ARIZONADRIVER

THE ENTHUSIAST'S GUIDE TO LIFE BEHIND THE WHEEL VOLUME 22 NUMBER 4 JULY-AUGUST 2023 AUCTIONS & EVENTS
AUCTIONS & EVENTS
JOSHUA TREE OVERLAND
ADOT, BORDER & TEEN NEWS
AND MUCH MORE!
AND MUCH MORE! Ford Bronco Sport
Heritage Limited 4x4 VEHICLES EQUIPMENT TECHNOLOGY PEOPLE EVENTS DESTINATIONS ATTRACTIONS



Since 2016, *Drive Toward a Cure*™ has been on a mission to support Parkinson's Disease research AND patient care, with donations benefiting the **Michael J. Fox Foundation** and the **Parkinson's Foundation**. Most recently, we created our own 'Access to Care' fund that supports **Parkinson's Foundation Centers of Excellence** throughout the country, in areas including Atlanta, Phoenix, Boston, Denver, Houston, Nashville, New York City, Portland and San Diego. And we're not done growing!

Having raised more than \$960k to date, thanks to generous donors, clubs, and organizations, we are on the cusp of crossing the \$1 million dollar threshold – **BUT WE NEED YOUR HELP**.

Join our **#BeOneInAMillion** campaign to help us foster even more programs for 2022 and beyond, and to keep the momentum going.

We're going for the Checkered Flag and with your help, those challenged by Parkinson's can win this race, so **#BeOneInAMillion!**

www.drivetowardacure.org/BeOneInAMillion

#BeOneInAMillion doesn't just mean making a donation. Ask us how you can organize an event like these...

Genau Autowerks (San Francisco) raised over \$7,500 by inviting friends and customers to take part in a fun wine country drive to visit The Racers Group. With some key sponsors lined up, every penny of the registration fees went to support the UCSF Parkinson's Disease Clinic.

The **Peachstate Region** (Atlanta) of the **Porsche Club of America** raised **over \$5,300** simply by taking a regular club rally event and setting donation options for

participants that included a "Gold Donor" level which 1 out of every 3 registrants opted for!



A rally to visit the 425 Magazine Northwest Idea House (Seattle) organized by **Lochwood-Lozier Custom Homes** and **Avants** raised **more than \$12,000**

from registrations and generous donations in the days that followed.



Drive Toward a Cure is a 501(c)(3) charitable organization.

News, event registrations, and donations at www.drivetowardacure.org

f/DriveTowardACure @@DriveTowardACure y@DriveTowardCure

Supporting Parkinson's Disease through beneficiaries including







ARIZONADRIVER

THE ENTHUSIAST'S GUIDE TO LIFE BEHIND THE WHEEL

news & features	July-August 2023
A Week With	2023 Toyota GR86 Premium 10
Motorsports	Phoenix Raceway NASCAR Championship Weekend () 13
A Week With	2022 Mercedes-AMG SL 63 Roadster14
Books / Travel	Rand McNally Road Atlas 100th Anniversary18
Overlanding	Joshua Tree National Park: Where the Streets Have No Name 3
Special Event	Barrett-Jackson Las Vegas Auction 2023 19
A Week With	2023 Lexus RZ 450e Luxury AWD (EV)26
Teen Driver	ADOT / MVD Home Permitting Programs
A Week With	2023 Mazda Mazda3 2.5T AWD Hatchback30
Special Events	Monterey / Pebble Beach 2023: schedule Highlights and dates as of now for this incredibly event-filled week or so around Monterey Bay in August. What a place to be.
A Week With	2023 Ford Bronco Sport Heritage Limited 4x4
Special Event	Overland Expo West 2023 Fundamental stats from this high profile national-regional event held just south of Flagstaff.
A Week With	2023 Mercedes-AMG EQE Sedan (EV)40
Good Deeds	Barrett-Jackson Las Vegas 2023 : Driven Project 043 During their auction week, Barrett-Jackson partners with the Driven Project to provide "Supercar Therapy" for children in need
A Week With	2024 Subaru Impreza RS 44
Infrastructure	Port of entry expansion at San Luis \$\ \begin{align*} \text{-47} \\ \text{\$308 million modernization and expansion at San Luis port of entry to expand capacity, enhance security and boost local economy.}
A Week With	2023 Dodge Hornet GT Plus 48
ADOT	I-17 Improvement Project: Flex Lanes ()
A Week With	2023 Nissan Ariya Evolve+ e-4ORCE (EV)52
Technology	Autonomous traffic coming to Sun City (1)
departments	
	■ FROM THE PUBLISHER4
	■ AUTOMOTIVE NEWS UPDATE
	■ THE INSIDE TRACK: BRIEFS & RUMORS56
	■ UPCOMING FEATURES58



COVER: Ford Bronco Sport Heritage. Photo: Joe Sage













START YOUR ENGINES: FROM THE PUBLISHER

e do primarily three types of vehicle drives. A manufacturer's new vehicle launch, usually with about a day and a half's driving, is generally a deep dive, with multiple versions of the vehicle (plus sometimes also the outgoing models, even competitors).

Weekly vehicles expose us to one copy of one particular trim—perhaps the top trim, or their anticipated volume seller, maybe a special edition or a particular powertrain.

Press association compare events have us driving multiple brands in various categories (e.g. cars, SUVs and trucks by size and/or price). These drives are fairly brief, generally 20-30 minutes each. Here, manufacturers usually also enter just one trim (or occasionally e.g. a luxury version and an off-roader).

Each has benefits and shortcomings. Focus is generally helpful, but so is comparison. Other trims or powertrains, prior models and competitive vehicles all offer insights. Each is distinctive or especially representative in its own way. You'll see we regularly dig into elements of all of the above, especially on our weeklies, especially all-new vehicles.

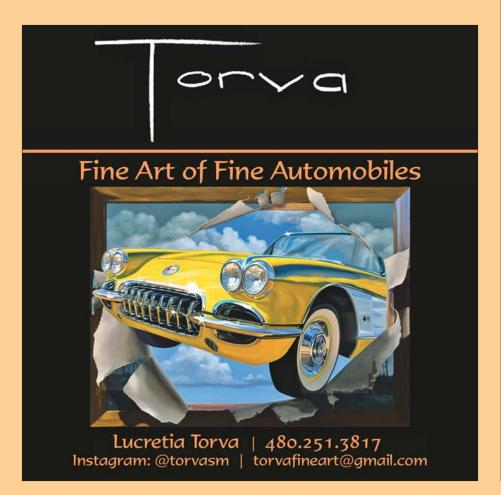
There are three EVs in this issue (and a late-in-the-cycle fourth will be in our next issue), across a range of brands and prices. What may be most noteworthy about this is not that there were so many, but that we are well on our way to a time when this no longer is noteworthy, fast becoming as mainstream as, say, hybrids have become.

Other forms of change are also represented in this issue—from the transformation of I-17 through Black Canyon, to a huge increase in traffic through the Mexican border, to more autonomous vehicle projects sharing the same public streets we all drive on.

Too much asphalt and steel? Then break away with **Sandra Muñoz Dorée** and photographer-slash-wilderness-chef husband **Bill Dorée** for a California desert overlanding trip that adds parks, motels, memorabilia and more, all with its own soundtrack built in. Enjoy the ride!

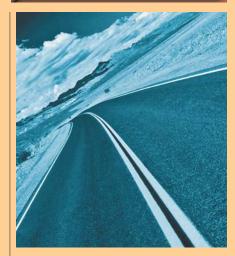
Joe Sage

Publisher/ Executive Editor



ARIZONADRIVER

MAGAZINE



PUBLISHER/EXECUTIVE EDITOR: Joe Sage

CONTRIBUTING WRITERS/PHOTOGRAPHERS:

Randall Bohl, Nick Calderone, Chris Collard, Sandra Muñoz Dorée and William Dorée, Tyson Hugie, Stephanie Jarnagan, BJ Killeen, Christina Lawrie, Mercedes Lilienthal, Sue Mead, JP Molnar, "LandSpeed" Louise Noeth, Doris Ong, Brenda Priddy, John Priddy, Kimatni Rawlins, Kelly Sallaway, Lyn St James, Tim and Kristin Sharp, Dave Stall, Paul Strauss, Valerie Thompson, Scott Tilley, Sherri Tilley, Aaron Turpen, Jan Wagner, Nicole Wakelin, Shawnda Williams, Kevin A Wilson, Meagan Wristen



■ Facebook: @ArizonaDriverMagazine

Twitter: @ArizonaDriver



ARIZONA DRIVER MAGAZINE IS A MEMBER OF: IMPAInternational Motor Press Association

MAMA....Midwest Automotive Media Association
MPG.....Motor Press Guild
NWAPA..Northwest Automotive Press Association

PAPAPhoenix Automotive Press Association
RMAPRocky Mountain Automotive Press
SAMASouthern Automotive Media Association
TAWA ... Texas Auto Writers Association

TxMPA ...Texas Motor Press Association **NAJ**Western Automotive Journalists

ACMLeMay—America's Car Museum Sturgis ...Sturgis Motorcycle Museum & Hall of Fame USFRAUtah Salt Flats Racing Association USMA United States Motorsports Association

PUBLISHED BIMONTHLY BY ADZONE ARIZONA LLC

All contents © AdZone Arizona LLC and Arizona Driver Magazine. All rights reserved. Any scanning, downloading and/or physical or electronic sharing of any part of this publication without prior written permission of the publisher constitutes theft of intellectual property.

Arizona Driver Magazine, Arizona Rider Magazine, Arizona Flyer Magazine and Arizona Boater Magazine are registered tradenames of AdZone Arizona LLC.

ARIZONA DRIVER MAGAZINE

PO Box 13387, Scottsdale AZ 85267 Advertising and sponsored content: 480-948-0200 Add coupon code AZDriver at checkout for an extra 15% off!

THE BEST LINE OF DEFENSE

Our biggest seller -- new lower prices!

BestLine Racing Diamond Nano-Lube Engine Treatment for Gas and Diesel

NEW FULL SYNTHETIC DIAMOND NANO-LUBRICANT ENGINE OIL ADDITIVES ARE NOW DESIGNED FOR BOTH GAS AND DIESEL ENGINES

Energy is lost due to friction that arises between the hundreds of parts that comprise an engine. This ultra-low friction technology uses nanotechnology in order to reduce friction by approximately 60% compared to conventional engines, by forming an ultra-low friction film on top of the Diamond Nano-coating. The Diamond Nano-Lube along with our other proprietary pure synthetic base oils and additives provide longer-lasting wear and heat protection for your motor. No Solids, No Teflon (PTFE), or any other old school ingredients. Only the latest high-quality additives are being used in the New BestLine Racing Engine and Fuel Treatments.

- Use for Gas and Diesel Engines High Shock Load Protection Protects Against System Corrosion
- More Concentrated Extreme Pressure Formula Use One Bottle for Every 5 quarts of oil
- Extreme Heat Resistance and Boundary Layer Protection Cleans & Treats Internal Components
- Fortifies Against Oxidation and Thermal Breakdown Lubricates with Diamond Nano-Particles
- Reduces Friction, Heat and Wear No Melting Point due to the Diamond Nano-Lubricating Particles
- Race Proven Under Extreme Conditions Improves Fuel Economy and Performance
- Extreme Pressure Lubricant Suitable for Race and Daily Drivers
- No Shipping Restrictions and Can Be Shipped Worldwide



Proud sponsors of Valerie Thompson Racing



Also available in gallon jug, 5-gal pail and 55-gal drum

Check out our Fuel Treatment, Power Booster Combustion Modifier, Water Wetter Cooling System Cooler, Transmission Treatment, No-Skweek Penetrant Lubricant, True Ceramic Coating Kit, kits, packages, accessories and more!



AUTOMOTIVE NEWS UPDATE



Rolls-Royce signals the end of an era as it ceases production of its Dawn convertible—the best-selling drophead in the brand's history. US deliveries concluded in 2022. With the success of Phantom VII and its stablemates Phantom Coupé and Phantom Drophead Coupé, an increasingly youthful customer base was drawn to the Rolls-Royce brand. These new superluxury consumers wanted a car that captured the glamor and romance of Rolls-Royce's transformative Goodwood era, while in tune with contemporary tastes and lifestyles. In creating Dawn, 80 percent of the panels were entirely unique, including a "wake channel" emanating from the Spirit of Ecstasy hood ornament to evoke a sensation of gathering energy while showing drivers a permanent vanishing point—a design feature enduring on other Rolls-Royce cars today. Dawn broke with a long-established automotive design convention. Almost without exception, convertibles are designed in a 2+2configuration, with full-size seating for driver and passenger in the front, plus two smaller seats for occasional passengers or children in the rear. As the lack of rearseat space, particularly legroom, reduces comfort and practicality, Dawn was made a full four-seater with comfortable, individual seating for all occupants. Engineers spent months optimizing the convertible experience with an exhaustive testing program, to neither eliminate airflow completely nor permit disruptive levels into

the cabin. Their test subject was a modi-

fied mannequin with a wig of long, flowing hair, chauffeured for hundreds of hours as a bank of sensors and cameras faithfully recorded how the hair was displaced by the moving air. The resulting data enabled engineers to perfect Dawn's aerodynamic comfort with the roof open.

Saleen Automotive, the Southern California vehicle manufacturer founded by legendary racing driver and vehicle buil-

Saleen has become synonymous with the words high-performance and Mustang," says Saleen. "While we have designed and manufactured other vehicles, the Mustang is the genesis for Saleen Automotive." NMRA president and CEO Steve Wolcott concurs, noting, "Both NMRA and Saleen were born during the Fox Mustang era, and both are still in the game decades later. With that in mind, we couldn't think of a better venue for Saleen fans to celebrate 40 years of Saleen performance vehicles at our big anniversary bash in Norwalk." Steve adds, "Saleen's 40th anniversary also corresponds with the last year of the S550 Mustang platform. We really wanted to make the SA-40 special, and I think we have, by creating the best looking and highest performing Saleen Mustang to date. In conjunction with Cruise for a Cause and its contribution toward cancer research, this special SA-40 sweepstake car will certainly help get the word out to the community." Traditionally, Saleen anniversary models are finished in yellow, black or white. Not since the SA-15 anniversary model in 1998 has Saleen pro-



der Steve Saleen, debuted its SA-40 model at the 2023 National Mustang Racers Association (NMRA) "Ponies In the Smokies" show in Sevierville, Tennessee in March, a weeklong event with over 1,000 Mustangs of all generations from across the country. Founded in 1983, Saleen celebrates with an SA-40 Speedster (Saleen 40th Anniversary model), limited to only 10 units. "Since its initial debut in 1984, the name

duced a yellow SA model, but now you can add the 2023 SA-40 to the yellow camp. Finished in proprietary Speedlab Yellow with black and white accents, the SA-40 features a new tonneau cover with dual hoop carbon fiber style bar. The SA-40 Speedster is based off the Saleen 302 Black Label convertible with 800 horsepower. All SA-40s are outfitted with special wheels, Racecraft suspension, Saleen

brakes, and a 40th anniversary interior package. MSRP starts at \$142,000.

Apocalypse Manufacturing set out 15 years ago to create a 6x6 vehicle that



could survive the end of times and today has over 220 on the road worldwide. They have now turned their Juggernaut 6x6 into a 4x4—the Apocalypse Super Truck—with an 850-hp modified supercharged 6.2L Hellcat HEMI V8. "We wanted to combine medieval, barbaric design that is impossible to ignore, with the ferocity of the HEMI Hellcat engine," says Joseph Ghattas, company owner, engineer and head designer. Atop 40-inch tires on 22-inch SFJ rims, the



truck sits 83 inches tall, 98 inches wide and240 inches long. Independent front suspension, locking differentials and Dana 60 axle bring 15,000 lbs tow capacity. The exterior features a steel front "grumper" (grille/bumper combo), slate-piled rear steel bumper and a slant-back roll-and-lock cover over its almost-eight-foot bed. Ample tire travel enables ramp-launch ten feet off the ground (a feature tested over

seven-foot-tall person comfortably and has the industry's largest rear bench. The interior is leather, with 12-inch head unit, Harman Kardon audio, heated-cooled-power seats and power mirrors, bird's eye and rear mirror live cams plus parking sensors, panoramic sunroof and power steps.

50 times). Modes cover off-roading and

drag race, and you can save your own cus-

tom mode. High-performance cooling is

designed specifically for the desert and

French automaker **Alpine**, founded in 1955 by Jean Rédélé, has carved out a name for itself as a manufacturer of sports

car in Alpine's new era, now brings the A290_ß (A290 beta) show car, the first of three models in a future new generation of fully electric sports cars, notable for its three-seat architecture and central driving position—the driver at one with the car, focused on the driving experience, passengers with an unparalleled experience as co-pilots. Design, materials and technology encapsulate a new angle on electric cars that are just as suited for sustainable motorsports as for everyday drives, and as exciting for the passengers as the driver. The A290_ß name is based on an Alpine global naming strategy—the letter A, followed by three numbers. The number 2 stands for the B-segment and the 90 stands for the brand's future lifestyle range. The Greek letter beta indicates an intermediate phase working up to the production vehicle's official launch in 2024. Its electric motor will also be manufactured in France, in the Cléon Megafactory. The development car's aluminum wheels foreshadow the production build, cut in a singular pattern and combining three colors: Alps Snow (matching the body), classic glossy mineral black and a blue rim. A square cut-out at the center of the 20-inch circle adds an original touch. Tires were purpose-engineered with Michelin for optimal performance, agility and control



cars. In 2018, Alpine unveiled the new A110, a sports car showcasing key principles of compactness, light weight and agility. The Alpine Business Unit was created in 2021, as Alpine became a Renault Group brand, continuing its own sports car development, while bringing its engineering expertise at Alpine Racing and Alpine Cars to the group. The A290, a future compact B-segment electric sports

in all conditions. As one of Alpine's hall-marks, the tires have two white triangles, which show where to position the tire to the wheel, with the Michelin name written visibly in white on the side. A city-friendly hot-rod inspired by racing cars and the Alpenglow concept car—that, in a nutshell, is what they say the A290_ß is all about.

KEEP RIGHT >>

6 • July-August 2023 • Arizonadriver



PASSION FOR WHAT MOVES YOU





Rachel Moore

Pedal is the must-have free app for automotive enthusiasts—the social networking community to capture and share the passion that moves you. Regardless of vehicle: car, truck, van or motorcycle. Whether you're a collector, dreamer or fan. An individual, organization or business.

Create a profile. Follow friends, family and others. Take new pictures and video, or upload from your camera roll. Share and comment. Post a link. Discover content from all over the world and join in the conversation.

This app is for people who want to share exotics like Ferrari, Lamborghini, McLaren and Porsche. Vintage, hot rods, daily drivers, electrics, autonomous and exciting barn finds. Individuals and car clubs. Racing from NASCAR to F1. The beautiful, ugly, strange and everything you think is worth sharing on and off the road.

Use Pedal to:

- Create your own profile.
- Post pictures and videos. Edit with our filters, add comments and save them to your profile.
- Opt-in to location services to geotag your posts.
- In the Discover page, search for users and hashtags to uncover and follow content you may like.
- On Pedal, we rev what we like. You can rev a post up to three times on the RPM gauge and then resets.
 Show your interest with each rev, watch the color change and the odometer counter go up.







PEDAL

© 2018 CARSICARSI, INC., ALL RIGHTS RESERVED.

▼ The all-electric **Fisker** Ocean, the automaker's debut vehicle, has won the internationally recognized 2023 Red Dot Product Design Award winner for Best Electric Vehicle—for beautiful aesthetics, excellent

function, ease of use, and responsibility/

impact, including more than 50 kg of re-

cycled polymers, bio-based content and other recycled materials. While keeping the

design language and form factor of an SUV,

the aerodynamic silhouette and low, wide

stance add efficiency to the Ocean's

range. The exterior is defined by a sports

car look, feel and dynamic, with elegant

arcs, clean surfaces and smooth highlights. Large 22-inch wheels ground its

proportions, while slim wrap-around light-

ing integrates into body panels concealing ADAS sensors and the world's first digital radar in a consumer vehicle. With one but-

ton, California Mode opens the SolarSky

roof and all windows simultaneously for a

convertible feel. Range is estimated at 350

miles (US with 22-inch wheels, or 440

WLTP-UK with 20-inchers or 436 with 22-

inchers). The SolarSky integrates solar pan-

els onto a panoramic glass power roof, ad-

ding up to 1,500 miles of solar-powered

range per year. The Fisker Ocean had its

first delivery in Denmark in May, with Hen-

rik Fisker personally presenting the vehi-

cle to its new owner at the Fisker Center+ facility in Copenhagen. A limited Ocean One launch edition model, it was presented in Great White paint, 22-inch AirGlider Black alloy wheels and a white Sea Salt in-



sustainability—with chairman and CEO Henrik Fisker and the Fisker design team The **Audi** TT, which began series production in 1998, turns 25 years old this accepting the award at the Red Dot Gala in late June in Essen, Germany, where the year. Audi had launched the A8 in the '90s, Fisker Ocean will be part of a "Milestones then renaming other models from 80/90 in Contemporary Design" exhibition of Red to A4 and 100/200 to A6 (and the first S Dot Award winners at the Red Dot Design car, the 200-derived S4, named for sport Museum, running through May 2024. Built and quattro drive, soon renamed to align at a carbon-neutral facility in Graz, Auswith its size, as S6)—with Audi A4 first to tria, the Fisker Ocean EV's materials are embody a new design language, followed carefully selected to reduce environmental

terior with white alcantara seats.

recalling the sporty NSU TT of the 1960s. The Audi TT Coupé's deliberate departure from standard Audi naming underscored the novelty of the model. In December 1995, the decision was made to mass-produce the TT. Audi exterior designer Torsten Wenzel, who helped bring the study to series production, recalls, "The greatest praise was when the trade press noted appreciatively that not much had changed from the study to series model, although we did, of course, have to adapt many details due to the technical specifications for the series version, including the proportions." The integration of a rear side window elongated the car's profile and increased the sports car's dynamics. The body of the Audi TT appears to be made from one piece, Wenzel says, and the front end, without traditional bumper overhangs, emphasizes its clear form. Numerous circular elements inspired the car's exterior and interior. Inspired by Bauhaus European design, every line in the Audi TT has a purpose, every shape a function. It worked, as Auto Europe voted it the best new car of the year in 1999, and by 2006, 178,765 first-generation Audi TT Coupés had rolled off the line. The gen-two TT Coupé, based on the platform of the A3, was launched in 2006, with a Roadster ad-

success with their motorcycles, while also



by A3 and A6. In parallel, American designer Freeman Thomas, under then-head of design Peter Schreyer, created the Audi TT Coupé, a puristic sports car study presented to an enthusiastic audience at IAA in Frankfurt in 1995—its "TT" name reminiscent of the legendary Tourist Trophy on the Isle of Man, one of the oldest motorsports events in the world, where Audi forebears NSU and DKW celebrated great

ded in 2007. In 2008, the TTS four-cylinder turbo model joined other Audi S cars, while the TT 2.0 TDI quattro arrived as the world's first production diesel sports car. A TT RS five-cylinder turbo arrived the next year. Generation three arrived in 2014. There are in fact two anniversaries this year, as Audi Hungaria Motor Kft—where the TT was produced from its outset— celebrates alongside the Audi TT itself. ■

SUB-SUPRA FUN by Joe Sage

GR86 for a week each last year (see May-June 2022), then the new Supra 3.0 finally with a manual transmission for a week earlier this year (see March-April 2023). Whether we drive both or just one, we always seem to find ourselves thinking whether the GR86 amounts to what could be called a Supra 1.0, all the moreso since Toyota introduced the turbo-4 Supra 2.0 (which also diluted Supra's long-inviolate status as a six-cylinder).

We've pondered this when the GR86 was the Scion FR-S and then when it was simply the Toyota 86 (as it long had been in the rest of the world). When Toyota added the Gazoo Racing initials to the 86, we took that as a nod to our line of thought.

There are, of course, notable differences. The GR86 is a four-seater; the Supra a two. Power is

e drove both the Toyota Supra 3.0 and certainly higher in the Supra, though the gap has been narrowed via both a bump in power for the GR86 and the addition of the mid-powered Supra 2.0, while horsepower also increased on the Supra 3.0 at that time. The 2.0 also lowered Supra's entry price point, Suspension, brakes, body and platform overall are much more advanced in the Supras. which, despite being two-seaters, are some 300 to 500 pounds heavier than the GR86. GR86 is shorter than Supra, but with a longer wheelbase—advantage Supra for a tighter turning circle, advantage GR86 for smaller overhangs. With higher ground clearance and without Supra's clamshell roof, the GR86 offers easier entry and exit.

The 86/GR86 has always had the advantage of offering a manual transmission, adding a fun and/ or control factor that could make it enticing or even

irresistible to an otherwise-Supra buyer. But the new manual Supra eliminates that comparative.

As for four seats versus two, the tight rear seats will likely go unused by most people, typical for a very small sports coupe at any price, and they give the GR86 a smaller trunk capacity, though GR86 has more useful stash points in-cabin.

As freestanding specs, 228 horses in a 2833-lb car is good. Horsepower has increased so much industrywide, we refer back to a gen-one Porsche Boxster for reference—201 hp and about 2750 pounds. That was taken at face value as a decent little performer worthy of its badge, and the GR86 has a stronger power-to-weight ratio than that.

As in the past, we found the GR86 very responsive, with solid steering and brakes. The manual transmission is (for us) a winner in itself. And the more aggressively you shift, the better it shifts. Rev-matching (which we don't much care for) is not needed. Running up a freeway ramp, we were able to accelerate, shift through a few gears and take a big van before the merge, nice but using about all the oomph it has. On surface streets, as a light turned green and we gave the GR86 a healthy kick, we were dusted by both an American muscle car and an EV. But referring back to that power-to-weight comparison, we know your drive experience can be sporty without being super powerful or super fast. It's not a performance racecar, at least not stock, but it is fun. How this stacks up for you will depend upon your own thrill thresholds and perhaps how competitive the streets are in your neck of the woods.

The GR86 is generally unchanged for 2023. The only thing different is availability of a 10th Anniversary Edition (which ours is not), in Solar Shift orange with black stripes, matte black wheels and GR cat-back exhaust.

When you come down to it, Toyota GR86 is not quite a baby Supra. Yet that comparison persists. It's probably best bearing its own name, admitted-



ly below Supra in performance. But GR86 does deliver above average fun. And it can leave you with enough cash to buy something else, too.

SPECIFICATIONS

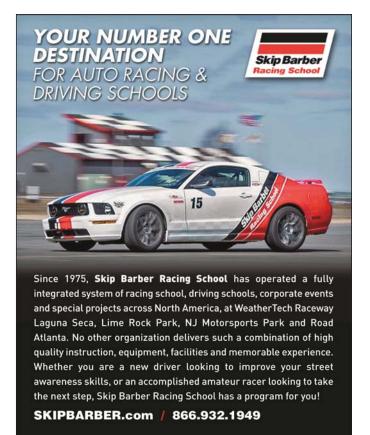
	Ota, Gunma, Japar
ROWS / SEATS	two/four (2+2
ENGINE	2.4L 4-cyl boxer, alum/alum
HP/TORQUE	DOHC 16v w dual VV 184 lb-f228 hp / 184
COMPRESSION RA	NTIO 12 5.
TRANSMISSION	6-spd manua RWI
DRIVETRAIN	RWI
SUSPENSION	F: sport-tuned indep
MacPher	son strut; 18.3mm stblzr bar
R: sport-tun	ed indep dbl wishbone style
	multi-link; 14mm stblzr ba
STEERING	elec power steering
BRAKES	F: 11.6 vented; R : 11.4 vented
WHEELS	(Premium) 18x7.5 allov
TIRES215/4	10R18 Michelin Pilot Sport
LENGTH / WHEELE	BASE167.9 / 101.4 ir
	NCE5.1 ir
TURNING CIRCLE.	35.4 f
HEADROOM (F/R)	37.0 / 33.5 ir
LEGROOM (F/R)	41.5 / 29.9 ir
CARGO CAPACITY	6.26 cu.f
WEIGHT	(Premium, MT) 2833 II
FUEL / CAPACITY	premium rec / 13.2 ga
MPG	20/27/22 (city/hwy/comb
BASE PRICE	\$30.500
	SSORY PACKAGE #1: carpeted
	rpeted trunk mat, first aid kit
guick change	cable pkg, key gloves404
REAR BUMPER AP	PLIQUÉ - CLEAR6
	ARGE1095
TOTAL	\$32,068

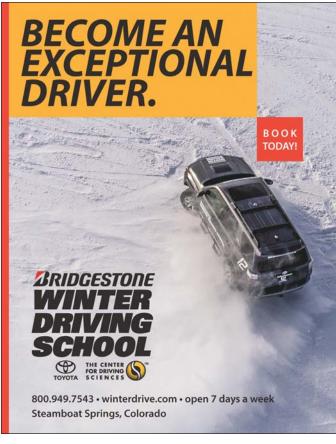
Prices have increased; see chart.

2023 TOYOTA GR86 LINEUP

	MT	AT
GR86	\$28,400.	\$29,900
GR86 Premium	▼ 31,000 .	32,500











NASCAR CHAMPIONSHIP WEEKEND NOVEMBER 3-5, 2023

xperience all Phoenix Raceway has to offer— from concerts, to pre-race and more—during the exciting NASCAR season finale in November.

The 2023 Fall NASCAR Championship Weekend at Phoenix Raceway has four major races over three days—the NASCAR Craftsman Truck Series Championship and ARCA Menards Series West Championship on Friday; the NASCAR Xfinity Series Championship on Saturday; and the NASCAR Cup Series Championship on Sunday. Only one of the final four drivers will be crowned a champion. Who will have what it takes to be the last one standing in Ruoff Mortgage Victory Lane?

TICKETS & INFORMATION: To secure tickets for this November's NASCAR Championship Weekend, information on additional experiences and entertainment, and the latest updated schedule details, call the Phoenix Raceway ticket office at 866-408-RACE (7223) or visit online at phoenixraceway.com.

Fans looking to buy or resell reserved seats can also visit SeatGeek.com.

WEDNESDAY, NOVEMBER 1
NASCAR Racing Experience8:00 am - 12 noon
THURSDAY. NOVEMBER 2
NASCAR Craftsman Truck Series practice and qualifyingtbd
ARCA Menards Series West practice and qualifyingtbd
FRIDAY, NOVEMBER 3
NASCAR Xfinity Series practicetbd
NASCAR Cup Series practicetbd
NASCAR CRAFTSMAN TRUCK SERIES
CHAMPIONSHIPtbd
ARCA MENARDS SERIES WEST CHAMPIONSHIP 7:00 pm
SATURDAY, NOVEMBER 4
NASCAR Xfinity Series qualifyingtbd
NASCAR Cup Series qualifyingtbd
NASCAR XFINITY SERIES CHAMPIONSHIP4:00 pm
SUNDAY, NOVEMBER 5
NASCAR CIIP SERIES CHAMPIONSHIP RACE 1:00 pm

NASCAR CUP SERIES CHAMPIONSHIP RACE1:00 pm



glorious BY JOE SAGE

he Mercedes-Benz SL has graced our roads for 70 years now, with a variety of iterations since the original Gullwing coupe in 1954 and first open roadster in 1957, with two-seaters and 2+2 four-seaters, soft tops, removable hardtops and retractable hardtops, and a variety of powertrains along the way. The lineup was simplified for 2022—after skipping the 2021 model year. (Unchanged for 2023, our sample here is a still-new 2022.)

One big change in this seventh generation is the discontinuation of the V12 version (most recently the Mercedes-AMG SL 65). As lineups are impacted by big-gasoline-engine angst industrywide, we can be glad this existed, providing headroom for this adjustment at the high end, while (for now) leaving the V8 models intact. In fact, some have preferred the V8, anyway, as its front/rear weight distribution is more balanced than with a V12.

Removable hardtops create their own stowage and ready convenience issues and were replaced on the SL in 2001 with a retractable hardtop, which has been a feature over two generations, through 2020. A second big change is that this has now been replaced with a power-retractable soft top. As with all such things, some may celebrate this, some may lament it, some may call it a tradeoff. It is marketed as the return of a roadster to its roots, and we agree—lighter, with a lower center of gravity, less complex by far, and quicker up and down.

A third big change is that SL is now all-AMG, comprising a Mercedes-AMG-two-digit-only line-up, with no more Mercedes-Benz SL three-digit versions. Tending toward a biggest-is-best mind-set, we are okay with this. But someone with SL desire, yet watching their budget, may miss the others. Again, though, this is a chance for the company to respond to market or regulatory pressures, while keeping a purist core alive and well.

What's more, just as we ended our week with this one, they announced a new addition to the lineup—a Mercedes-AMG SL 43, arriving this summer. This has a 375-hp turbo-four and 4.8-second zero-to-60 time (weight and fuel mileage yet to be

announced), and of course provides a lower-cost starting end, while also buffering the lineup further for regulatory survival. (Also arriving in the near future will be an SL E Performance hybrid.)

A fourth big change is that the two so far—the AMG SL 55 and 63—are 4MATIC+ all-wheel-drivers. The AMG SL 43, however, will be a rear-driver.

This generation remains a 2+2 four-seater.

New through and through, the gen-seven SL is an AMG lightweight composite aluminum build, with an aluminum space frame and self-supporting structure, optimizing rigidity, precise driving dynamics, comfort, vehicle packaging and proportions. The new body shell is a clean sheet design, with not a single component from the prior SL or any other model (such as the AMG GT Roadster).

Optimized materials and shapes create space for components delivering advanced performance, comfort and safety—as well as the soft top. Materials include aluminum, magnesium, fiber composites and steel. The windshield frame works with a roll bar system behind the rear seats, which can extend at lightning speed if needed, for rollover protection.

Torsional rigidity of the body shell (itself weigh-

ing about 595 pounds) is increased by 18 percent, and transverse rigidity is 50 percent higher than the already highly advanced AMG GT Roadster, with longitudinal rigidity 40 percent higher.

Like the Mercedes-AMG EQE Sedan in this issue, our SL came in MANUFAKTUR Magno flat-appearance paint, though a different shade of grey, and with a red soft top. These paints have an unmatched presence, telegraphing the feel of a solid cast ingot (which is a neat juxtaposition of experiences if you inadvertently rap a knuckle on one of the composite doors).

This is a \$200,000-plus car (as ours was outfitted, with fairly irresistible options). And it's a beauty, inside and out—and in motion. Expense is easy enough to achieve; expense you can see, feel, touch and appreciate from first sight is a significant accomplishment, and they have succeeded. The immediate and lasting conclusion: "worth it."

The SL has long benefitted from a long, wide, ground-hugging stance. The aforementioned lowering of the center of gravity, along with the move to 4MATIC+ all-wheel drive, makes it all better than ever—the car tracks and corners just perfectly at any speed. It's a platform that could be ideal for a wide variety of vehicles, with the small yet commanding cabin of this 2+2 performance roadster perhaps the optimum of all possibilities.

The soft convertible top (which removed about 46 pounds from the upper half of the car) raises or lowers in about 15 seconds—our benchmark for a quick top on even a two-seater, and this is a 2+2—and can be done at speeds up to 60 km/h (about 37 mph). The top also lies flush when retracted, no longer gobbling up about half the trunk volume, as the retractable hardtop did. The trunk's nicely rectilinear volume, by the way, is far more spacious than its specification suggests. The trunk lid itself also accomplishes its final close electrically, an assurance that the rear spoiler's conditions-contextual smart operation will not be interfered with by any careless closing.

Drive modes include Sport, Sport+ and Track Pace (each with a distinct binnacle instrument layout). The two sport modes offer a blip-shift feature for rapid (yet dramatic) downshifts, a feature found with some performance manuals. We didn't use these, as performance was stellar in default mode. Track Pace provides a range of race engineering and performance log features we would not be trying during our public-road-oriented week.

Instrument and feature setup in the driver interface is unusually straightforward for today's complex systems, one of the more complete, yet intuitive minimal-step systems we've seen. The main

COIL



ASSEMBLY.....

ENGINE/TRANSMISSION ...Germany / Germany CONTENT.......78% Germany / 0% US/Canada ENGINEhandcrafted AMG 4.0L V8 biturbo, diecast alloy block/heads577 hp / 590 lb-ft COMPRESSION RATIO .. fully variable all-wheel drive 0-T0-60 MPHest 3.5 sec SUSPENSIONF/R: AMG Active Ride Contro STEERING.....electromech speed-sens pwr w LENGTH / WHEELBASE185.2 / 106.3 in LEGROOM (F/R)...premium unl / 18.5 gal FUEL / CAPACITY ... \$178.100 BASE PRICE... PAINT: Manufaktur Monza Grey Magno. RED SOFT TOP LEATHER: black Nappa CARBON FIBER TRIM
AMG AERODYNAMICS PKG
AMG NIGHT PKG BLACK MICROFIBER HEADLINER TRONT SEATS: multicontour w m HEATED/VENTED FRONT SEATS... AUDIO: Burmester high-end 3D surround WHEELS: 21-in AMG forged, black..... LOAD COMPARTMENT PKG change, emergency stop, speed limit, brake w cross-traffic, blind spot, evasive steering assist; route-based speed adapt1950 PERFORMANCE LINE: front axle lift, illuminated doorsills, hands-free access, heated steer-ing wheel, AMG light display, AMG drive unit steering wheel buttons, active LED head-lights, surround view camera, heads-up dis-play, augmented nav video1800 ..1300 **GUARD 360 VEHICLE PROTECTION. DESTINATION CHARGE...** \$205.135

2023 AMG SL ROADSTER LINEUP

AMG SL 43	375 hp	\$109,9	90
		137,4	
AMG SL 63	577 hp	 7 178,	10
AMC CLE Da	daymana l		





Treat yourself to the life of luxury travel

Your Travel Center's phenomenal relationships and reputation within the travel industry provide a bridge from YOU to executives of over 1,000 of the world's finest hotels, cruise lines and tour outfitters. You will be recognized as a VIP guest with privileged access to special amenities and services when available, such as:

Complimentary room upgrades Breakfast for two daily Food & beverage credit Cocktail partys And much more...

Hosted tours Private transfers



Our Advisors are certified Travel Agents and experienced travelers. Depending on your specific needs, you will be directed to a travel expert who knows your destination and can provide you with the guidance that can best fulfill your travel expectations. Using the latest technology, they keep up with the latest enhancements that will save you time and money.

Our experienced leisure travel specialists can help with all your travel desires, including but not limited to all-inclusive luxury cruise vacations, luxury resort getaways, customized travel vacations, safaris and even guided travel to China, Southeast Asia, Europe, Africa and beyond. Our preferred relationship with the Four Seasons Hotels, Ritz-Carlton Hotels and the Belmond group allow us to offer our luxury hotel clients amazing perks and value-added amenities when available. such as hotel credit, complimentary breakfasts, hotel room upgrades and more! This is also true with many of our luxury and premium cruise partners as well as many of our destination management companies located throughout the world.

We also have a dedicated corporate travel team that handles large accounts across the United States. Our partnership with The Frosch Travel Group gives us the tools necessary to tailor a corporate travel plan for your company, provide travel savings for your employees and give you the personal attention you need in this technology driven era. Our personal commitment to providing you the tools you need to travel safely and at the lowest cost is unmatched.



Arizona headquarters

With 40+ years in the travel business, our travel agency offices in Arizona have a reputation for an outstanding passion regarding the world of travel. Our attention to personal service, along with our preferred travel relationships with many airlines, car rental agencies, hotels, cruise and tour vendors, ensures that we will exceed your travel needs.

Whatever your travel needs may be, allow Your Travel Center the opportunity to serve you.



MEMBER OF THE FROSCH' TRAVEL GROUP



Your Travel Center

MEMBER OF THE FROSCH TRAVEL GROUP

414 South Mill Avenue, Suite 125 Tempe, AZ 85281 480-496-0160 / 800-952-3174 Toll Free www.ytc.com

CST# 2019108-10

screen-blessedly not overly large-is positioned atop the forward area of the console, where it features another delight, power-angling forward and back through just enough range to optimize its visibility, notably making it super easy to eliminate the downside of every other screen, sunlight glare—just power it forward or back a couple of degrees. Loved this.

We often wear light leather gloves when temps ease above 100 degrees, at least until the interior cools down (which of course is pretty guick in this smallish cabin), and we did find those especially essential when first starting out on our hottest days, as the metal bits on the steering wheel can be blisteringly intense after sitting in the sun.

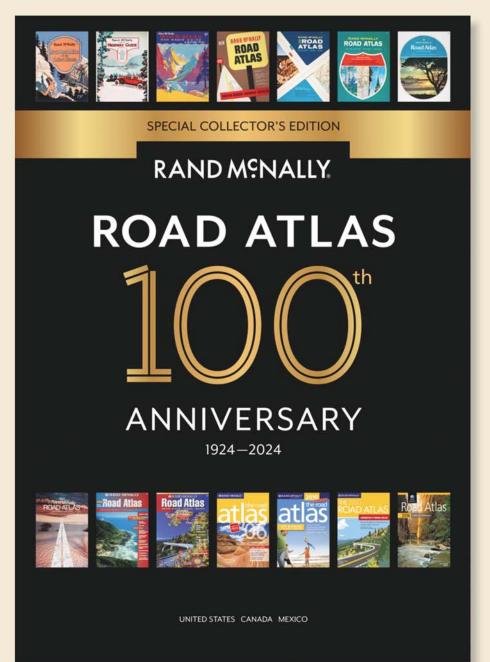
We had a long, winding, twisty, open road drive planned for our last couple of days, but our week was unexpectedly cut short without that session. Nonetheless, ever moment and every mile within an hour or so of our home base was exquisite. Someday, we'll do the rest.

Give it a spin, and anybody and everybody will surely want to own this AMG SL. Pricey it is, but if you have a quarter-million dollars in your new car budget, you'll still have plenty left over. And seriously, the SL 43 and even 55 must be tremendous values-we'll have to give them a spin sometime, too.









AMERICA'S NUMBER ONE ROAD ATLAS TURNS 100

Beginning with its predecessor the Auto Chum in 1924, the Rand McNally Road Atlas has been an essential, trusted tool for road travelers for 100 years.

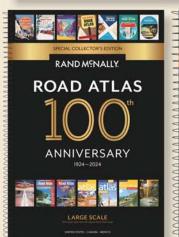
Celebrating its centennial anniversary, this 2024 Special Collector's Edition features a trip down memory lane—a nostalgic look back at 100 years of roadside culture, cars and the highway system that shaped the open road, as well as showcasing *Road Atlas* covers through the years.

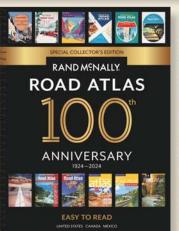
Billed as "America's #1 Road Atlas" and made in the USA, it includes updated maps of every US state and Canadian province, an overview map of Mexico, and detailed inset maps of over 350 cities and 20 US National Parks.

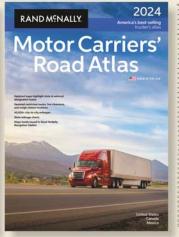
Rand McNally 2024 Road Atlas

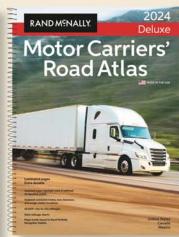
ISBN: 9780528027185
Publisher: Rand McNally (April 17, 2023)
Pages: 144, Format: Saddle Stitched
Dimensions: 10.375 x 15.375 inches
Case Pack 24, List Price \$24.99 each
25-99 at \$20.49; 100-499 at \$19.99,
500+ at \$19.24; or inquire for higher quantities.
Branding (1-color imprint; belly-band wrap)
at additional cost.

Other formats and editions also available:









Rand McNally 2024 Midsize -EasyFinder Road Atlas - Spiral (Large Print)

ISBN: 9780528026935

Pages: 160, Format: spiral, stay-flat binding Dimensions: 8 x 11 inches (travel size) From \$19.99 each, 24-pack

Rand McNally 2024 Large Scale Road Atlas (Large Print) ISBN: 9780528027192

Pages: 288, Format: spiral-bound Dimensions: 10.375 x 15.375 inches From \$29.99 each, 24-pack

Rand McNally 2024 Motor Carriers' Road Atlas

ISBN: 9780528027208

Every mile, in every cab, American truckers rely on *Rand McNally's Motor Carriers' Road Atlas* for the most comprehensive highway and trucking information on the market. America's #1-selling trucking atlas is designed to meet the unique needs of professional drivers, helping save time, save money, and stay compliant. Other Features:

- Detailed coverage of state and national designated routes
- Updated restricted routes, low clearance, and weigh station locations
- 22-page mileage directory including more than 40,000 truck-route-specific, city-to-city mileage
- Road construction and conditions hotlines
- Updated coverage of hazardous materials regulations
- Easy-to-use chart of state and provincial permit agency phone numbers and websites

Rand McNally 2024 Deluxe Motor Carriers' Road Atlas

ISBN: 9780528027161

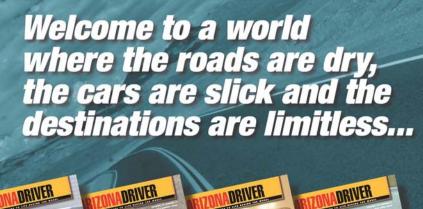
Laminated and spiral bound *Motor Carriers' Road Atlas* for heavy-duty users. The #1 selling trucker's road atlas in North America is as tough as the rig you're driving. With its laminated pages and spiral binding, the *Deluxe Motor Carriers' Road Atlas* can stand up to all of the wear-and-tear from the road. Save time and money with this easy to use atlas. Other Features:

- Durable, laminated pages stand up to stains and liquids, and won't show signs of normal wear-and-tear
- Tough spiral binding allows the book to lay open easily
- Detailed coverage of state and national designated routes
- Updated restricted routes, low clearance, and weigh station locations
- 22-page mileage directory including more than 40,000 truck-route-specific, city-to-city mileage
- Road construction and conditions hotlines
- Updated coverage of hazardous materials regulations
- Easy-to-use chart of state and provincial permit agency phone numbers and websites

For complete information or to order, visit: **www.thebookco.com**



THE ENTHUSIAST'S GUIDE TO LIFE BEHIND THE WHEEL



CITY THE REAL PROPERTY AND ADDRESS AND ADD

DRIVER



Focused content delivered to a targeted, engaged audience
Print-social-web advertising & promotional bundles
Print-web special sections & sponsored content
Custom publications, brochures and direct mail

sales@arizonadrivermagazine.com / main office: 480-948-0200 www.arizonadrivermagazine.com / FB: @arizonadrivermagazine IG: @arizonadriver / TW: @arizonadriver / Pedal: @arizonadriver

WHERE THE STREETS HAVE NO NAME



An overlander's quest to find THE Joshua Tree

BY SANDRA MUÑOZ DORÉE PHOTOS BY WILLIAM DORÉE Pollowing visits by peyote-popping hippies, but long before Los Angeleno influencers descended upon Joshua Tree National Park, Irish rock band U2 immortalized it by name. Their 1987 album was named after the boho chic-est national park. Thanks to the popularity of the album and the band itself, it became one of the most fabulous hipster destinations in the Golden State.

We spent five action-filled days overlanding in this dry corner of California, where towering rock formations and, of course, forests of Joshua Tree, also known as Yucca brevifolia, pepper the landscape. You can climb, bike and hike on this rocky terrain, and as a bonus, you can immortalize your stay with a selfie and the subsequent bragging rights that come with it.

Starry nights

If a full day of activities has you worn out, take it easy, grab a chair and wait until sunset when the park really comes alive. Recently designated as an IDark Sky park by the International Dark Sky Association, a gaze upward will reveal dark skies full of the most radiant stars. They are out-of-sight!

Clear skies and a diverse geography have led the park to take necessary steps to protect its land from an overabundance of stargazing visitors. It's best to call ahead for the latest information

Regardless, bring your tripod and camera and be prepared to capture what the heavens have to offer during your visit.

Campsite vs wild camping

There is no wild camping inside the Park. The Bureau of Land Management offers free camping near the National Park's North and South entrances.

We stayed at Black Rock Canyon Campground at the Park's northwest corner on our first night. This campsite is located on a hillside with beautiful views of the majestic Joshua trees. It's further from the rock formations, but closer to the North entrance to the park. But the views of the dense grove of trees appear like a landscape scene from a Dr. Seuss book.

On our second night, we chose the famous Jumbo Rocks Campground, which is the largest one in the National Park. Here you will wake up to closeup views of the bouldering rocks and have access to the trail that leads you to the famous Skull

Rock. It is also a great spot for stargazing.

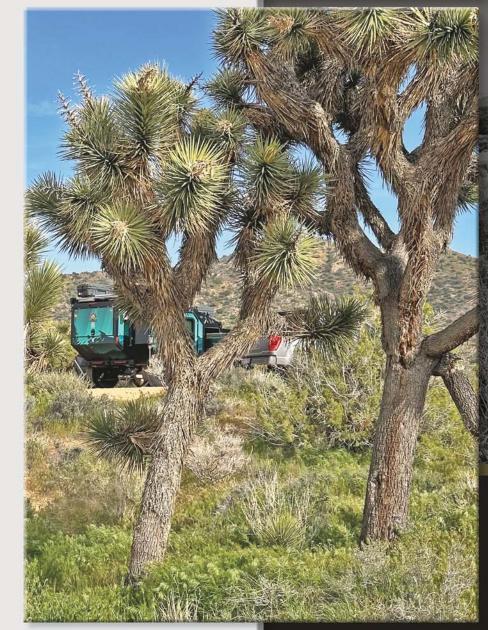
Our quest

But that's not what we were looking for; we were on a quest to find *THE* Joshua Tree immortalized by the rock band U2 on their album cover of the same name.

We headed out to the Park Service Visitor Center for some information on this famous tree And answers we got. It turns out that U2's iconic photoshoot was not taken inside Joshua Tree National Park at all, but at Zabriskie Point in Death Valley National Park. Yes, the inside cover photo, where the U2 bandmates moodily look into the camera with a lone Joshua Tree looming in the background, was shot in Death Valley along Highway 190.







20 • July-August 2023 • Arizona Driver • July-August 2023 • 21



Sadly, that's the only association between the Irish band and a National Park. We were told an autographed guitar is at the Visitor Center in Joshua Tree National Park. Oh, a must-visit is the Harmony Motel, where the band stayed during their desert escapade. Outfitted with retro-chic furnishings, it reminds visitors of road-tripping in a different age.

As for "the Joshua Tree," it died years ago. All that remains is its trunk and a bronze commemorative plaque in the ground, engraved, posing a simple question: "Have you found what you're looking for?" The commemorate plaque was made by U2 superfan Ernie Navarre in 2003. It has become a shrine for the band's fans. Many leave notes answering the posed question.

Overlanders can find the mysterious location in Darwin, California, a half-mile off the west side of route 190. It's actually closer to the outskirts of Death Valley National Park.

Be surprised

Without proper preparation, the Mojave Desert can be an inhospitable place. But it can also be beautiful. For a new perspective, we discovered world-renowned South African artist Daniel Popper's new installation *Transmission* rising almost 30 feet above the sand. This larger-than-life goddess sculpture is set to evoke a sense of peace, love and connection. Made of concrete and steel, embellished with glass mosaic, this will take your breath away.

The striking sculpture is anchored by two set of palms adorned with dichroic mirror mosaics that change color as the rays of sunset reflect on the circular cutouts. In a way, it seems to connect earth, sky and viewer in a magical way. Just like the Mojave itself.

Please note this art installation is definitely Instagram worthy, but it is not located at Joshua Tree. Instead, it can be found at the Mojave Moon Ranch. It can be viewed from the road or by taking a few steps along a path designed to bring viewers in for a closer look.

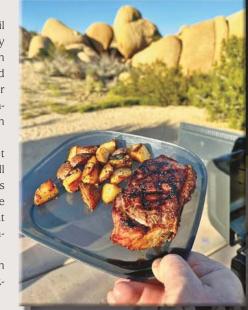
As with almost every trip we have been on, there's always more to discover than meets the eye. Getting off the beaten path and venturing onto nearly 800,00 acres of mystical beauty will make memories that will never leave you. There are plenty of back roads to discover, but some may re-

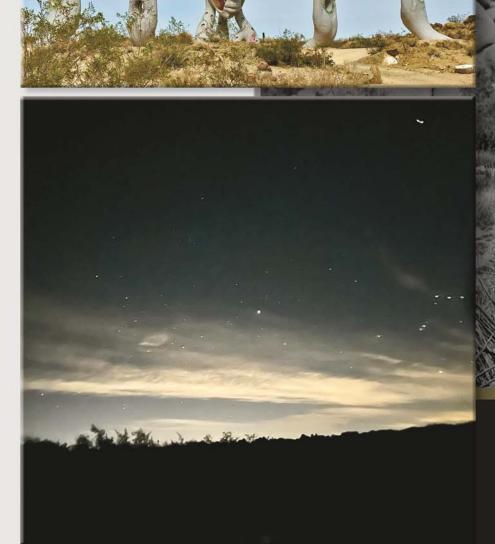
quire a permit.

There is a 79-mile point-to-point trail near Joshua Tree that is rated "Easy" by AllTrails.com. It's a popular trail, but on some days, you can find it less crowded and even more scenic. The trail ends near the North entrance of the Park. Before entering remember to replenish groceries in the city of Joshua Tree.

The evening temperatures can get quite chilly, so it was a no-brainer to pull out the Camp Chef to make a delicious steak and crispy potato dinner around the campfire. But if you prefer, there are great dining options outside the park in Twentynine Palms.

From sunup to sundown and all night in between, we did find what we were looking for. And then some.



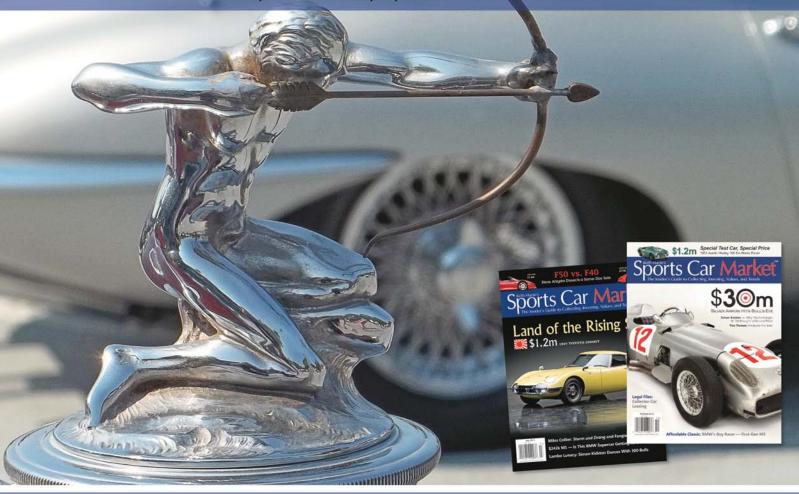


22 • July-August 2023 • Arizona Driver • July-August 2023 • 23

Sports Car Martin's The Insider's Guide to Collecting, Investing, Values, and Trends

"Hats off to you. Keeping up the great effort to produce the best car magazine each month is no small feat."

- E.M., Northbrook, IL, subscriber since 1998



Subscribe to SCM today and become a collector car insider

www.sportscarmarket.com



Barrett-Jackson

Las Vegas Auction 2023 Thursday-Saturday June 22-24 2023

Las Vegas Convention Center, West Hall, Las Vegas NV 89109

The 2023 **BARRETT-JACKSON** Las Vegas Auction saw 496 vehicles sold at auction, all with No Reserve, for \$29.2 million. Additionally, Barrett-Jackson sold 264 pieces of authentic automobilia for more than \$1.5 million, for total auction sales of \$30.8 million, with a 100 percent sell-through rate, and achieving over 30 world record auction sales.

The diverse docket of highly desirable collectible vehicles included a Ferrari SF90 (Lot #741), the 1972 De Tomaso Pantera (Lot #702) that starred in the *Fast & Furious* movie series, iconic Las Vegas showman Danny Gans' custom 1967 Ford Mustang (Lot #767) and several significant car collections. The top 10 non-charity vehicles that sold included:

	2019 Ford GT Lightweight Edition	Lot #749	.\$990,000
	2021 Ferrari SF90	Lot #741	594,000
	2016 Lamborghini Aventador LP750-4 Superveloce	Lot #742	489,500
	1968 Ford Mustang Eleanor Tribute Edition	Lot #718	352,000
	2023 Chevrolet Corvette Z06 70th Anniv Convertible	Lot #733	282,700
	1961 Chevrolet Corvette Custom Convertible	Lot #761	275,000
	1968 Shelby GT500KR	Lot #708	275,000
	2018 Lamborghini Huracán Performante	Lot #758	275,000
	1967 Ford Mustang Eleanor Tribute Edition	Lot #737	260,700
0	.1968 Ford Mustang Bullitt Custom Fastback	Lot #768	242,000

Elite collectible vehicles, world-class athletes, celebrities including Academy Awardwinning actress Nicole Kidman on stage to support the sale of a charity car, and new attractions were all hosted during this year's event.

Raising a total of \$865,000, Barrett-Jackson sold two charity vehicles to benefit the American Cancer Society as well as Kristi House, which provides treatment, advocacy and coordination of services for all forms of child trauma. Lot #3000 was a 2024 Lancer Craft Elite Runabout Boat (VIN 001) and trailer that raised \$165,000 for American Cancer Society. Lot #3001 was a one-of-one 2023 Dodge Challenger SRT Demon 170 that raised \$700,000, with 100 percent of the hammer price benefiting Kristi House. Academy Award-winning actress, producer and humanitarian Nicole Kidman was on stage to support the sale of the Challenger for Kristi House, offering tickets and VIP meet and greets to Keith Urban's concert in Las Vegas to the winning bidders. The Challenger charity car initially sold for \$400,000 and was immediately donated back by a generous Barrett-Jackson VIP bidder to sell once again for an additional \$300,000. To date, Barrett-Jackson has helped raise more than \$154 million for charity.

Automobilia sales were especially strong—264 pieces at auction with No Reserve for more than \$1.5 million. Total automobilia auction sales surpassed all previous Barrett-Jackson auctions outside of its flagship Scottsdale event. The top three pieces:

	3.		
1.	1920s Standard Gold Crown Fry Visible Gas Pump	Lot #8277	\$368,000
2.	1928 Ford Wayne Model 515 Visible Gas Pump	Lot #7276	149,500
3	1950s Stainless-Steel Soda Fountain, Cora-Cola Begalia	Lot #8265	\$80.500

This year's Las Vegas event included the all-new Barrett-Jackson Fan Zone which elevated the guest experience with meet and greet opportunities with athletes from UFC and PBR (Professional Bull Riders). The Las Vegas Auction attracted additional celebrities including recording artists and prominent sports figures.

Up next for Barrett-Jackson is their inaugural New Orleans Auction, September 28-30, 2023, at the Ernest N Morial Convention Center. For information, tickets, to consign or register to bid, visit **www.barrett-jackson.com**





Lexus goes electric by Joe Sage

Toyota-Lexus has gained somewhat of a reputation for moving cautiously into the EV realm. Some might say wisely. Most are diving in headfirst, at the expense of existing well-honed internal combustion technologies. Toyota-Lexus starts from a bit of a different spot, though, technically and philosophically, as pioneers and leaders in hybrids and plug-in hybrids (both now called "electrified" to blend with the bandwagon) long enough to have them mastered, to the point that they remain competitive with all the latest, especially when including all factors from extraction impacts to purchase price to refueling speed and range.

Their e-shift does continue apace, however, as Lexus now has its first globally available, purpose-

built battery-electric vehicle (BEV)—the Lexus RZ 450e—as they embark on a promise to offer 100 percent battery electrics globally by 2035.

Their comprehensive approach starts with a new e-TNGA platform, a lightweight and rigid assembly with low center of gravity, controlled inertia, heating and cooling achieved by an integrated underfloor battery placement. With sophisticated suspension and a complex DIRECT4 all-wheel drive system controlling counterbalanced front and rear eAxle sets, the whole setup is capable of sending up to 100 percent of torque to the front or rear.

Coming in two grades, the vehicle combines

150kW front and 80kW rear units for 308 system

hp, with a zero-to-60 time of 5.0 seconds. Range is about 220 miles on 18-inch wheels or 196 miles on 20-inch wheels. Base trim (Premium) offers either wheel size, the bigger wheels adding 22 pounds; Luxury has 20-inchers only, with features bringing its weight another 33 pounds higher. Combined

MPGe is 107 miles for Premium with 18s, 95 miles with 20s, but also 95 for the heavier Luxury with 20s, suggesting the difference is due to the tires' rolling resistance, since it's apparently not vehicle weight. Prices are close on all three (see sidebar).

Tech features abound, in an interior Lexus describes as minimalist with maximum luxury. The cabin's spacious feel is augmented by a panoramic glass roof with a smart e-coating to suppress heat, while a dimming function via an optional Dynamic Sky roof (\$550) sounds ideal in our climate.

The rotary shifter has a bit different operation from most, but intuition conquers it pretty quickly—all in all a good balance between zoomy tech and familiarity (we consider the latter essential for times a different driver may need to grab and go).

While the cabin has ample interior space, air handling was of note. It was not all that hot out yet, but we were finding it extremely stuffy even with AC seemingly optimized in the usual ways. A

deeper dive into the screen revealed that the air was all focused on just the driver. We've all seen that in, say, an audio system balanced to the driver—but for air handling, if you're not cooling the rest of the cabin, too, your corner will suffer. This seems to fall into the "did it because we could" engineering category. We set it to cool the whole cabin; problem solved and highly recommended.

Mission number one, of course, is to drive—and we had nothing but praise. Handling is superb. Acceleration through sweeping two-lane curves hugged pole position tightly, smoothly and accurately, even as we dug in with more power. This Lexus dedicated platform should be a big success.

Suspension was also a standout around town—we could hear seams in the road but not really feel them, a great balance of comfort and road awareness—and it was unusually smooth, strong and comfortable on rain troughs and speed bumps

Whether you're familiar with EVs or this is your first, you are not only going to like it, but you may even forget it's an EV, in the sense that it delivers a clear and transparent performance drive—while

with all the EV advantages.

While this is a bit of a golden age for power, the RZ 450e's combined output is not extreme—308 hp. And acceleration is more in line with internal combustion performance sedans. But weight is kept favorably under control. We've all seen more dramatic power and acceleration in EVs, but many go beyond the point of silliness. The RZ 450e is fast without feeling reckless and nimble in maneuvers; anything more might be wasted. (That said, we'll of course happily hop right into any higheroutput versions that may come later.)

The only downside, given all that, is that its range is not higher. On the plus side, our range readouts met or exceeded its ratings for the duration—and its recharging was faster than average.

Toyota-Lexus may not have been flooding the market with EVs to date, but they've clearly been busy. It's easy to note that the Lexus RZ 450e is a very solid first entry—but of course it's more than just a first attempt. This is their new global EV platform, and it's going to see plenty of use. They are definitely ready for prime time.

SPECIFICATIONS

	SPECIFICALI	UNS
	ASSEMBLY	Motomachi Plar
		Tovota City, Japa
	SEATING	fiv
	MOTORS	e perm magnet synchronou
		R: perm magnet synchrono
	BATTERY355V	lithium-ion 71.4 kWh. 96-ce
	POWER	Max output (F/R): 150/80 k
	Max	Max output (F/R): 150/80 k ¹ k torque (F/R): 196.4/124.3 lb
		Total system power: 308 I
	MAX SPEED	99 mp
	TRANSMISSION	5.0 se dial-type shift kno
	DRIVETRAIN	Direct4 AW xle coupled w engine & fro igh-output high-torque eAx
	rear eA	xle coupled w engine & fro
	motor, two h	igh-output high-torque eAx
	units per wh	neel set, 150-kW front, 80-k
	rear, three	neel set, 150-kW front, 80-k -point eAxle motor mounts
	lightweight a	lum brackets, symmetrical
		counterbalance eAxle torq
	SUSPENSION	F : indep MacPherson stru
		R: trailing arm multi-li
	STEERING	rack-assist-type elec powe
		(future: steer-by-wire w roa
		surface monitorin
	BRAKESI	: 12.91 vented, double-pisto er; R : 12.48 vented, single-pi
	floating calipe	er; R : 12.48 vented, single-pi
	ton floa	ting caliper; Active Hydraul G system works w drivetra
	Booster	system works w drivetra
	and reg	en motors to improve vehice and brake force distribution
	hostare	20-in black machine finis
	TIDES /	ours: Dunlop) 235/50R20 104
ä	I ENGTU / WUEEI	BASE189.17 / 112.2
	CPOLIND CLEAD	ANCE
	THENING CIRCLE	36.8
	HEADDOOM (E/D	39.88 / 39.69
Š	I ECDOOM (E/D)	42.11 / 37.52
	WEIGHT	4619
į	CARGO CAPACIT	Y 23.74 / 47.97-55.57 cu
Š	CHARGING TIME	110V AC (0-100%) + 50 h
	2 TANGET OF THE	110V AC (0-100%) \pm 50 h 120V AC (0-100%) \pm 9.5 h
	DC	Fast Charge (0-80%) \pm 30 m
ť,	RANGE (FP	A est 20-in wheels) 196 mile
P	MPGe (20-in w	A est, 20-in wheels) 196 mile hl) 102/87/95 (city/hwy/com
		\$64,00
	BASE PRICE	304,UL
	COLD AREA DVC	: Ether5
	III IIMINATED ED	ONT BADGE 2
	DANODAMIC CI /	SS ROOF5
	CARPET CARGO	WAT1
	KEY GLOVES	1.35%
ø	PUDDLE LAMPS:	side/rear3
8	DESTINATION C	IARGE 11
i		
	TOTAL	\$67,09

2023 LEXUS RZ 450e LINEUP

Premium AWD (18-in wheels)	58,50
Premium AWD (20-in wheels)	59,74
Luxury AWD (20-in wheels)	64,00



ELEVATE YOUR PERFORMANCE IN ALL SEASONS. SUPERCAR CERTIFIED.

MORE AT MICHELINMAN.COM









SUMMER IS TEEN DRIVING PERMIT TEST TIME IN ARIZONA

ADOT website has materials and practice tests to help aspiring drivers

While the school year is over, and summer has begun, many students will still be studying for a very important test—their written driver

Summer is typically a busy time for permit tests for the Arizona Department of Transportation Motor Vehicle Division. Thankfully, the ADOT website is a great resource for test-takers and their parents, sharing the Arizona Driver License Manual and even free practice tests online.

Aspiring drivers must be 15 years and six months old to apply for an Instruction Permit. First-time drivers younger than 18 have a few options for taking the written test. Most choose to take the test online via Permit Test @ Home.

▼ azdot.gov/permit-tests

The permit test is also offered at MVD office locations. Applicants can schedule their in-person test appointment date and time online at:

▼ AZMVDNow.gov > Schedule an Appointment

Participating Arizona Professional Driving School trainers also administer the written test.

PERMIT TEST @ HOME

Teenage Arizona drivers who need to take the written driver test to get an Instruction Permit can now take that test online with appropriate supervision. Permit Test @ Home is available for parents or legal guardians to administer utilizing their free, personalized account on AZ MVD Now. Note: at this time, Permit Test @ Home is offered only to teenagers under 18.

azmvdnow.gov

Note: Teenagers' accounts cannot be used for taking the test. The parent of legal guardian must have the account.

Steps for the parent or legal guardian:

- Log in or create your AZ MVD Now account
- Verify your identity
- Complete your teen's information
- Pay the \$7 application fee
- Supervise the test

It is recommended that teens study the Arizona Driver License Manual and take the online practice tests before attempting the Permit Test @ Home.

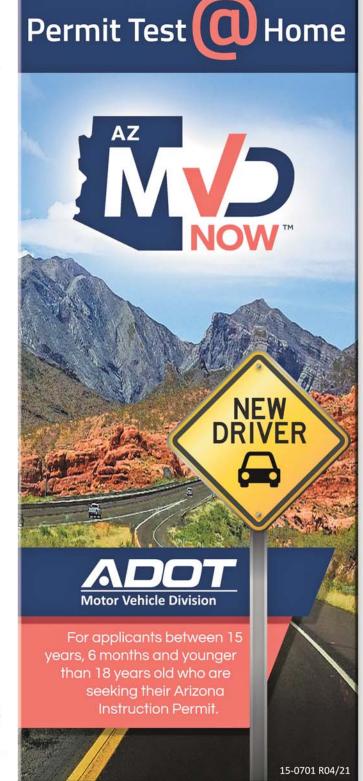
Participating Arizona Professional Driving School trainers can also administer the test on behalf of the parent or legal guardian.

GETTING THE PERMIT AFTER PASSING THE TEST:

With the teen's AZ MVD Now account, schedule an MVD office appointment at AZ MVD Now or visit an Authorized Third Party Driver License Provider. Bring a completed application and all original supporting documents.







A FULL MATRIX BY JOE SAGE

azda3 and Miata are the only remaining azda's and Miata are the only remaining "cars" in Mazda's lineup—the rest being crossovers (currently six, as one-digit models e.g. CX-5 migrate to a new generation of two-digits e.g. CX-50, with both available this year for some, plus their first MX-designated EV). But have no fear —Mazda3's lineup is so complex, it's like having a whole stable of car alternatives within itself.

Variables, as noted in the detailed breakout at right, include a sedan-hatch choice, engines, transmissions and drivetrains, adding up to a whopping 14 different Mazda3 builds. The hard part is that you can't just pick and choose from among these variables. A case in point would be the very welcome presence of a manual transmission, but with

30 • July-August 2023 •

the unfortunate limitation of it only being available with front-wheel drive and only with the smaller engine (two heartbreakers), and only on the hatch.

There are likely engineering tradeoffs, as well as sales projections, that determine such things. And most people may not fall into this crack at all, simply choosing by the basics and their budgets. Tough enough and easy enough, at the same time.

Our sample has the more powerful turbo engine and all-wheel drive. Much as we love a manual. with this powertrain in hand, we might be hard pressed to stand by that as an absolute. On the other hand, we know that if we had the manual in hand, we would be unlikely to give it up. Or would we? We may prefer AWD as much as the manual,

and they are not available together. We really need to drive them back-to-back-to-back in depth (which we don't get to do often enough), then face the music on which to buy (we're usually largely just speculating about this, but it's a reality you could be more immediately facing).

As for the lower-powered non-turbo engine (on most versions), it gains five horses this year, while fuel economy also scoots up a little. The turbo, on the other hand, can run on either premium or regular fuel (for either about 19 or 31 percent more power than the base 2.5L), so turbo buyers can save money or increase power at will, at the pump.

In Soul Red—one of the finest factory paints on the planet—ours was pretty much a rocket, with plenty of power on tap and hugging the curves like the best AWD performers. Though the hatch for-

2023 MAZDA3 LINEUP VARIABLES

(See lineup pricing chart, lower right sidebar.) This is one of the more interesting lineups you will find:

ENGINES: There are a 191-hp base 2.5-liter and a 250-hp 2.5-liter Turbo (premium fuel, or 227-hp with regular). TRANSMISSIONS: Only one out of 14 builds offers a manu-

al transmission—the 2.5 S Premium Package—but this is non-turbo, hatchback-only and, sadly for us, FWD-only. **DRIVETRAINS:** The first three trims of the non-turbo S are

front-drivers. Only one non-turbo S (Carbon Edition) gives you a choice of FWD or AWD. The only manual is FWDonly and non-turbo S (Premium) only; non-turbo S Premium is otherwise AWD. All turbos are AWD-only.

SEDAN OR HATCHBACK: There's both a sedan and a hatchback of most, but it's hatchback-only for the only manual transmission or the base Premium AWD turbo (for a turbo sedan, you can go with Premium Plus).

mat limits over-the-shoulder visibility (especially notable as we had it during Motorcycle Safety Awareness Month), its cocoon-like experience is distinctive and just plain cool. A hatch also provides more cargo volume and, though not as lockable as a trunk, your contents are air conditioned.

That's a lot of apples and oranges, especially in terms of some of the basic options many of us will care about the most—those who seek the manual transmission and AWD, preferably with a choice of trim levels and body type.

Thus ours, a 2.5 Turbo Premium Plus Package Hatchback, is the top model in the matrix. And it is also available as a sedan. However, as with all but one, you can't get it (or any turbo) with a manual transmission. You also can't get the turbo's Premium Plus top level of features with the non-turbo S engine, nor as a front-driver.

Prices are all reasonable, and we're happy enough with all of that, except for the impossibility of a turbo with manual trans or a non-turbo manual without AWD. That obviously exceeds either engineering limits or possibly just their sales forecasts for this particular niche. These are all elements of many a common conundrum, but the other variables in this mix make this really stand out—at least to us.

Even if you have a few nitpicks with some of the little details in the interface—as of course we always do-you'll make friends with them all. The Mazda3 AWD turbo hatch is a blast, a real pleasure to drive. At the end of our week, we hated to see this one go.

SPECIFICATIONS

ACCEMIDIV	Uofı∟lanar
ENCINE/TDANC D	Hofu, Japar : UILD Japan / Japar
DADTE CONTENT	US/Can 0% / Japan 85%
PARIS CUNIENI.	05/Can 0% / Japan 85%
PASSENGERS	five TIV-G 2.5L turbo-4, Dynamic
	re, G-Vectoring Control Plus
	prem fuel) 250 hp / 320 lb-f). reg fuel) 227 hp / 310 lb-f)
TDANCALCCION	ATIO10.5: 6-spd Sport auto
CHEDENCION	AWI F : indep MacPherson strut
SUSPENSION	R : torsion beam axlı
STEEDING	elec power ass
DDAVEC	F : 11.61 vented; R : 10.43 solid
	18x7J Black Metallic alloy:
	215/4518 M+S
I ENGTH / WHEEL	BASE175.6 / 107.3 ii
	NCE5.5 ii
	curb-to-curb 34.8 f
	37.5 / 36.5 ii
LEGROOM (F/R)	42.3 / 35.1(L) 34.4(R) ii
	/20.1 cu.f
	3393
FIIFI / CAPACITY	premium rec / 12.7 ga
	23/31/26 (city/hwy/comb
BASE PRICE	#05 000
BASE PRICE	\$35,300
	PKG (INCL): leather-trimme
seats, front/r	ear parking sensors, 360-de , traffic jam assist, auto-din

	THE MICHIGAN TEOD THE (MICHEL). TOURIST CHIMINE
	seats, front/rear parking sensors, 360-de
	gree monitor, traffic jam assist, auto-di
	driver side mirror, Homelink®, front a
	guides, nav, traffic sign recog, Sirius traffi
	& travel (3 yr), smart brake support-rea
	rear cross traffic w brake, front air dan
	black rear hatch spoilerinc
	SOUL RED CRYSTAL METALLIC PAINT
ы	DESTINATION CHARGE 139

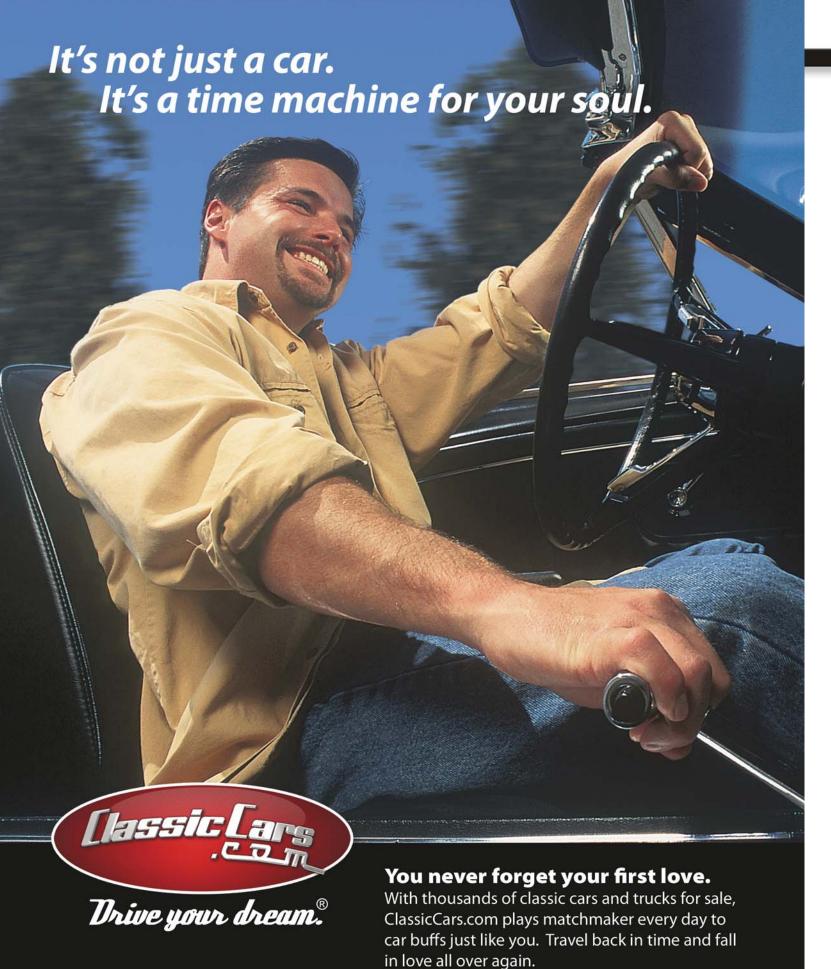
		CONTRACTOR OF THE PARTY OF		Total Control	Marine Town	
	1000	1000	ALC: N	100000	Service of the last	201
ı	SEE	10 to 10 /	THE PARTY OF	医复杂地	\$37	I LO L

2023 MAZDA3 LINEUP

TOTA

Mazda3 2.5 S	SEDAN	HATCH
AT / FWD	OLDA!	
(base S)	\$22,550	\$23,550
Select Pkg	23,950	24,950
Preferred Pkg	25,550	26,550
AT / FWD / OPTIONAL AWD	100	
Carbon Edition	27,200	28,200
AT / AWD		
Premium Pkg		30,400
OPTIONAL 6MT BUT FWE		
Premium Pkg: 6 MT		29,150
Mordo2 2 F Turbo	CEDAN	HATOH
Mazda3 2.5 Turbo	SEDAN	HAICH
AT / AWD (base Turbo)		32 450

Premium Plus Pkg.......34,000 35,300



SPECIAL EVENTS: MONTEREY / PEBBLE BEACH 2023: SCHEDULE-OVERVIEW

This high-profile week is a great time to duck out of Arizona's summer heat for a few days around beautiful Monterey Bay on the Central California coast, taking in multiple collector auctions, four days of vintage racing at WeatherTech Raceway Laguna Seca, and a chain of related events culminating in the famous Pebble Beach Concours d'Elegance.

Here are dates (as of now):

FRIDAY, AUGUST 11

Monterey Car Week Kick-Off

SATURDAY, AUGUST 12

Monterey Pre-Reunion

SUNDAY, AUGUST 13

Monterey Pre-Reunion

MONDAY, AUGUST 14

The Porsche Monterey Classic

MONDAY-WEDNESDAY, AUGUST 14-16—> Automobilia Monterey Expo (14-16)

UESDAY, AUGUST 15

Classic Motorsports Mgzn Monterey Kickoff Acura in the Park

WEDNESDAY, AUGUST 16

Motorlux

Pebble Beach Motoring Classic Little Car Show

Concours for a Cause

WEDNESDAY-FRIDAY, AUGUST 16-18—>Bonhams Quail Lodge Auction (16-18)

WEDNESDAY-SATURDAY, AUGUST 16-19—>

Rolex Monterey Motorsports Reunion (16-19)

THURSDAY, AUGUST 17

Ferrari Owners Club Concours Carmel Legends of the Autobahn

Pebble Beach Tour d'Elegance Pres. by Rolex Prancing Ponies Women's Car Show

THURSDAY-FRIDAY, AUGUST 17-18—>
Monterey Jet Center Auction (17-18)

THURSDAY-SATURDAY, AUGUST 17-19—>

Mecum Monterey 2023 Auction (17-19) Pebble Beach Classic Car Forum (17-19) RM Sotheby's Monterey (17-19)

THURSDAY-SUNDAY, AUGUST 17-20—>

Pebble Beach RetroAuto (17-20)

FRIDAY, AUGUST 18

Pacific Grove Rotary Concours Auto Rally The Quail, A Motorsports Gathering Werks Reunion

FRIDAY-SATURDAY, AUGUST 18-19—>

Gooding & Co.'s Pebble Beach Auctions (18-19)

SATURDAY, AUGUST 19

Exotics on Broadway

Monterey Motorsports Festival Annual Ferrari Owners Club Gathering Concorso Italiano

Concours d'LeMons

www.ClassicCars.com

SUNDAY, AUGUST 20Pebble Beach Concours d'Elegance

*To confirm the most current dates and to find the latest general information, visit: www.pebblebeachconcours.net www.whatsupmonterey.com

72nd Pebble Beach Concours d'Elegance and Monterey Car Week







AS YOU MAY RECALL BY JOE SAGE

here have been many branches in the Ford Bronco tree, though it distills down pretty simply. It roots are most deeply embedded in the original small Bronco (generation one, 1966-1977), a general purpose off-road and farm duty utility on its own dedicated platform, then in a sequence of full-size Broncos based on F-150 frames and cabs (generations two to five, 1978-1996).

For a stretch of time, there was also a Bronco II (1984-1990), built off the Ford Ranger, supplanted by the Ford Explorer, as the SUV craze sprang its own roots and grew in a new separate direction.

One thing for certain: despite ever more SUVs

and crossovers on the market since the Bronco retired, as well as ever more variants of its most direct competitors, people clamored for its return. Funny thing is, that meant different things to different people. To many, it meant the big F-Seriesbased Bronco, while others craved the smaller gen-one Bronco, or some even the Bronco II.

The new gen-six Bronco (2021 forward) was introduced with big (Ranger-based) 2-Door and 4-Door models, along with a smaller (Escape-based) Bronco Sport, which in fact came out first and gave the overall nameplate a spot in the red hot compact crossover market. For anyone more into big,

tough trucks and utilities, it was easy to dismiss the Bronco Sport as a less serious entry. But it turns out there has always been more to it, and here we have the proof, and the image to support that, fully fleshed out in a special new version.

New to both the big Broncos and small Bronco Sport for 2023. Ford introduces Heritage Edition and Heritage Limited versions of all three. Design cues—including roof, grille and wheels in Oxford White (except for dark wheels on the big Bronco Heritage Limited), along with special paints—harken back to the original small Bronco from 1966.

Ford will build just 1,966 units of each Heritage

Limited Edition model to commemorate the year the original Bronco debuted. It's a great treatment on any of them, but it is arguably the Bronco Sport versions that really bring the spirit of that numerically honored smaller gen-one Bronco back to life.

The 2023 Bronco Sport Heritage Edition is built on the Big Bend version (second up from a base trim currently not even available), with a 181-hp 1.5-liter EcoBoost three-cylinder. Heritage Limited upgrades to a 250-hp 2.0-liter four-cylinder.

The Bronco Sport Heritage models are admittedly kind of cute, especially in such colors as Robin's Egg Blue or our Yellowstone Metallic, along with their white elements. Their presence in the broad compact crossover market segment and that cuteness factor aside, though, they are dead serious.

All feature G.O.A.T. (Goes Over Any Type of Terrain) modes and a H.O.S.S. (High-Performance Off-Road Stability Suspension) system with increased ride height and attention to off-road comfortbound stops, to 46-mm monotube rear shocks, antiroll bars and specially tuned springs.

Interior touches on the Bronco Sport Heritage and Heritage Limited models include plaid cloth seats in heathered Navy Pier—a color inspired by the cloth seats in 1980s Broncos-with plaid inserts and Race Red and Robin's Egg Blue accent stitching; a Navy Pier microsuede center console and armrests with Race Red stitching; Oxford White accents on a Navy Pier instrument panel as well as the doors; and a Bronco Sport MOLLE strap storage system on front-row seatbacks with Navy Pier straps and Race Red zipper grips.

Bronco Sport Heritage series wheels are period stylish, but also modern off-road oriented—17-inchers bearing 29-inch all-terrain off-road rubber with deep, aggressive tread continuing onto the sidewalls for extra protection in the rock and brush.

Put it all together, and you have two cute, classic off-roaders, one near base price and one now **SPECIFICATIONS**

....Hermosillo, Mexico ENGINE 2.0L EcoBoost 4-cylinder,
DOHC, TI-VCT, alum block/head/pistons,
powder forged rods HP/TORQUE......(prem fuel) 250 hp / 277 lb-ft COMPRESSION RATIO 10.0-1 TRANSMISSION8-spd SelectShift auto w oil cooler, paddle shifters4x4, liquid-cooled PTU, 4x4 disconnect w 4x4 lock, dual clutch RDU w differential lock lower control arm, cast knuckle,

R: indep double lateral link semi-trailing
arms w unique coil spring, stblzr bar,
monotube hydraulic gas shocks, isolated
steel subframe w unique cast knuckle

STEERINGelec power-assist
w tuning unique to drive modes
RRAKESF: 308mm x 27mm vented, single-piston calibers, R: 302mm x 11mm, single-piston WHEELS17-in Oxford White alum heritage TIRES235/65R17 Falken WildPeak AT AT3W Off-Road LENGTH / WHEELBASE172.7 / 105.1 in GROUND CLEARANCE8.6-8.8 in WATER FORDING ..63.4 / 62.8 in TRACK (F/R) APPR / DEPART / BRKVR30.4 / 33.1 / 20.49 37.4 ft TURNING CIRCLE. .41.5-42.4 / 41.7 in HEADROOM (F/R). LEGROOM (F/R) .40.8 / 36.9 in **CARGO CAPACITY** .29.4 / 60.6 cu.ft WEIGHT3713 lb **TOW CAPACITY** ..2200 lb .prem rec / 16 gal 21/26/23 (city/hwy/comb) **BASE PRICE**. EQUIPMENT GROUP 410A: dual zone climate, HD radio, B&O 10-spkr audio, remote start, universal garage door opener, power moonroof, 14-in Oxford White wheels, rear parking sensors, wireless charging pad, FORD CO-PILOT360 ASSIST+...... CARGO MANAGEMENT SYSTEM

2023 BRONCO SPORT LINEUP

DESTINATION CHARGE....

(base model)	.\$29,215
Big Bend	31,230
Heritage Edition	33,400
Outer Banks	
Badlands	38,090
Heritage Limited	44,655

150

..1595 .\$46,400

(BIG BRONCO HERITAGE MODELS: 2- / 4-DOOR) Heritage Edition Heritage Limited .\$44,305 / 46,295

from specially tuned front struts with hydraulic re-A jog in the roofline just aft of the sunroof evokes some of the toughest off-roaders the world has known. Bronco Sport Heritage models bear the bold red BRONCO name on the grille as with Mustang, Bronco generally prioritizes its own treasured brand over corporate badging. (As fate would have it, though, while most big Bronco trims also bear the BRONCO name on their grille, big Bronco Heritage models carry the FORD name front and center, as does the big Bronco Raptor. Purist advantage: Bronco Sport?) Service of the last of the las

the top model (see pricing in sidebar), confirming that this build is more than just a styling novelty.

Having studied the specs before its arrival, and now gazing out over this Bronco Sport's purposeful dual power bulge hood, it took only a couple of blocks to conclude that Ford is on to something here. Perhaps they themselves decided the Escapebased Bronco family member may have been at risk of not being taken as seriously as the big ones. Mission accomplished. While knowing full well how much we'd like to have a big Bronco all our own, we started falling for this one, as well.

Our first run was up the Beeline Highway, continuing onto two-lane Bush Highway out past Saguaro Lake, then doubling back to west of the Beeline for some relatively light dirt time. Our driving overall was comprehensive—surface streets, freeways (and their all-important ramps), subur-

ban boulevards, and a full sampling of parking and speedbumps along the way. It's a given that U-turns and parking lots in the Bronco Sport can be dreamily easier in this small off-roader.

Regular daily driving can get quite aggressive in these parts, and the 250 horses in this well-undertwo-ton vehicle, as well as the road manners of its otherwise so trail-ready suspension, conquered all challenges. From merging multi-lane frontage road turns at speed, to accelerating up climbing and further-merging freeway ramps—where we could easily grab the top spot—to competitive freeways themselves, the fuel-efficient EcoBoost four easily dominated as much as it ever needed to.

We hadn't used the G.O.A.T. modes on our first quick off-roading, and after a few days realized we hadn't used drive modes around town, either, a positive sign that basic performance is never lacking. So we popped it into sport. You can tell the difference if you're paying attention, but you're not reliant upon it, which to us is a plus, as we feel standard mode should always give good performance, if good performance is built in. Ford also seems to have perfected auto start-stop, which we often actively override in anything, but which was smooth and transparent in this, barely noticeable.

On our last full day, we took it to another off-

highway vehicle park to the northwest—via freeway, Interstate and rural two-lane highway—for several hours of more challenging off-roading. We knew what the big Bronco could do here. It turns out this little guy is awesomely capable, as well.

Ground clearance is 8.6 to 8.8 inches. Suspension is beefed up, though not articulated in the extreme. Falken All-Terrains on 17-inch wheels are a solid foundation. There is a great mix of surfaces and conditions at this location, though, as with most such systems, we have decisions to make if we want to apply specialized modes. The very first access trail is fairly rudimentary, really just the drive to the drive, but BAM! we promptly hit the undercarriage, nothing damaging, basically acoustic, but we were surprised (and glad the skid plates are substantial). Nonetheless, our fantasies were perhaps tamed for the moment, though this was not all bad, sort of a "hey, don't overdo it, remember this is the smaller one" indicator.

We played with the G.O.A.T. Modes from a spot parked at quite an angle atop a very steep piece of road, wheels up and to left over a very steep edge,

pointed in a skyward launch position. We figured we didn't necessarily need modes here, but it'd be a great place to try them. G.O.A.T. Modes offer settings for mud and ruts (we had ruts but not mud, although there was some light rain kicking in); slippery (there's inherent slip in dirt, but this surely means snow and ice); sand (not really, though this is more that type of slip); rock crawl (less likely in this, at least when it's not our own vehicle). Sand seemed like the best contender here. And it could not have been easier. We no doubt would have had some slippage, grabbing for grip, in Normal. In Sand mode, you would not think we'd been in the position we were in at all, just driving right on out of it, piece of cake. It was enough to contemplate whether we needed modes at all, but it equally seems proof that we did. Or at least bene-

Aside from our G.O.A.T. session, all we used up there was 4WD lock—not the differential lock, didn't turn off traction control, and didn't use hill descent. It's so capable, we never needed to.

fitted from them. Nice. This is ready for anything.

Vehicle size here can work either wav—some-

times a big honking beast is what conquers conditions, and sometimes smaller is definitely better, for sneaking between rocks, trees and brush.

We switched out of 4WD lock as we departed our off-roading, back on pavement, to head back toward civilization. We popped it back into sport just because we thought of it, did get a quick little kick from that, and we were on our way, cruising down the two-lane desert highway at speed and concluding that this thing is great, all around.

We gained high respect for the Bronco Sport as an available alternative to the big Bronco. As for the Heritage Editions, once you tune in to the roof, wheels and colors, and lock into the concept overall, you can't think of anything that would be vitally better. The Bronco family are all great, but this one has nailed its targeted persona—equal parts tough truck and show truck, of course in no way mutually exclusive, anyway, this being a case in point. This build goes way beyond skin deep.

If you want the bigger Bronco, of course go get it. If you're interested in a smaller one or open to them all, this Bronco Sport scores an A-plus.

BIG BRONCO HERITAGE EDITIONS

Big Bronco (two-door and four-door) Heritage and Heritage Limited Editions have a two-tone paint job similar to Bronco Sport Heritage models, with Oxford White modular hardtop roof and accents. On the big Bronco, the Oxford White grille has Race Red FORD lettering, rather than BRONCO as on Bronco Sport. Similar to Bronco Sport, the big Bronco Heritage has 17-inch Oxford White wheels, while Heritage Limited departs from this with gloss black wheels, though with an Oxford White lip.

Built off Big Bend, same as the Bronco Sport, the big Bronco has squared fenders evoking the original gen-one Bronco, with a wider track beneath Sasquatch-width flares. The interior is similar to Sport.

Heritage Edition on the big Bronco has a 300-hp (premium fuel, 275 on regular) 2.3L EcoBoost four and 7-speed manual or 10-speed SelectShift automatic. Included is the Sasquatch Package with High-Performance Off-Road Stability Suspension (H.O.S.S.) 2.0 with long-travel Bilstein position-sensitive dampers with end-stop control valves and increased ride height atop 35-inch Goodyear M/T tires and Dana front and rear electronic locking 4.7:1 axles.

The big Bronco Heritage Limited upgrades its build from Big Bend to Badlands features and is powered by the 330-hp (on premium fuel) 2.7L Ecoboost V6, with 10-speed automatic only.





2023 BIG BRONCO LINEUP

	2-DOOR	
Base	\$32,295	\$36,445
Big Bend	36,285	38,275
Black Diamond	38,950	40,940
Outer Banks	41,855	44,445
HERITAGE EDITION.	44,305	46,295
Badlands	45,095	47,385
Everglades	3,44	53,895
Wildtrak	52,780	54,320
HERITAGE LIMITED	66,895	69,185
Raptor		73,780
SALES OF THE PARTY AND	and the same of	

Big things come in small packages. The Bronco Sport Heritage models include features found in Ford's top off-roaders—a full range of G.O.A.T. (Goes Over Any Type of Terrain) modes—normal, eco, sport, slippery, mud/ruts, sand, rock crawl. A H.O.S.S. (High-Performance Off-Road Stability Suspension) 2.0 system with long-travel Bilstein position-sensitive dampers with end-stop control valves and increased ride height standard, along with 35-inch Goodyear mud-terrain tires and Dana front and rear electronic locking axles with 4.7:1 final drive ratio. And an advanced 4x4 system with a twin-clutch rear-drive unit with a differential lock can divert virtually all rear axle torque to either wheel

Something else that can often be found in small packages is fuel mileage. The big Broncos range from 17-20 mpg combined (17-18 for most), of just 15 for the Bronco Raptor. Bronco Sport combined ratings range from 23-26, which is 30 to 35 percent higher than the big Bronco, as much as 45 percent higher if you include the big Bronco Raptor. The numbers proved meaningful, too, as our combined readout stayed in the 22s and 23s the entire week, no matter what we threw at it.



PERFORMANCE RACING INDUSTRY

The New Website is Here



LEARN MORE AT PERFORMANCERACING.COM



SPECIAL EVENT: OVERLAND EXPO WEST 2023

Record attendance at Overland Expo West

This year's Overland Expo West, held once again at Fort Tuthill County Park I just south of Flagstaff, attracted over 30,000 attendees, making it the largest event in the series to date. Attendees arrived from 45 states, North and South America, Europe and Australia.

The weekend drew over 400 exhibitors, well over 100 presenters, trainers and VIPs, another 100-plus media members, supported by 75 staff personnel. Over 500 session hours of instruction included about 450 classes, seminars, demonstrations, slideshows, films and other activities.

Of special note through the weekend were:

- Reveal of Ultimate Overland Vehicle 2023, based upon the Lexus LX600
- Reveal of Ultimate Overland Motorcycle 2023 based on Triumph Tiger 1200
- Global debut of fourth-generation Toyota Tacoma
- Public reveal of Polaris Xpedition

- More than \$18,000 raised from raffle ticket purchases for the Overland Expo Foundation, the most ever raised for the Foundation at the raffle
- Off-road ridealong course for fans of the Toyota 4Runner and new Tundra
- Sold-out Rider Justice Moto Party, hosting a moto raffle with thousands of dollars in prizes given away. A portion of the proceeds, \$1,000, was donated to Wildland Firefighter Foundation
- Happy Hours hosted by Cruise Master, MAXXIS, and Barebones Living for networking and post-event libations, attended by thousands
- The Overland Film Fest, hosting films produced by overlanders from around
- The Overland Essentials, Backcountry Skills, Around The World Pavilion and other classroom areas with over 400 session hours of overland education and thousands of eager learners throughout the weekend.

The company also hosts Overland Expo Pacific Northwest (in Oregon during July), Overland Expo Mountain West (in Colorado during August) and Overland Expo East (in Virginia in October).





Magnifiqueby Joe Sage

T ast fall, we flew to Denver for an immersion Lidrive in the Mercedes-EQ lineup to that point —a carryover EQB SUV, along with an all-new EQE SUV and EQE Sedan, as well as an all-new EQS SUV and EQS Sedan. We also had studio presentations (indoors, no driving, no cameras) of upcoming AMG versions, with full teams of engineers, interior designers and stylists on hand. (See our November-December 2022 cover feature.)

We had noted then that early everyday EVs tended to be small, simple, limiting and uninspiring to many. New startups then brought user tech and guicker speeds. But without luxury materials

and quality, analysts tortured themselves to call those newcomers luxury brands—though they still mostly did, if due to their higher prices alone.

For the new wave of EVs from Mercedes-Benz. no such rationalizations are needed—the results from this seasoned luxury builder speak for themselves. Mercedes-EQ establishes an era offering an inarguable luxury experience and atmosphere, along with all that high-tech interface and then some, and Mercedes-AMG EQ versions up the performance game even further, as they always have.

Those AMG versions are now coming to life, and we've just had our hands on the Mercedes-AMG EQE Sedan for a week. Roughly \$20-30 thousand pricier than the non-AMG versions, this midsize EV sedan (also with an equivalent AMG EQE SUV version) adds many performance elements

worthy of the AMG badge (AMG EVs, after all, will not be boasting those familiar AMG handcrafted gasoline engines), as its front and rear motors deliver 617 hp and 710 lb-ft of torque through fully variable 4MATIC+ all-wheel drive. Engaging its Race Start feature can bring these numbers up to 677 hp and 738 lb-ft for a brief burst of boost.

Styling is bold, sleek and dramatic on the AMG

models—its blind grille bearing vestigial vertical bars evoking the gasoline models—all the moreso in new MANUFAKTUR Magno paints (ours Graphite Grey), an innovative new finish with low reflectivity yet the luster of a deep metallic or pearlescent paint, but with more conventional care than matte or flat (the right cloths and waters are still recommended). Besides just looking sharp, this finish conceals cleaning swirls and dust. It's also hard to miss the AMG carbon ceramic brakes, set in a distinctive AMG 21-inch staggered wheelset.

The AMG EQE Sedan is a substantial vehicle, in line with the best of the Mercedes brand and more than in line with its price. (And there are still an EQE SUV version plus EQS versions of both the Sedan and SUV, as well, all of which we've driven in Mercedes-Benz form and some as AMG builds.)

Nearing three tons, this sedan is a bit of a luxury performance tank, but you'd never notice it as its 617 horses (or 677 on boost) bring you up to 60 mph in just 3.2 seconds, enough to dominate any freeway ramp. If you can have this much power on tap, why would you want any less? In this magnificent machine, you will treasure every pony.

Everything is a bit beyond the ordinary in this. Its 4MATIC+ experience surpasses other all-wheeldrivers with a feeling of not just overall grip but a sense of the power, poise and purpose of each individual wheel. Rear-axle steering, though a smaller spec than on the EQS, contributes to its

NEW NON-AMG PERFORMANCE POSSIBILITY

Mercedes-Benz USA has a new performance acceleration-on-demand upgrade for its non-AMG EQE 350 and EQS 450 models (Sedan or SUV), for an increase of 60 hp on EQE or 80 hp on EQS, with 0-to-60 acceleration up to one second guicker. The over-the-air Acceleration Increase update is offered through the Mercedes me connect Store, via monthly or yearly subscription or lifetime purchase, to tailor a vehicle to changing needs or preferences over time. Costs are

s follows:	EQE 350	EQS 450
lonthly	\$ 60	\$ 90
early	600	900
fetime of Vehicle	1,950	2,950

ly in appearance and feel, but also function. One such favorite item were console cupholders that swing into position when needed or retract to provide more stash space when not. Clever.

Charging is also very quick in the EQE, achieving 80 percent in half an hour on DC Fast (which is useful, because range is not extreme).

Performance, Style, Presence, Mercedes-AMG



SPECIFICATIONS

	EMBLY	RS	dual, fro	nt and	re
	axle, perm	nanently	excited sy	/nchror	10
	TORSEPOWE	К	617 np (.710 lh-ft (up to 6	/
	*(when us	ing Race :	Start bo	00
	BATTERY PAG	:KL	ithium ion	/ 90.6 k	kΜ
IKA O-TO	NSMISSION 0 60 MPH	(in Bacı	Start mc	ngie-sp ide) 3.2	99
TOP	SPEED		(electr li	m) 149 ı	mp
DRI	VETRAIN	.AMG Pe	erformanc	e 4MA	ΓIC
SUS	PENSION	Tully va	riable all-v	vneerd elf-leve	uriv elin
	4-wheel m	ultilink A	MG RIDE	CONTR	10
OTE.	sport air sus	spension	based on	AIRM	ΑT
SIE	ERING r power	ack and assist, 3	pinion, eie .6º rear-a:	kle stee	rii
	standar	d, more (direct fror	ıt-axle ı	rat
BR/	KES	AMG car	rbon cera o addtl inf	mic sys	te
WH	EELS 2	۱۱) 1-in AM0	6 Y-Spoke	black a	allo
TIRI	E S	M	ichelin Pil	ot Spor	t E
	F: 2	65/35 R2° d\ bigb-r	1 XL; R : 29 performan	5/30 R2	11) um
GRO	OUND CLEAR	ANCE	(no sr	oec stat	teo
	Air susp	ension c	an reduce	cleara	ano
THE	at nign N ing circl i	speea, ir =	icrease at	: IOW Sp :d redu	pe
	bv 3.6º w	included	rear-whe	el steei	rin
	"as maneu	verable:	as a comp on of dista	act car	r"-
LEN	GTH / WHEE	LBASE	196	.9 / 122	.8
HEA	NDROOM (F/R ROOM (F/R)		4	0.1 / 38	
LEG	ROOM (F/R)	v	4	1.7 / 38	l.2 TE
WE	GO CAPACIT			553	34
RAN	IGE			225 m	nile
CH/	ARGING TIME	240V/3	32A (10-10 caina (10-8	0%) 9.5 20%) 32	h
MP	IGE Arging time 110kW DC F Ge	74/7	3/74 (city/	hwy/co	m
BA	SE PRICE			\$106.	90
PAII	NT: Manufak	tur Graph	ite Grey M	agno	32
LEA	THER: black/ KES: AMG h	sable AM igh-perfo	G Nappa	ramic o	29 201
	oosite syster HANDLING:	1911-perio 1	ance co	i anno (54
AIR	HANDLING:	Energizin	g Air Conti	ol Plus	W
ACC	HEPA filter DUSTIC COM	ORT PKG			4 11
FRO	NT SEATS: m	ulticonto	ur w mass	age	11
HEA RI A	TED/VENTED CK MICROFII	FRONT S Rer head	EATS		4 16
WH	EELS : 21-in A	.MG Y-sp	oke, black		14
	ITER PKG: he				
AM	windshield, h G NIGHT PKG	: front/rea	ar seats ar bumpers	and sid	e s
	nserts w da	rk chrom	e accents	, black	wi
PIN	dow trim NACLE TRIM	I FVEI · Δ	ir Balance	nka ho	7 ad
	up display, fo	ur-zone d	limate. US	В	22
DRI	VING LIMITE	RS: begini	ner and va	et	
(CR	BLE : 110v hou E DIT : missing	senola ci std 871 h	narging nands-free	acc)(2 (10
	TINATION C				
TOT	TAL	A-18-		\$130.	24

2023 EQE SEDAN & SUV LINEUP

The second secon		
EQE 350+	Sedan	\$74,90
	SUV	77,900
EQE 350 4MATIC	C Sedan	77,900
	SUV	77,900
EQE 500 4MATIC	C Sedan	85,900
	SUV	89,500
AMG EQE	Sedan	7 106,900
(FROM EUROS)±	SUV	139,800

Racing JUNK.

FREE CLASSIFIEDS Built to Go FAST!

Register Today - Free to Browse, Free to Join, Free to Post #1 Motorsports Marketplace. Go to www.racingjunk.com



- Drag Racing Cars Off Road Road Racing Cars Antique/Classic Cars and Trucks
- Motorcycles Modern Cars/Trucks/SUVs Hot Rod/Street Rod/Custom Much More

Interested in having millions of people see your products?
Email advertising@RacingJunk.com to learn about dealer and advertising opportunities.



Barrett-Jackson partners with the Driven Project to provide "Supercar Therapy" for children in need

B arrett-Jackson kicked off its 2023 Las Vegas Auction on Thursday June 22 by once again partnering with the Driven Project charity to provide a "supercar therapy" experience for 10 local children battling critical and chronic illnesses.

Awaiting these little co-pilots and their families as they arrived at the West Hall of the Las Vegas Convention Center were Barrett-Jackson and Driven Project teams, as well as a wide range of supercars such as Ferraris, Lamborghinis and Mclarens

Following their arrival, the co-pilots embarked at 8:30 am on a supercar adventure that began by crossing Barrett-Jackson's auction block in the

passenger seat of a supercar. Each child received a hero's welcome, was introduced to those in attendance by longtime Barrett-Jackson television personality Rick DeBruhl, and had pictures taken on the auction block with the supercars.

Next, the co-pilots and their drivers enjoyed a cruise down Las Vegas Boulevard, before returning to the West Hall for a day of family fun at the auction, including a special scavenger hunt designed just for them.

"We are excited to once again partner with the Driven Project as we host many exceptional young children and their families to kick off another highly anticipated event in Las Vegas," said Barrett-

Jackson chairman and CEO Craig Jackson. "Over the last couple of years, we've partnered with the Driven Project several times to create special, unique and impactful experiences for these children, and I can't wait to see the smiles on their faces at Barrett-Jackson. This is truly the perfect way to jumpstart our 2023 Las Vegas Auction."

The Driven Project was founded by Kevin Gordon in 2018 in Vancouver, British Columbia, with one goal in mind: to provide "supercar therapy" to children who are battling critical and chronic illnesses and help give them the strength to "keep driving forward" on their journey.

The Driven Project charity is now operating in the US, Canada and Australia. The "supercar therapy" experience provides these amazing children with a much-needed adrenaline-filled escape from reality, helping them stay strong through their battles and an opportunity to create memories alongside their family that they will cherish forever.



FOUNDATIONAL BY JOE SAGE

urprisingly, this is only our second Impreza in over 20 years of publishing, though we have had plenty of WRX, WRX STI, Crosstrek and Forester, which are all Impreza-based. Among all those variants, and with the core Impreza itself, there have been a mix of body types and transmissions over the years. For 2024, this simplifies, as Impreza no longer offers a sedan or manual transmission—the new model is hatchback and CVT-

20 percent more powerful than the 152-hp 2.0L in lower trims. All are of course all-wheel-drive. We did our usual daily rounds in the Impreza

and also took it for a long drive up into the high

country, with the mission of paying special atten-

only. There are two four-cylinder boxer engines,

our RS bearing the larger one, a 182-hp 2.5L about

tion to its CVT, on behalf of a friend and colleague who is interested in a new purchase from the lineup, but has always been a devoted manual shifter.

The drive up I-17 offers a lot of everything—a climb of thousands of feet, challenging twisty twolane sections, all with semi-trucks, RVs, trailers and traffic in general always jockeying for prime position, at speed. To add to the mix, I-17 is under considerable construction now, up to Sunset Point, a multiplier of all of the above, as well as provider of uncharacteristically rough payement in spots.

For good measure, we popped it into Sport.

All was easy going, with decent power for our own purposes, though relinquishing our spot a few times to aggressive larger vehicles having their way across multiple lanes (typical on that stretch).

Through here, we also encountered our first unexpected patch of notably rough pavement, the kind revealing foundational layers—which would normally be promptly patched or resurfaced, but not when the whole road is in the process of a rebuild. Yet the ride here was notably smooth, solid and comfortable, and the car tracked true, with engaging road feel—all the factors any enthusiast appreciates, exemplary suspension all around.

Despite our intent to be especially discerning, we also realized we hadn't been paying attention to the CVT, as it had been proving totally transparent, with none of the hunting, surging and dropping we get from most automatics on that first quick 3,000-foot climb. A number of our colleagues commonly "love to hate" CVTs, but we're generally inclined to think a great many owners will never know or care that they even have one. In principle,

the CVT provides what its name promises—it's continuously variable, like a person running or swimming, to provide a smooth sweep through varying speeds. However, when operating a machine, we may all be more used to a pattern of shifting. But fuel efficiency goals have increased the number of gears in recent years, industrywide, moving well past five or six speeds. And whereas these may bump up MPG a bit, their wealth of gearing possibilities does often introduce that hunting and dropping, especially on such a complex stretch of road. A CVT basically brings the gearnumber-equivalent to infinity, in principle maximizing efficiency while eliminating those effects. And you have manumatic-mimicking paddles if desired.

Our notes around town were in line with the rest—its 182 horses are not a tremendous amount of power, but at just over 3,000 pounds in top trim. the car is nimble and, in Sport mode as we generally chose, suitably responsive. Speed bumps, everybody's least favorite thing, also demonstrated the car's well above average suspension.

We do not hypermile, but we do glance at fuel mileage readouts. The default, as set up upon its arrival, was an instantaneous reading, seldom of much practical use (99+ one second, 17 the next, 45 the next, and so on). We set up a new profile in the trip computer, and here we averaged 22.3 MPG through an active and diverse week—short of its ratings, but not bad, and more is surely achievable via operational or behavioral discipline.

In basic Impreza form (as opposed to STI, Crosstrek or the others) it's not much of a head-turner. but it certainly gets the job done—a sleeper, you could say, which (if you've ever felt a little too visible in a showy muscle car) can be a good thing.

The various special purpose Impreza-based Subarus—WRX and STI rally vehicles or Crosstrek outdoor adventure vehicles—hold plenty of appeal, whether you have specific need for them or not. If not, or according to your budget, this clean and simple version does the trick.

SPECIFICATIONS

TOTAL	\$28.97
BASE PRICE DESTINATION CHAR	\$27,88 GE 109
MPG	26/33/29 (city/hwy/coml
FUEL / CAPACITY	reg unl / 16.6 g 26/33/29 (city/hwy/coml
WEIGHT	3275
	19.9 / 54.7 cu
LEGROOM (F/R)	42.9 / 36.5
HEADROOM (F/R)	39.8 / 38.0
THRNING CIRCLE	SE
CROUND CLEARANC	re 5.1
	225/40R18 98V all-seasc . SE 176.2 / 105.1 i
WHEELS	(RS) 18x7 alum allo 225/40R18 98V all-seaso
R	: 11.2 vented, single-pisto
BRAKES(RS)	F: 12.4 vented, two-pisto
STEERING	dual pinion elec power. F: 12.4 vented, two-pistor
R: dbl wishbone	. coils. dampers. stblzr ba
	hydraulic engine mount
lower L-arms,	coils, dampers, stblzr ba
LINGION	: MacPherson type strut
	e nyuraunc transfer clutt 4-wheel inde
	e hydraulic transfer clutc
DRIVETRAIN	ACT-4 active torque spl I AWD w electr controlle
V	v 8-spd manual shift mod
TRANSMISSION	Lineartronic® CV
COMPRESSION RAT	IO 12.0
HP/TORQUE	182 hp / 178 lb- IO 12.0
ENGINE2.5L	. boxer 4-cyl, DOHC, dir i
ROWS / SEATS	two / fiv
body, full in	ner frame safety structui
	mpact hatchback, unitize
ASSEMBLY	Gunma, Japa
SPECIFICATION	15

2023 SUBARU IMPREZA LINEUP

2.0L : 152 HP	(base)	\$22,99!
	Sport	
2 FL - 402 UD	De	- 27 001

We always have a few nitpicks with anything, but without the opportunity to test multiple copies in depth, we generally consider them just worth a passing mention. On our long drive, we noted the AC had not been very effective, in the 80s up top or 90s in the Valley at the time. It was not the tem perature, so much as a lack of airflow, so we upped the fan speed, noting two downsides—one, this required a screen dive that we could not achieve while driving; and two, we couldn't revert to automatic by punching the convenient Auto button once it had cooled down, but rather had to dive back into the screen. And we had two notably odd incidents with the brakes, both when others had injected stupid human tricks into freeway traffic—we stopped effectively (and very promptly) in both cases, but heard or felt unnerving squealing or loss of adhesion, despite of course ABS



BECOMEAN EXCEPTIONAL DRIVER.

Learn performance driving in a way that will benefit you on every surface.

Our globally recognized training program allows you to adapt instantly to ice, snow, pavement, dirt and gravel with skill and confidence.

A variety of programs are available from corporate and teen safety to professional racers and security professionals.

We train in a wide variety of specially equipped state of the art, front, rear and all wheel drive Toyota cars and SUVs.

Each vehicle is equipped with Bridgestone Blizzak winter tires, which offer the best performance possible on our world class snow and ice tracks.





THE CENTER FOR DRIVING

BOOK TODAY!



800.949.7543 • winterdrive.com • open 7 days a week Steamboat Springs, Colorado

\$308 million port modernization and **expansion at San Luis**

New port facilities to expand capacity, enhance security and boost local economy

The US General Services Administration (GSA) and US Department of I Homeland Security Customs and Border Protection (CBP) held a groundbreaking ceremony on June 27 with local, state, and federal officials to commemorate the launch of a \$308 million project to modernize and expand the San Luis I Land Port of Entry. Funded by the federally-funded project will replace the port's undersized 1980s infrastructure with new, expanded buildings and increased inspection capacity.

As the second busiest non-commercial port in Arizona, San Luis I currently serves three million drivers and two and a half million pedestrians annually. Once completed, the port will boast a 40 percent increase in pedestrian inspection capacity and will double vehicle inspection capacity, while also improving security, alleviating congestion and boosting the local economy while creating good-paying jobs for local communities.

The project will double the number of northbound vehicle inspection lanes from eight to 16, install a 16,000-square-foot canopy and support installation of the latest inspection technology to support CBP's security mission. The project also includes a new 21,000-square-foot pedestrian inspection building, increasing the number of inspection booths from 10 to 14 and improving the flow of pedestrian traffic.

About \$100 million in funding is for sustainability features. The port's new all-electric and net-zero design integrates numerous water-saving and energyproduction features to meet current administration goals calling for net-zero federal buildings by 2045—buildings where the clean energy generated onsite offsets the total energy used, resulting in zero net energy consumption. Additional sustainability features include solar panels and other clean energy sources to reduce operational emissions and eliminate reliance on carbonbased energy. The project will also incorporate sustainability elements such as advanced insulation materials, energy-efficient heating, ventilation and air conditioning systems, and energy-saving LED light fixtures. Funding will be used to incorporate sustainable asphalt, concrete and steel construction materials, as identified in GSA's low-embodied carbon material requirements pilot, aimed at making the building more resilient to the location's desert environment.

The San Luis I port is a critical gateway connecting the binational communities of San Luis, Arizona, and San Luis Rio Colorado, Sonora, which enjoy a unique social and economic relationship. Together, they represent a dynamic region where a modernized and expanded port facility will further strengthen these bonds, fostering economic and cultural exchange.

Construction is scheduled to last through Fall 2028, with the port remaining fully operational for the duration. Once completed, the new San Luis I Land Port of Entry will provide the traveling public enhanced travel and commerce, while better connecting the San Luis border communities.









Dodge adjusts course BY JOE SAGE

There have been smaller SUVs and crossovers from Dodge before—the compact Journey and perhaps counting Caliber—but as the brand has staked out its turf via a winning combination of proven Detroit iron and V8s-by-default in recent years, the midsize Durango has been their sole SUV presence.

Parent Chrysler's European mergers over the past 15 years or so (FCA, then Stellantis) brought off-the-shelf fuel economy, courtesy of Fiat and Alfa Romeo in particular, plus a chance to use them as the basis for US-brand iterations (e.g., Jeep Renegade and Fiat 500X).

This gave Dodge the headroom to achieve brandwide CAFE requirements while continuing its performance muscle focus. But those days are drawing to a close.

Expect electrified evolutions of some (see the Charger EV concept revealed in our last issue), but the new Dodge Hornet is a chess piece added to the board today, a small entry populating a new spot in the Dodge lineup.

it has been widely noted that Dodge Hornet is basically a reskinned Alfa Romeo Tonale. A bit closer to home and far more familiar in our market, it is also platform-mate to Jeep Com-

pass. Our comparative chart shows how powertrain variants are a big part of their commonalities and distinctions (along with somewhat-related Jeep Renegade and Fiat 500X).

Dodge Hornet is kind of two different vehicles—one (an R/T 1.3-liter turbo PHEV, coming soon) is more like the Alfa Romeo Tonale, and one (our GT 2.0-liter turbo, out now) is more like Jeep Compass, except the Jeep is a bit shorter to provide more off-road-oriented approach-departure-breakover. Like the Alfa, the Hornet of course also has more road-oriented tires and wheels than the Jeep.

GT Plus seems likely to be the default volume seller, with the simpler GT likely created to (almost) keep the starting price under

\$30,000, their original stated intent, while creating a smoother price walk to the PHEV.

As the Tonale-twin Hornet R/T PHEV is not here quite yet (though could be any day now), we're not able to compare its fuel economy or its pricing, either with the Hornet 2.0-liter or the Alfa (even the Alfa's fuel mileage information is coming just in small bits as available).

However you parse these points, Hornet—built at the same Italian factory as the Alfa—is marketed as a member of the overall Dodge "performance family," with its styling and stance generally supporting this quite well.

Hornet GT and R/T PHEV have the same suspension, different transmissions (R/T will be a 6-speed), same size brakes (with the red Brembo calipers of the R/T available on GT in a package) and different steering ratios. With its battery pack and motors, R/T will weigh

425 pounds (11.44 percent) more than the GT, yet will hit 60 mph almost a second faster.

Relatively powerful and relatively light, our Hornet GT Plus was always peppy, quick off the line. Though all versions are all-wheel-drivers, we perceived a bit of front-driviness in aggressive turns—and thus preferred it in sport mode, seeming noticeably improved for everything from cornering to straight line to braking. As with the majority of such systems, we had to reset to sport each time.

Choosing a compact crossover from among a sea of competitors can be both satisfyingly and frustratingly complex. Seen as one more entry, you may or may not find the Hornet remarkable. However, point by point, each detail is notably well executed. It's an intriguing flag-bearer going forward, and one thing for certain—it's a handsome little devil.



SPECIFICATIONS

	SPECIFICATIONS	
	ASSEMBLY FCA Italy S.P.A. It	а
	ASSEMBLYFCA Italy S.P.A., It ENGINE2.0L DOHC Hurricane turbo-4 E	S
	HP/TORQUE (w prem fuel) 268 hp / 295 ll	h-
	COMPRESSION RATIOT	В
	TRANSMISSION9-spd 948TE a	ut
	DRIVETRAIN	
	0-T0-60 / TOP SPEED 6.5 sec / 140 m	าท
	SUSPENSIONfour-wheel independe	
	Koni FSD adaptive damping dual sta	
	valve shocks w selectable mod	
	F: MacPherson strut; R: Chapman st	trı
	STEERINGelec p	
	BRAKESDodge branded Brembo R	e
5	F: 13.53 in four-piston fix	
	R: 12.08 in floating performar	hc
	system (incl w Track Pa WHEELS20x8.0 Abyss Fin	С
	WHEELS20x8.0 Abyss Fin	iis
	TIRES2325/40R20 all-seas	so
	LENGTH / WHEELBASE178.0 / 103.8	8 i
	GROUND CLEARANCE8.0	o i
	TURNING CIRCLE	5
	HEADROOM (F/R)T	В
	LEGROOM (F/R)T	В
	CARGO CAPACITY 27.0 c	u.
	WEIGHT371!	
	PAYLOAD1245	5 I
	TOW CAPACITY	b I
퓴	FUEL / CAPACITYprem recmd 13.5	a
	FUEL / CAPACITY prem recmd 13.5 MPG 21/29/24 (city/hwy/cor	nl
ď	BASE PRICE \$34,9	
	BASE PRICE \$34,3	Ų
	PAINT: Gray Cray	4:
	"Hornet" badge, dark GT badge, gloss bl	a
	side window moldings, 18x7.5 Abyss Fir	al nic
S	wheels, 225/55R18 a/s tires1	qc
	TECH PACK: intelligent speed assist (ISA), act	tiv
	driving assist, surround-view camer drowsy driver detect, ParkSense front/re	ea
	side park assist2	44
	TRACK PACK: black Alcantara seats w red	a
ð	cents, alum door sills, sport leather steer	rir
띯	wheel, dual mode suspension, bright ped	al
	red Dodge brake calipers, 20x8 Abyss Fir	nis
	wheels, 235/40R20 a/s tires2	99
	(BUNDLE DISCOUNT GT: Track Pack & Blackt	
	(10	0
U	DESTINATION CHARGE1	5
	AND DESCRIPTION OF THE PARTY OF	

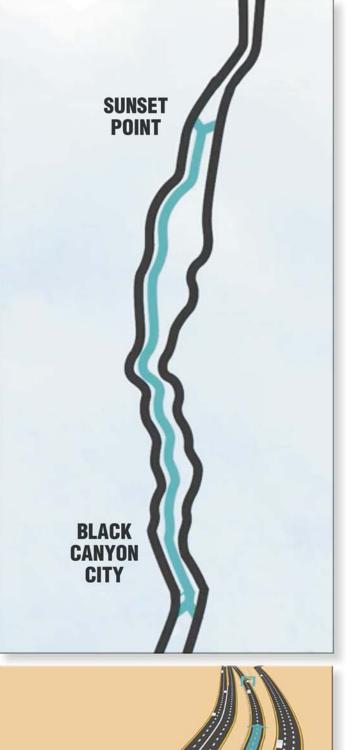
2023 DODGE HORNET LINEUP

GT	. 268 hp 295 lb-ft AWD	\$30,735
GT PLUS	"""	35,735
R/T PHFV	288 hn 383 lh-ft ΔWD	TRD

TRAVEL SITES TO BE SEEN



Southwest Media Communications 602-892-4766 - info@southwestmedia.net



Future operation of flex lanes on I-17

First-of-its-kind system in Arizona will change how drivers travel along the Interstate

Motorists driving Interstate 17 north of Phoenix have seen crews moving dirt and blasting rock over the last year to make way for a wider and safer 23-mile stretch of highway between Anthem Way and Sunset Point, as part of the I-17 Improvement Project. When the project is completed in 2025, drivers on the approximately 8 miles between Black Canyon City and Sunset Point will experience the first flex lanes in Arizona's highway system.

The Arizona Department of Transportation (ADOT) has a new animated video online to help explain how the new flex lanes will work, found on a newly launched webpage dedicated to explaining the system, along with providing information and resources for drivers.

"The flex lanes are an innovative solution that increases safety and helps address congestion in a very challenging geographic area," said Annette Riley, ADOT's project manager for the I-17 Improvement Project.

The two-lane flex lane system is being constructed adjacent to the existing southbound lanes and will carry one direction of traffic at a time. The flex lanes are a proven system that safely addresses traffic congestion during peak travel times, or if an unplanned incident would otherwise create all-too-familiar delays. Typically, the flex lanes will be open to northbound traffic Monday through Saturday and to southbound traffic on Sunday. However, the direction of the flex lanes will be changed as needed, to whichever has the heaviest traffic. They will be operational at all times, seven days a week.

The new crossover lanes will allow vehicles to safely access the flex lanes, which will be separated from the existing southbound lanes by a concrete barrier. Steel gates will be installed in this concrete barrier in four locations, allowing emergency responders access to the flex lanes, to redirect traffic into the general purpose lanes in the event of an incident.

ADOT's Traffic Operations Center will manage and monitor the flex lanes remotely using cameras that will be placed throughout the corridor.

- Dynamic overhead guide signs will alert drivers to the open direction of the flex lanes.
- Safety systems will be in place to prevent vehicles from entering the flex lanes when traffic is flowing in the opposite direction.
- A specialized automated net barrier and swing gate system will operate at both ends of the flex lanes.
- When one direction of the flex lanes is closed, a series of swing gates will be extended. These gates get progressively wider and block access to the flex lanes.
- Beyond the swing gates, a vehicle-arresting barrier with a net in the down position will also prevent vehicles from entering the flex lanes in the wrong direction.

These components of the flex lanes safety system are designed specifically for reversible lane operations in controlling the direction of traffic. For more information on the entire 23-mile I-17 Improvement Project between Anthem Way and Sunset Point, visit **improvingl17.com**. ■



A big leap from Leaf— Nissan EVs e-volve by Joe sage

leaf, introduced in 2010 for the 2011 model year, the first mass-production 50-state electric vehicle, setting the early pace for universal charging technologies, and boasting one of the highest owner retention rates in the industry. Nissan Leaf soldiers on, but while the spotlight has spread wider through the industry over recent years, Nissan has otherwise been pretty quiet on EVs. Until now. And that's fine. It's a time of great change, and

some corporate caution can be appropriate. We're not huge fans of throwing away all the great products and technologies of the internal combustion era, anyway; and it gave Nissan time for further development, a chance to really get it right.

Their new entry is the 2023 Nissan Ariya. There are nine variants (see sidebar) priced from \$43,190 to \$60,190. Five are front-wheel-drive and four e-40RCE all-wheel-drive (with just two of seven trims offering both). Two base versions have lower

power, while higher power units have a "plus" designation (except for one). Our Evolve+ e-40RCE is sort of upper-mid-pack at \$54,190 (there are three higher trims, but only one higher e-40RCE AWD).

The first Leaf, much like early hybrids, had a bit of look-at-me-l'm-different styling, while gen-two, since 2018, was more conventional. The new Ariya EV, a compact crossover, is also conventional in appearance, while also evolutionary, great news, as Nissan has been overdue for a facelift. They call the new look "Timeless Japanese Futurism," simple yet powerful modern styling.

Our week with the Ariya generated far more observations than average. But ours was a prepro-

duction unit (see sidebar). Many notes were about issues with switches and screen, likely not complete, and an incessant voice assistant, difficult to turn off, which may or may not be complete.

A positive direction that probably is complete is that whereas we're often surprised by EVs that, despite being thoroughly electric, lack such common features as power seats, but this has those and more, such as a nifty power console top. Such pleasures are likely to dominate the final vehicle.

Suspension and powertrain are likely complete, and we soon made fast friends with the driving experience—quick and accurate, accelerating and handling nicely, smooth on rough pavements, generally lacking in no regard. Braking disturbed us, however—generally adequate, but usually followed by a very disquieting additional movement

forward. Regenerative brake implementations vary tremendously, and on this the key is an e-Step mode, which may have mitigated that, but instead seemed to stop us about six car-lengths prematurely. We're hoping this is still being fine-tuned.

Those loose ends aside, we found a likable new machine representing a likable new direction or two for this likable brand. It's a handsome crossover with solid performance and content value. It bears a bit less horsepower than some, though has well more than most gasoline comparables, is a more accessible entry to the EV world, and delivers a solid kick in the pants. Range and charging times are both very good. Neat, tidy, functional and purposeful, the new Nissan Ariya strikes us as being ahead of the curve on the mainstreaming of EVs—a solid entry from a solid brand.

52 • July-August 2023 •

SPECIFICATIONS [+ e-40RCE]

or Lon Ioanic	one [. o -tener]
ASSEMBLY	Tochigi, Japa small station wago
CLASSIFICATION .	small station wago
MOTOR	dual externally excite
	synchronous motors (EESN
OUTPUT	290 kV 389 hp / 442 lb-1
HP/TORQUE	389 hp / 442 lb-1
BATTERYLi-	ion liquid-cooled underfloo-
	otal, 87 kWh usable capacit
TRANSMISSION	single spee
DRIVETRAIN	AWI
SUSPENSION	F: indep strut w coils
	23.4mm hollow stblzr ba
	R: indep multi-linl 28.6mm hollow stblzr ba
	28.60000 Stbizi ba
	F : 14.3x1.18 vented
DNAKES	R : 13.0x0.63 vente
WHEELS 19x	7.5 alum alloy w aero cover
TIRES	235/55R19 all-seaso
TURNING CIRCLE	35.4
GROUND CLEARA	NCE
APPR/DEP/BRKVR	17.7 / 21.9 / 16.5
LENGTH / WHEEL	BASE 182.9 / 109.3 i
HEADROOM (F/R).	BASE182.9 / 109.3 i 37.9 / 36.6 i
LEGROOM (F/R)	42.3 / 37.0 i
CARGO CAPACITY	722.8 / 59.7 cu.t
CURB WEIGHT	4899
TOW CAPACITY	1500 L
CHARGING TIMES	Level 2 (0-100%) 14 hr narge 50 kW (10-80%) 90 mi
Quick ch	harge 50 kW (10-80%) 90 mi
Quick cha	arge 130 kW (10-80%) 40 mi 272 mile
RANGE	272 mile
MPGe	97/86/92 (city/hwy/comb
BASE PRICE	\$54,190
TWO-TONE PAINT	Boulder Gray Pearl
/Black Diamoi	: Boulder Gray Pearl nd Pearl35
FLOOR MATS	25
DESTINATION CH	
TOTAL	\$56,12
TUTAL	

2023 NISSAN ARIYA LINEUP

海南阳原	激素	FWD	e-40RCE AWD
Engage	63 kWh	\$43,190	\$47,190
Engage+			
Venture+		47,190	
Evolve+		50,190	. 7 54,190
Empower+.		53,690	
Premiere			
Platinum+			60,190

PREPRODUCTION UNIT

We receive occasional pre-production vehicles for review, which can mean different things. Most are indistinguishable from the final—complete, just built in low volume before the assembly line fires up at speed. A few are more like prototypes, with some features incomplete or only roughly in place. Supply chain challenges the past few years have contributed to more being incomplete, but we often don't know specifically what may be a temporary or partially fleshed-out detail. There is also almost never an owner's manual. As such, many issues during our week may not be representative, so detailing them could be misleading. But we do look forward to driving a final version when available, so we can compare, confirm or clarify any number of things.

Commercial Strength Shop Stools

Heavy duty garage counter shop stool with full swivel seat & great vintage look! Built in the USA, this shop stool is an industrial/restaurant grade counter stool built for long lasting durablity, comfort and strength. Available in 36 designs!

- 30" standard counter height to seat Vinyl covered seat is 14" wide • Full 360 degree swivel seat • Industrial strength chrome plated legs
- 1600 lb weight capacity (vs imports rated at 300 lb) Backrest option available . Built to order, allow 10-15 work days for delivery

 Minor assembly required • Tables to match—please inquire Miracle Car Repair Shop Stool / SKU: 09-BKG-MCR

Gas, Oil & Toil Shop Stool / SKU: 09-BKG-TOIL Were \$179.95 : Now \$159.95 each

Free ground shipping in the lower 48 states!

Neon Garage Clocks

USA Made Neon Automotive Garage Clocks with old school vintage car guy looks for your man cave. No disappointments. Highest Quality & Reliability available.

• Features a spun aluminum black case, glass face and a separate on/off switch for the white neon lamp. (100,000 hours of neon, that's 11 years continuous running!) • Measures a large 20" in diameter and 5" deep • 8' Power Cord, Chain Pull for Lamp • Limited warranty against defects in material and workmanship; runs on 110 Volt AC . Several Car Guy Styles to Choose From....Check 'Em All Out! . We've been selling these clocks for over 15 years; Never a Return, Never a Complaint, you have our word on it . Looking for something smaller? Check out our BKG-76600 for a 12" alternative

Shown: Vintage Iron Speed Shop Clock / SKU: 09-BKG-VI

Were \$399: Now \$349 / Free shipping on this item!

All-Steel Toolboxes

The Greasemonkeys have the feeling their full line of durable all-steel portable toolboxes with lift-out tray and a variety of the most cool car guy graphics (five styles now and more coming!) just may be too good to stash tools in-we may have to call them"deco-boxes"!

· Rugged all steel end cap construction · Powder coated, rust resistant · Heavy-duty stainless steel handle · Nickel-plated steel latch and hinge for added security . Full length lift-out tote tray

• Cool car guy quality color graphics • 6 lbs • 16" x 7" x 7.5"

Wrench-In-Hand Steel Tool Box / SKU: 10-BKG-WCL Vintage Pickup Truck Steel Tool Box / SKU: 10-BKG-VT

\$49 each / Eligible for free shipping!

Vot only are your products awesome, but the service and the people are too! I very much intend to pass the word along about how great it is to do business with the Busted Knuckle Garage. - Many thanks! Jackie B.

My husband just loves everything. especially me for getting him such cool stuff. I'd have to say we will be lifetime customers, oh ya!! Thank you, Greasemonkeys. - Sincerely, Pam

It's a Miracle!



I just had the most wonderful buying experience! I only hope my father asks for something from The Busted Knuckle Garage for Christmas so I can do business with such a wonderful company once more.

- Cheers! Michelle

First, let me be the one thanking you! I honestly cannot remember such extraordinary customer service. Thanks again, "JR" Jean

Furnishings | Clothing | Signs | Barware | And More! FREE FedEx SmartPost Ground Shipping over \$99.99!

Check us out on Facebook and Instagram! / www.bustedknucklegarage.com Need a volume discount for your shop or business? Call us: 928-708-0987



TECHNOLOGY: ON-DEMAND AUTONOMOUS IN SUN CITY

More AVs on our roads: Arizona's first on-demand autonomous public transit service for 55+ community

ay Mobility, established in Ann Arbor, Michigan in 2017, is launching the first on-demand public transit service using autonomous vehicles (AVs) in Arizona, in the Maricopa County 55-andolder community of Sun City.

The service will be powered by Via. pioneer of the TransitTech industry category, applying optimized networks and new technologies to develop public mobility systems.

The goal of this deployment is to use AVs to expand access to safe, reliable and equitable ondemand transportation for aging adults, in turn learning more about how its technology is adopted and addresses this group's mobility challenges.

This is May Mobility's first deployment in the Western US, picking up on Arizona's fast-growing reputation as a testing ground for AV technology. Previous deployments in a mix of urban, suburban and rural areas span the Northeast, Midwest and the South, in climates ranging from humid and subtropical to the frigid winters of Minnesota.

May Mobility and Via believe aging populations stand to gain increased freedom and mobility from AVs, and are dedicated to engaging, serving and educating these communities to drive adoption of innovative technologies.

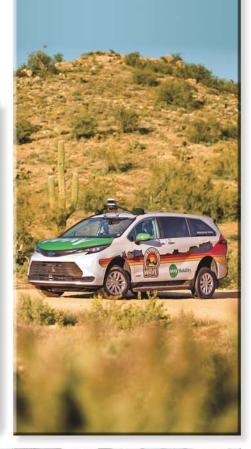
"We're fundamentally changing public transit, making it easier and more desirable than having a personal car," says May CEO Edwin Olson.

"People are living longer, and we believe aging populations stand to gain greater access to mobility with autonomous vehicle technology. We're committed to providing safe, reliable transportation for people who don't want to or can't drive themselves "

"Our organizations are united by the vision that advanced technology is key to expanding access to efficient mobility for riders of all ages and needs." adds Via autonomous lead Meghan Grela. "and we believe Sun City is a model for innovative, inclusive public transportation for other communities around the world."

The service will operate Monday to Friday from 7 am to 5 pm through residential complexes, recreation centers, grocery stores, pharmacies and medical centers.







THE INSIDE TRACK: BRIEFS & RUMORS



*Automobili Ferruccio Lamborghini S.a.s." was founded 60 years ago, in 1963 —the initial name of an industrial venture that, starting from scratch, revolutionized the automotive industry and has evolved to become today's world-famous company "Automobili Lamborghini S.p.A." with over 2000 employees and delivering 9233 cars in 2022. Automobili Lamborghini has been holding a number of international events to celebrate the anniversary, each different, but all sharing the aims of involving owners and their Lamborghinis, the official Lamborghini Clubs, the dealerships and fans around the world. The international program of celebrations began in January with the inauguration of the newly renovated Lamborghini Museum in Sant'Agata Bolognese and the exhibition "The Future Began In 1963". Important events have followed: "Lamborghini Day Japan-60th Anniversary" in Suzuka; and "Lamborghini Day UK-60th Anniversary", which saw over 380 Lamborghinis gathered at Silverstone circuit in April; and in May, the "60th Anniversary Giro" tour in Piazza Maggiore in Bologna Italy, with a Concours d'Elegance open to the public, with more than 150 Lamborghinis participating.

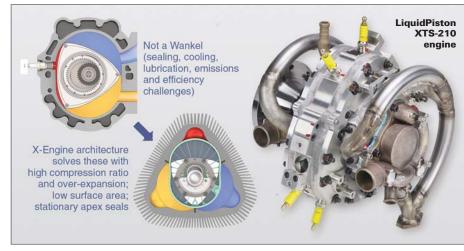
For those who dream of being tracked more than they already are, and of having their cars do the driving themselves, the tire industry is saying their **tires** could one day provide data to cars in real time. While noting that technology, batteries and data integration haven't quite caught

up with Bridgestone, Goodyear and other manufacturers' drive to have tires provide real-time road conditions to self-driving cars, they say they're working on it. Real-time data could let an autonomous vehicle instantly adapt its driving, which Goodyear senior VP of operations Chris Helsel says would be the "holy grail."

British supercar company **McLaren** Automotive and engine supplier Ricardo have

UK-based companies, with Ricardo building both the V6 and V8 engines that will power McLaren's existing and future highperformance hybrid supercars. Since the introduction of the McLaren's first series production supercar, the 12C in 2011, Ricardo has produced around 34,000 McLaren powertrains at its purpose-built assembly facility at Shoreham-by-Sea, then delivering them around 50 miles away to the McLaren Production Centre in Woking, Surrey, where McLaren designs and hand-builds its supercars. The agreement ensures Ricardo will supply both hybrid and non-hybrid variants and, together with McLaren, make further significant investment in the high-performance engine production facility at Shoreham, with over 100 manufacturing engineers and technicians dedicated to supplying McLaren's high-performance powertrains.

LiquidPiston, Inc., a technology startup based in Bloomfield, CT, is developing combustion engines scalable from one to over 1,000 horsepower, compact (delivering 1.5 HP/lb) and capable of utilizing effi-



announced a new long-term V8 engine supply partnership for future high-performance hybrid powertrains. Ricardo will manufacture the next-generation McLaren V8 power unit, designed in-house by McLaren's powertrain team, as part of a long-term investment deal and part of the company's Future of Performance strategy. The agreement sees a continuation of the long-term relationship between the two

cient fossil or renewable fuel. Their patented High Efficiency Hybrid Cycle (HEHC) and engine architecture support next-generation fuel-energy conversion solutions for hybrid power systems. The company intends to commercialize the XTS-210, a 25-HP two-stroke, supercharged, liquid-cooled 210cc rotary engine. Compared to current diesel piston engines, the XTS-210 design reduces size and weight by nearly

80 percent, with comparable power output. Representing the latest generation of LiquidPiston's X-Engine platform architecture, the XTS-210 engine addresses the fuel efficiency, lubrication, and fuel type



limitations of the traditional Wankel rotary engine, an influential engine design developed in the 1950s. The X-Engine is inherently simple in design, with just two primary moving parts—a rotor and shaft. The 25-HP XTS-210 adds up to one bar of boost through supercharging and operates as a two-stroke, producing six combustion events per revolution of the rotor, to deliver smooth power from a lightweight package, roughly the size of a basketball. The company has a \$9 million development contract from the US Army to develop a prototype "core engine" based on the XTS-210 design for military applications and is targeting delivery of an XTS-210 prototype to the US Army in 2024. LiquidPiston has also received a \$1.7 million Army contract to power a hybrid-electric VTOL UAV demonstrator. This brings the company's Department of Defense contracts total to over \$30 million.

Development and production of ICE powertrains in Czech automaker **Škoda's** home town of Mladá Boleslav dates back to 1899, when Václav Laurin and Václav Klement built their first bicycle fitted with an auxiliary engine. As early as 1905, Laurin & Klement presented its first car, the Voiturette A, powered by a 1.0-liter liquid-cooled engine developed in-house. The wholly owned subsidiary will now be applying its engine know-how to powering 50 models from seven Volkswagen Group brands, as their engineers have been given responsibility for the next generation

sponsible for the MQB A0 Global platform in addition to drum brakes across the VW Group family. The Mladá Boleslav location has also developed a new generation Škoda Superb, alongside the new Volkswagen Pas-

sat. The EA 211 model range is character-

ized by a high degree of variability-en-

gines can be three- or four-cylinder, range

in size from 1.0 to 1.6 liters, with power

currently from 65PS to over 150PS. The

engines can use gasoline, CNG or ethanol

of internal combustion engines. New EA

211 series ICE powertrains will be follow-

ing the current three-cylinder engine pow-

ering 3.5 million vehicles over the last 15

and 1.5 TSI found in vehicles from Fabia and Octavia to the Karoq and Kodiaq. They offer drivers a combination of high performance and low fuel consumption, as well as excellent handling. The developers in Mladá Boleslav will continue to improve and adapt these engines to the needs and regulations of dozens of global markets. The aim is to develop even more powerful and more fuel-efficient engines with lower emissions, with an emphasis on maximum reliability.

The latest fruits of a collaboration between Porsche and New York fashion label Aimé Leon Dore (ALD), the third joint vehicle project by the two partners, is a highly individualized 356 B from 1960. Painted in Midnight Blue, the one-of-akind 356 ALD combines a purist sports car design with luxurious accents. To achieve the elegant appearance of its body, front and back bumpers were removed. The vehicle is retrofitted with white wall tires on brushed aluminum alloy wheels, with disc brakes. On the front end, new fog lights are added, along with a hand-painted ALD gold leaf crest on the left fender. Mounted on the grille are three specially designed badges that recall the once-customary emblems of clubs or motorsport events. The interior design



and are also available in mild-hybrid and plug-in hybrid versions. The MPI units are naturally aspirated engines with indirect multipoint fuel injection, renowned for their robustness. The TSI engines, on the other hand, feature an exhaust pressure wave supercharger—powerful, high-torque engines that can power a wide range of models including 1.0 TSI, 1.4 TSI (for plug-in hybrids such as the Škoda Superb iV),

focuses on combining styling with comfort. The steering wheel is from the top model of the time, the 356 Carrera 2. Seats are Midnight Blue leather with tone-ontone stitching and a tartan pattern in the center sections. Seat backrests and floor mats are upholstered in supple alpaca leather. This special Porsche 356 B premiered at the re-opening of the ALD flagship store in New York City in May.

56 • July-August 2023 • Arizonadriver • July-August 2023 • 57

UPCOMING FEATURES

Range Rover 3.0L I6 PHEV 434 hp



Sandra Muñoz Dorée: Four Peaks Wilderness overland



Lexus RX 500h F SPORT



Lucretia Torva mural at Cascio Motors



Genesis Electrified GV70



Sally McNulty - racer and race car builder



Honda Accord Hybrid Sport-L



Radical Volks rally



G O F A R T H E R



Jeep Rentals • 4wd Instruction

Overlanding & Guided Trips



3009 W SR 89A Sedona, AZ 86336 **928-282-8700**



284 N. Main St. Moab, UT 84532 435-259-3195

www.Barlows.us

