginal rock art, caves and beautiful trees and roots climbing all over the rock.

Putting the drone in the air, I simply couldn't believe my eyes. We had only been able to see a tiny fraction of the formation, which is many miles in length and width. Leaving the stunning formation at sunset, we saw a herd of wild water buffalo on the track, another terrible Australian tale of an introduced species turned feral that now wreaks havoc on the native plants and animals.

Ivanhoe Crossing

After a quick resupply in Kununurra just over the border into Western Australia, we set out early in the morning to check out one of Australia's most infamous river crossings. At Ivanhoe, the Ord River cascades over a kind of curved concrete dam wall, and concrete blocks mark the edges of the driving surface. At this time of year the water is no deeper than a foot, although it is flowing fast enough that I concentrate carefully. Putting a tire wrong would result in a very bad day, especially given the river is teeming with

"EACH PILLAR IS A STUNNING DISPLAY OF VARIOUS COLORS CAUSED BY THE MINERAL DEPOSITS IN THE SANDSTONE AND MILLIONS OF YEARS OF SUN EXPOSURE."

This goanna was happy to share our waterhole for a swim.



Ivanhoe crossing is one of Australia's most famous and stunning river crossings.



Often teaming with hungry crocs, Ivanhoe Crossing is never dull.

The water flowing over the concrete road surface causes disorientation, and it's easy to think you are not moving.



Moving forward with confidence through the flowing waters of Ivanhoe Crossing.



Ivanhoe Crossing is the perfect way to wash away thousands of kilometers of dust.



I stayed well back from the water at Ivanhoe Crossing, a popular fishing hole for Crocodiles and fisherman alike.

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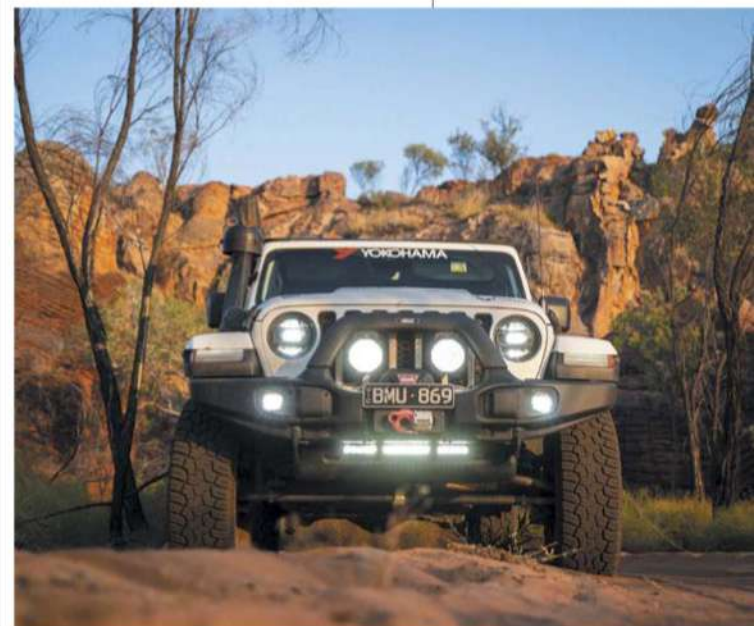
man-eating crocs waiting below for any wayward fish or four-wheel-driver.

With low mountains in the background and Boabs on the water's edge, the scene was spectacular and inviting, and I had to constantly remind myself this is not the place for a swim. I was also not sure about the group of locals standing on the bank fishing. The crocs are a constant concern, they say, but the fishing makes up for it. I think it helps to be nuts.

After promising we wouldn't give up the location, a local told us about a nearby "secret canyon" full of waterfalls and swimming holes, and so we immediately set out to explore. The access track has a few river crossings that lap at the hood, and a couple of loose rock scrambles that require low range 4x4, though as usual we know Hiluxes and Rangers are making the drive, so it is nothing the Gladiator can't handle easily.

The canyon and surroundings were everything we were promised, and we spent an entire day swimming and climbing all over the waterfalls in the hot sun. The elevation

The Western Lost Cities lit up at sunset.



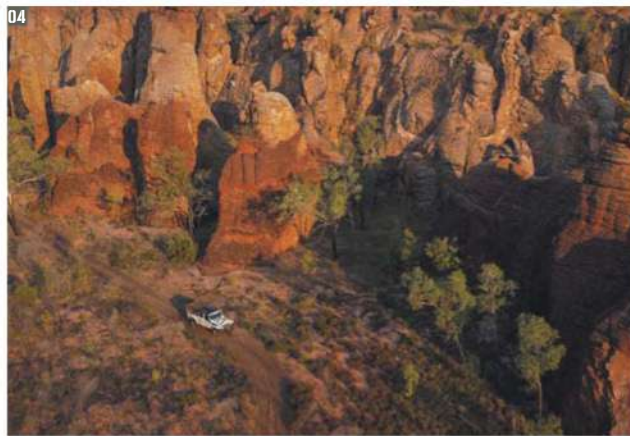
1. Beautiful rock formations rise in every direction in the Lost Cities.



2. The Gladiator proved itself worthy of the trek into the Lost Cities.



3. The scale of the Lost Cities is hard to take in.



4. Rock formations tower above the Jeep and provide hours of exploration.



5. No matter the view, the Lost Cities grab your eye.



6. Rock strewn mountains, rivers and valleys punctuate the barren landscape.



7. Simplicity at its best on the Gregory River.



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“... WE HAVE EXPLORED WELL OVER 3,000 MILES ON REMOTE AND DUSTY CORRUGATED ROADS TO SEE STUNNING NATURAL WONDERS, PLENTY OF BEAUTIFUL WILDLIFE, AND MORE CROCS THAN I CARE TO COUNT—BOTH FRESHIES AND SALTIES.”



We are sworn to secrecy on the location of this stunning canyon.



Sunset stretches for well over an hour across the barren salt flat.

changes and rocky waterfalls mean there should be no crocs to worry about, and I was very happy to not see one for the entire day.

The Mighty North

We spend a week resupplying and doing odd maintenance jobs in and around steamy Darwin—a city that feels more like Southeast Asia than Australia, which makes perfect sense given we're only a stone's throw from a dozen other countries.

Reflecting on our time across the top of Australia, we have explored well over 3,000 miles on remote and dusty corrugated roads to

see stunning natural wonders, plenty of beautiful wildlife, and more crocs than I care to count—both freshies and salties. Though we are months from the peak of summer, the heat and humidity have been intense, and the red earth has taken on a special hue that makes sunsets brighter than ever before. All of this combined with tropical fruit, natural hot springs, waterfalls, and monster lizards made me feel like we've been exploring some exotic land far from where I grew up in southern Australia.

While the distances are huge, the rewards are equally as big across the top of this enormous continent. 📍





Katie picked out features among the ancient rock paintings.

ABOUT THE WRITER
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TREAD ON TRAILS

Rubicon Trail: The Ultimate Off-Road Playground

WORDS AND PHOTOS BY CHRIS HAMILTON

If you haven't hit the Rubicon Trail yet, you're missing out on the holy grail of off-roading. Nestled in the Sierra Nevada mountains near Lake Tahoe, this trail is the stuff of legends. The Rubicon isn't just a trail—it's a rite of passage for anyone who claims to be serious about wheeling.

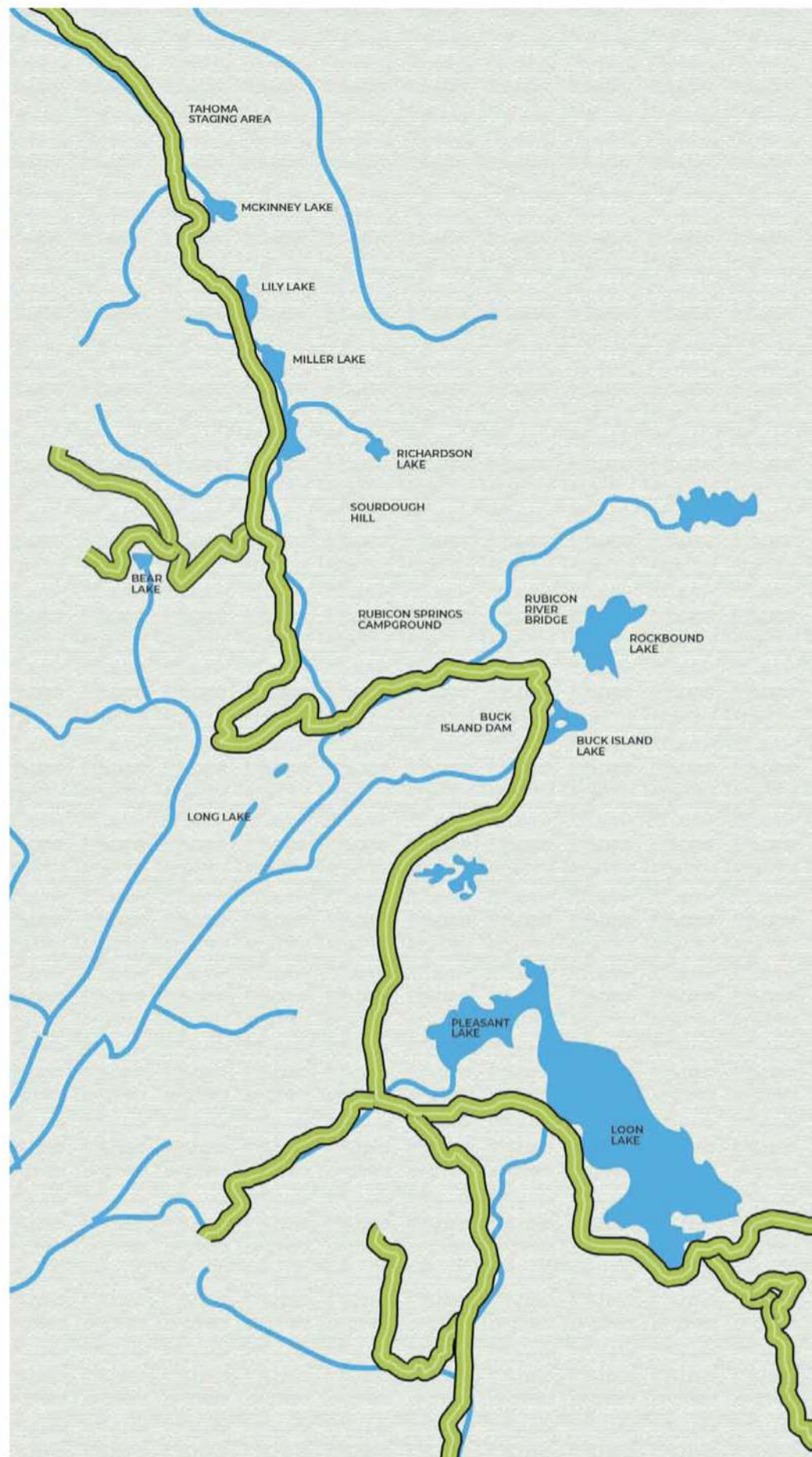
First off, this trail is no joke. It's gnarly, with rock gardens that'll have you crawling, flexing, and picking your line like a pro. If your rig isn't built for it, don't even think about attempting until you are sure. Lockers, a lift, and beefy tires are the minimum entry fee. And you better know how to use them, too.

The Rubicon serves up a full plate of off-road challenges. You've got your famous obstacles like the Gatekeeper, Little Sluice, and Big Sluice. These aren't just bumps in the road—these are the real deal. They'll test your rig and your nerves. Expect to hear your rock sliders scraping and your suspension working overtime.

But it's not all about the trail—it's about the experience. The scenery is killer. Imagine pulling up to Buck Island Lake or Spider Lake, setting up camp, and just soaking it all in. You've got the granite boulders, the pines, and that pure, fresh mountain air. It's the kind of place that reminds you why you got into off-roading in the first place.

The camaraderie on the Rubicon is something else, too. You're out there with other wheelers who know the score. Everyone's ready to lend a hand, swap stories, or just crack open a cold one at the end of the day. It's a community, and when you're out on the trail, you're part of it.

Bottom line? The Rubicon Trail isn't just a trail—it's a legend. It's where you prove what you and your rig are made of. So, gear up, air down, and get ready for the ride of your life. The Rubicon is calling. Answer it. 🏠



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