

# ARIZONA DRIVER

THE ENTHUSIAST'S GUIDE TO LIFE BEHIND THE WHEEL

VOLUME 22 NUMBER 6  
NOVEMBER-DECEMBER 2023

**SEDANS AND  
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COMPARO AWARDS EVENTS  
AUCTIONS & CONCOURS  
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# #BeOneInAMillion

Help us cross the \$1,000,000 line for Parkinson's

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](http://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

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# ARIZONA DRIVER

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**COVER:** The \$98,300 Lucid Air Pure, built in Arizona. Major activity in the EV sector is marked by a significant presence of full-electrics at our comparo drives in this issue—in Drive Revolution, as expected, but also in normally gasoline-dominated Run to the Sun, where our cover car's sibling \$137,500 Lucid Air Grand Touring had a surprise win. (While EVs won all categories plus overall in Run to the Sun and both categories in Drive Revolution, a hybrid won overall in Run to the Sun.)

Photo: Doug Berger / DBPics.com for NWAPA

Joe Sage

Hot Wheels Legends Tour

Arizona Concours d'Elegance

William Dorée

Joe Sage

Nikola Corporation



## START YOUR ENGINES : FROM THE PUBLISHER

When lockdowns hit, events and travel came to a standstill. No more travel to first drives of new vehicles, and events locally and nationally were postponed, cancelled and modified for awhile. But we did continue to get new vehicles here weekly. You may have noticed that most grew into two-page features—a chance for bigger (and more) photos of the machinery, as well as our own Arizona roads and scenery. Paper, printing plants and rack distribution also shut down for some time, but online readership is considerable—and here, there is no issue of a fold down the middle of those pretty pictures.

Still, there's plenty else in our mission besides cars, and this gave us the chance to expand news and features about Arizona business (and our boom in automotive manufacturing), overlanding, highway construction plans, automotive books and more.

Overlanders **Sandra Muñoz Dorée** and photographer husband **William Dorée** (also an accomplished chef) have brought us several enticing road trips this year. In this issue, they tackle the inevitable fact that you will arrive at your destination hungry.

Finally back in the air, we head to Oregon/Washington, Texas and South Carolina for three comparo events and one new vehicle launch. And you'll find a solid set of weekly drives in this issue—many we wanted to keep—over a wide range of purpose and price. Notable are desirable big sedans (a category many manufacturers said was done, an opportunity seized by others), as well as a range of small crossovers (leaning toward station wagon or hatchback format, two more categories we're constantly told Americans don't want). But a name is a name, and "crossover" has always been ripe to cover a great deal. We have only one Detroit-based vehicle in this issue (though many of the foreign-borns are American-built), as lockdown and supply chain recovery, in the face of a hugely disruptive move into EVs, now also meet lengthy UAW strikes head-on. But the usual domestic players did show up in force at our comparo events in the Pacific Northwest and Texas.

Enjoy the ride!

**Joe Sage** • Publisher/ Executive Editor

# ARIZONA DRIVER

MAGAZINE



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# AUTOMOTIVE NEWS UPDATE

2025 Ford Mustang GTD



▼ The first-ever 2025 **Ford** Mustang GTD is a street-legal limited edition designed in parallel with the Mustang GT3 race car—returning to Le Mans next year—and aiming to take on the world’s best performance cars. The project has been in development since 2021, since a handful of team members met after hours in a metal storage garage hidden behind a wind tunnel building in Allen Park, Michigan, to lay out their Euro-conquering vision. Ford considers the Mustang GTD the pinnacle of a Mustang family now with both street-legal and track-only race cars, including the recently revealed Mustang GT4, Mustang GT3, upcoming Mustang Dark Horse R spec racer and more. The GTD name refers to the IMSA “GTD” racing class for cars built to FIA GT3 technical regulations. Production targets include over 800 horsepower and a sub-7-minute Nürburgring time from its supercharged 5.2-liter V8 with unique dry sump oil system, going beyond what’s allowed in racing. Mustang GTD has extensive use of carbon fiber in the body and is planted to the tarmac by exceptional downforce from active aerodynamics and by enormous grip from huge tires mounted to an advanced dual-ride-height short-long arm front and multi-link rear suspension that adjusts spring rate and ride height settings for track or street conditions. It includes a rear-mounted 8-speed dual-clutch transaxle and lightweight carbon fiber driveshaft for ideal near 50/50 weight distribution, and stops with carbon ceramic brakes. Other distinctions include

magnesium wheels and available titanium exhaust. Production of Mustang GTD will be limited. It will start life at the Ford Flat Rock Assembly Plant in Michigan, then be transported to Multimatic facilities in Markham, Ontario, where it will be handcrafted to racing-inspired precision by Ford Performance and Multimatic teams. Mustang GTD will be available in late 2024 or early 2025, with pricing expected to start at about \$300,000.



1955 Maserati A6GCS/53 Frua Spider crowned “Best in Show”

▼ The 12th edition of the annual Concours of Elegance, presented by A Lange & Söhne over three days at Hampton Court Palace in west London, welcomed a record 15,000 visitors to the stunning Palace gardens, for a landmark display of rare and significant road and competition machinery. The Best in Show winner—uniquely

chosen by the Concours car owners themselves—was the 1955 **Maserati** A6GCS/53 Frua Spider, an irresistible masterpiece of Italian design, making its debut appearance on British soil. This Maserati, widely considered to be among the most beautiful and desirable 1950s cars of all, was one of just three built with Frua coachwork, and of just two that survive. The A6GCS Frua Spider was conceived by Guglielmo “Mimmo” Dei, the official Maserati dealer for Rome, who commissioned a small series of exquisitely coachbuilt cars based on the high-performance A6GCS platform—the “CS” standing for “Corsa Sport.” Originally developed for the 1953 World Sports Car Championship, the A6GCS/53 featured motorsport-honed mechanicals—a potent 170-bhp in-line six-cylinder engine, initially developed by famed engine builder Columbo for Formula 2 racing, and a similarly race-bred, lightweight tubular chassis by Gilco. The resulting car, weighing just 740 kg, was a real work of automotive art, the perfect blend of delicate spider styling, delightful handling and potent, racecar performance. Chassis 2110

was shipped to the US in the late 1950s, where it remained until now. In the early 2000s, it received a painstaking restoration under the supervision of Maserati aficionado Adolfo Orsi. The Le Mans centenary celebration was another highlight of the Concours. The display, in partnership with L’Automobile Club de L’Ouest, assembled a jaw-dropping array of significant La Sarthe legends, including 10 winners and

four double winners, a lineup the likes of which has never before been seen in the UK. Elsewhere, Fritz Burkard was celebrated as The Collector for 2023, for a diverse range of machinery from his “Pearl Collec-

Lotus Emeya Hyper-GT



tion,” while other highlights included the women-only Levitt Concours, 30 Under 30 Concours, and Gooding & Company Auction. Next year’s event runs from August 30 to September 1, 2024.

▼ **Lotus** Technology Inc. has announced the debut of Emeya, the company’s first (and one of the world’s few) advanced electric hyper-GT, a four-door luxury performance vehicle. Equipped with active aerodynamic features and high-power dual motors, Emeya can accelerate from 0-62mph (0-100km/h) in 2.8 seconds, making it one of the fastest electric GTs in the world. Emeya demonstrates Lotus’s charging capabilities, able to top up approximately 93 miles (150km) of range in just five minutes using a 350kW DC fast charger. Emeya has also been designed with the sustainable materials to reduce the carbon footprint of its production. Emeya will join Lotus Tech’s line-up of luxury lifestyle EVs as the company continues its transformation into an advanced, fully electric, intelligent and sustainable luxury mobility provider by 2028. The debut of Emeya marks an important milestone in Lotus’s Vision 80 strategy and follows the first global deliveries of Eletre, the brand’s maiden fully electric hyper SUV, which began in March this year. With more than 190 stores in its global retail network, Lotus had accumulated global orders of about 17,000 units as this summer, for Eletre and Emira, the brand’s mid-engine sports car. With the plans to

further broaden their product portfolio by launching the Type 134, a D-segment BEV SUV, and Type 135, an all-electric sports car, over the next four years, Lotus Tech expects to achieve a 100 percent BEV

portfolio by 2027. As announced in January 2023, Lotus Tech entered into a definitive agreement and Merger Agreement with L Catterton Asia Acquisition Corp, a special purpose acquisition company formed by affiliates of L Catterton, a leading global consumer-focused investment firm, incorporated in the Cayman Islands and headquartered in Singapore. The Merger Agreement is expected to be completed late this year and would result in Lotus

plant inside—a 6.2-liter LT4 crate engine with 1.7L Eaton TVS supercharger, able to hit 20,000 rpm with over 9 lb of boost. To cope with such a hike in power, it includes heavy-duty cylinder heads, titanium intake valves, forged connecting rods and pistons and stainless steel exhaust manifolds. MAER heavy-duty axles help to harness the beast within. An Eaton Detroit Trutrac ATB limited-slip differential (LSD) provides enhanced traction, with greater power distribution to the wheels, resulting in improved torque bias. Unlike traditional clutched LSDs, the Trutrac ATB doesn’t have wear-out parts like clutch or friction plates, ensuring long-lasting performance. Satin Black accents such as KAHN Defend 1983 rims and a KBX front grille combine with the Phoenix Orange paint for a vehicle with all the “show” to match the “go.” A Safety Devices L242 Exoskeleton keeps the body taut while adding to the build’s distinctive look. The interior has Vintage Thatch leather upholstery throughout, while matching seat belts and custom embroidered headrests highlight the level of personalization applied to this restored and reimagined Defender. Black billet alloy is present at every touch point, and the MOMO steering wheel provides driver-focused feedback via the front axle. Black carpeting and a grey suede headliner fin-

Arkonik KRAKEN 690-hp Defender 110



Tech becoming a public company with a pro forma enterprise value of approximately \$5.6 billion US. Production of Emeya is expected to start in 2024.

▼ **KRAKEN**, a 1992 Land Rover Defender 110 with a 690-hp LT4 engine and 10-speed automatic transmission, is the latest build from **Arkonik** Ltd. Phoenix Orange metallic paint wakes you up to the power-

ish off the luxuriant ambience, while a Pioneer NEX double-DIN infotainment system keeps you wired for fun, entertainment and business connectivity. The LT4 engine and 10-speed transmission build is available to all clients. Arkonik performs the upgrade at their SVO division in Charleston, South Carolina.

KEEP RIGHT >>



▼ Automobili **Lamborghini** debuted their Lanzador concept at The Quail, A Motorsports Gathering during Monterey Car Week this summer, then closed the week



out by displaying it to the public on the Concept Lawn at Pebble Beach, offering a curated glimpse at the future. “Presenting the fully-electric Lamborghini Lanzador concept car during Monterey Car Week represents an important milestone in our company’s history and shapes our path towards decarbonization and electrification,” said Lamborghini chairman and CEO Stephan Winkelmann. “It was deeply gratifying to see the positive reaction from our valued customers to this vision of a future purely-electric fourth series production Lamborghini.” The Lanzador concept opens a new car segment for the brand, a high ground-clearance Ultra GT with 2+2 seats, featuring clear, purist and technical forms, with all-new concepts combining the inherent performance of a Lamborghini super sports car with an enhanced on-board experience—a fun-to-drive personality plus the versatility of a daily driver. To celebrate the historic 60 years of Lamborghini, the Pebble Beach Concours showcased a stunning array of historic cars in a dedicated Lamborghini 60th Anniversary class, offering a cross section of significant classics, former show cars and special production vehicles. Annually, the Concours d’Elegance recognizes not only the best cars in the world but also the experts and enthusiasts who uphold the tradition of elegance in automobiles today. Both Winkelmann and Lamborghini head of design Mitja Borkert had returned again this year as Honorary Judges to serve in Sunday’s Concours ceremonies.

▼ **Jeep®** has introduced the 2024 Gladiator off-road capable midsize pickup, updated with a new seven-slot grille, available power seats, standard sidecurtain air-

bags, standard 12.3-inch Uconnect touchscreen, a windshield-integrated trail-ready stealth antenna and seven all-new wheel designs. Gladiator distinguishes itself in the segment by its open-air freedom—a folding windshield, three roof choices and three door choices including available half doors and removable doors—as well as bragging points for tow capacity and payload. Two new trims are added, Mojave X and Rubicon X (we drove the Wrangler Ru-



bicon X in our previous issue), with integrated off-road camera, steel bumpers and Nappa leather-trimmed 12-way power adjustable front seats.

But wait, there’s more—the 2024 Gladiator has three new available upfit packages—Upcountry, Upcountry+ and Level II—by American Expedition Vehicles (**AEV**):

- AEV Upcountry and Upcountry+ upfits are available for Gladiator Sport, Willys,

- Mojave and Rubicon. • Upcountry adds AEV 2.0-inch suspension kit, AEV jack base, AEV ProCal, AEV Pintler wheels, 35-inch BFGoodrich All-Terrain T/A KO2 tires, JPP/Mopar flare extensions and an AEV plaque. • Upcountry+ adds an AEV EX front bumper, AEV non-winch cover plate and AEV tailgate badge. • Upcountry and Upcountry+ upfits both provide 15-inch ground clearance, 35 inches of water fording, and 47-degree approach, 25-degree breakover and 33-degree departure angles.

- The Level II upfit, available for Gladiator Rubicon, adds an AEV EX front bumper, AEV front skid plate, AEV 7000 series lights, Warn Zeon 10-S winch, AEV trail camera relocation kit, AEV 2.5-inch Dual-Sport suspension with Bilstein 5100 shocks, upgraded steering stabilizer, AEV jack base, AEV ProCal, 37-inch BFGoodrich All-Terrain T/A KO2 tires, AEV Savegre II wheels, JPP/Mopar flare extensions, AEV plaque and AEV Level II badging. • The Level II upfit provides 16-inch ground clearance, 36 inches of water fording, and 57-degree approach, 26-degree breakover and 34-degree departure angles.

“The dealer orderable AEV upfit packages for the new 2024 Jeep Gladiator give Jeep truck owners even more capability and customization choices,” says Jim Morrison, senior VP and head of Jeep brand

North America. “This selection of upfit packages for the 2024 Gladiator gives our passionate off-road enthusiasts the option to pick the upfit package that best suits their off-roading adventures.”

AEV upfit packages for the 2024 Jeep Gladiator are dealer-ordered and will ship directly from the Toledo Assembly Complex to AEV for upfit, then to the customer’s dealer of choice. ■

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OFFICIAL TIRE 



# Derivative as starting point

BY JOE SAGE

This was our first session with the Volkswagen Atlas Cross Sport. And we have a solid crush. Introduced in 2017 (for 2018), we drove the original Atlas during Texas Auto Roundup at Circuit of the Americas (see our July-August 2017 issue), but it was the only vehicle assigned only to an off-track service road, which was by its nature limited. Its newer sibling, the Atlas Cross Sport, was introduced in early 2020 and has existed through the past few years of pandemic lockdowns and other industrywide disruptions, which has placed it only loosely on the collective radar, or at least ours. Beyond Texas, our first mention of the Atlas was in the introduction of the new Tiguan, which accompanied the departure not only of the old Tiguan but also of the pricier, bigger Touareg (see March-

April 2018). We finally had the Atlas-Atlas for a week here at the start of 2021 (see March-April 2021), producing a very positive report. The EPA classifies both Atlases as Small SUVs, odd and debatable as both are large SUVs by any objective measure, the largest in VW's Taos-Tiguan-Atlas lineup. Though VW's long record of naming some models after North African (rally) winds and tribes is romantic, Touareg was awkward to spell, a little awkward to say and probably harder to remember. Atlas? Strong and easy. (Atlas Cross Sport is more cumbersome. They might have done better to just go with Atlas Sport, a more common pairing, or Atlas Cross, a more distinctive pairing.) Our temptation is to call the first "the big Atlas," especially as our general perception was that the

Atlas Cross Sport was smaller, before receiving it. But while Atlas is a three-row and Atlas Cross Sport is a two-row, they are otherwise basically the same. The three-row is only about five inches longer and weighs about 300 pounds more. (Note that Tiguan has two or three rows in certain trim levels, but without the name change.) And herein lies a revelation. Both the name and sequence of release suggested Atlas Cross Sport is a derivative version of Atlas, and that's largely true. But the attributes of the Atlas Cross Sport have us thinking it could just as easily be considered the lineup's point of departure, with Atlas the derivative. Refreshed for 2024, the ever more stylish Atlas Cross Sport has a new 269-hp 2.0-liter turbo-four, replacing prior 4- and 6-cylinder engines both, for better torque as well as higher fuel mileage. There is also a clean, modern new interior with a range

of feature upgrades. Our midrange SEL includes 4Motion all-wheel drive (a \$1900 option on lower trims). Or you could call it top-of-range, with two R Line variants as special builds atop SEL. Either way, our sample sits at a bargain point overall. Performance is strong, from the engine, to its legit 8-speed automatic, to VW's proven 4Motion AWD system, to advanced conventional suspension. The handsome interior includes such details as rear side window screens you'd see on a utility twice its price, or etched detail on the instrument panel that reminds us of a \$10k option in a \$400k superluxe sedan. The screen interface and related controls are well organized and contained a surprise that's guaranteed to delight—a layer of gesture controls, very effective and intuitive. Again, this is all on a spacious SUV priced in the \$40s. Most of all, we fell for Atlas Cross Sport's purpose-derived stance, really well balanced, sporty and aggressive. With a subtly sloping rear roofline, high beltline, large wheels and high rocker panel, it

looks purposeful and ready to pounce. The real payoff is how this plays out inside. Compared to 20-cubic-foot cargo volume behind three rows of seats in the Atlas, the two-row Atlas Cross Sport has over 40 cubic feet of cargo space behind the rear seats, almost 80 with the second row down. Both rows have over 40 inches of legroom in the Atlas Cross Sport, compared with rear legroom in the 30s for the three-row Atlas. You can start to see why we felt this two-row version will be the standard for a great many buyers. Ground clearance is also healthy. Though not a rock-crawling off-roader, its wheel and tire fitment has big enough, strong enough sidewalls for fishing, camping and picnics well beyond the ordinary. If you conclude you really need three rows, the Atlas SEL is just \$1,010 more. But if legroom and cargo space, along with a sexier style that'll make you smile daily, are what suit you best, you may develop your own crush on the Atlas Cross Sport just as solidly as we did. ■

An 18.6-gallon fuel tank and 26-mpg consumption equal almost 500 miles of highway range on a tank—enough for your adventure weekends to be on a Southern California beach, or in Moab, Ruidoso, you name it, without any stops except for food or fun.



## SPECIFICATIONS

ASSEMBLY	Chattanooga, Tennessee
ENGINE/TRANS BUILD	Mexico / Japan
PARTS CONTENT	US/Canada 50%, Mexico 32%
ROWS/SEATS	two / five
ENGINE	2.0L inline-4 turbo/intercooled, 16v TSI, transverse, cast iron block, forged steel crank w 5 main bearings, alum alloy crossflow head
HP/TORQUE	269 hp / 273 lb-ft
COMPRESSION RATIO	9.6:1
TRANSMISSION	8-spd auto
DRIVETRAIN	4MOTION AWD
SUSPENSION	F: strut-type w lower control arms, coils, telescopic dampers, anti-roll bar; R: multilink w coils, telescopic dampers, anti-roll bar
STEERING	elec power asst rack & pinion
BRAKES	F: 13.2x1.2 vented; R: 12.2x0.9 vented
WHEELS	20x8J machined alum-alloy
TIRES	255/50 R20, all-season
LENGTH / WHEELBASE	195.5 / 117.3 in
GROUND CLEARANCE	6.3
APPR/DEPART/BRKOVER	20.8 / 24.9 / 17.6°
TURNING CIRCLE	40.0 ft
HEADROOM (F/R)	39.4 / 37.8 in
LEGROOM (F/R)	41.6 / 40.4 in
CARGO CAPACITY	40.3 / 77.6 cu.ft
TOW CAPACITY	(braked) 5000 lb
WEIGHT	4359 lb
FUEL / CAPACITY	reg unl / 18.6 gal
MPG	(AWD) 19/26/22 (city/hwy/comb)
BASE PRICE	\$47,435
DESTINATION CHARGE	1350
TOTAL	\$48,785

## 2024 VW ATLAS CROSS SPORT

	FWD	AWD
SE	\$36,715	\$38,615
SE w/Tech	40,655	42,555
SEL		47,435
SEL R-Line		48,885
SEL Premium R-Line		51,445

## 2024 VW ATLAS

	FWD	AWD
SE	\$37,725	\$39,625
SE w/Tech	41,665	43,565
Peak Edition SE w/Tech		46,555
SEL		48,445
SEL R-Line		50,435
SEL Premium R-Line		52,455





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## SPECIAL EVENT : BARRETT-JACKSON NEW ORLEANS AUCTION 2023 : RESULTS



### Barrett-Jackson Barrett-Jackson New Orleans 2023 Thursday-Saturday September 28-30 2023

Ernest N Morial Convention Center, New Orleans LA 70130

**BARRETT-JACKSON** let the good times roll as they concluded their 2023 schedule with their inaugural New Orleans Auction, September 28-30, 2023. In total, 356 vehicles were sold at auction, all with No Reserve, for \$21.6 million. Additionally, 274 pieces of automobilia brought over \$960,000, bringing total auction sales to \$22.5 million—with a 100 percent sell-through rate and over 30 new world auction records set.

Topping the sales was a resto-mod 1958 Chevrolet Corvette convertible at \$660,000, while the "Honolulu Lulu" custom 1932 Chevrolet Woody Custom Wagon was auctioned for charity, raising \$375,000 for Samaritan's Purse.

"The city's rich heritage combined with the region's expansive car culture made it an ideal backdrop," said Barrett-Jackson chairman and CEO Craig Jackson. "We saw enthusiastic bidding across all segments of collectibles, and the performance we witnessed from resto-mods as well as custom trucks and SUVs demonstrated just how strong their place in the hobby continues to be."

The top non-charity sales during the inaugural New Orleans Auction included:

1. 1958 Chevrolet Corvette Custom Convertible .....Lot #748.....\$660,000
2. 2005 Ford GT Hennessey 1000 .....Lot #725.....495,000
3. 1967 Ford Mustang Eleanor Tribute Edition .....Lot #717 .....440,000
4. 2005 Ford GT.....Lot #735.....418,000
5. 1954 Chevrolet Custom Pickup .....Lot #782.....330,000



6. 2020 Lamborghini Huracán LP640-4 EVO .....Lot #730.....286,000
7. 1967 Chevrolet Chevelle Custom Coupe .....Lot #707 .....286,000
8. 2020 Aston Martin DB11.....Lot #701.....275,000
9. 2023 Maserati MC20 .....Lot #723.....253,000
10. 1964 Corvette Custom Convertible .....Lot #764.....220,000
11. 1959 Chevrolet Apache Custom Pickup "Indian Outlaw" .....Lot #679.....220,000

The 1932 Chevrolet Woody Custom Wagon, nicknamed "Honolulu Lulu" and donated by renowned philanthropists Megan and George Shinn, was auctioned to benefit Samaritan's Purse and their relief efforts in Maui following the devastating August fires. First hammering for \$100,000, the custom hot rod was immediately donated back by longtime member of the Barrett-Jackson family Michelle Mauzy to sell again. After hammering a second time for \$75,000 with the winning bid from Ted McIntyre, additional donations included \$100,000 from Mike and Tracy Patterson as well as \$50,000 from the Shinn's and another \$50,000 from Hendrick Motorsports owner Rick Hendrick.

"From an expansive docket filled with collectible vehicles for every enthusiast to Thrill Rides and live music, we brought the ultimate Barrett-Jackson experience for our first-ever event in Louisiana," said Barrett-Jackson president Steve Davis. The event also hosted notable celebrities, including New Orleans Saints all-time sack leader and eight-time Pro Bowler Cam Jordan and "The First Lady of Motorsports" Linda Vaughn. Barrett-Jackson's year-long Fantasy Bid presented by Dodge culminated on Saturday with Keith R. from Ohio taking the crown and the grand prize, a 2023 Dodge Charger.

Next up for Barrett-Jackson schedule is right here at home, the 53rd Annual Scottsdale Auction, running nine days from Saturday January 20 through Sunday January 28, at WestWorld of Scottsdale. For information, tickets, to consign or register to bid, visit:

▼ [www.barrett-jackson.com](http://www.barrett-jackson.com) ■





# Packaging wonder

by Joe Sage

If you may have missed this one at its birth, it's understandable, as the Mazda CX-30 was introduced in late 2019 as a 2020 model—just in time for pandemic lockdowns and all the rest. Though officially a subcompact crossover, this nifty unit is slotted between the outgoing CX-3 and CX-5, the latter one of their most popular vehicles for years.

This will be the last time you ever think of the CX-30 as a subcompact, once you get inside.

You will also get used to the new double-digit alphanumeric naming scheme, the introduction of which is overlapping the departure of single-digit models. (The CX-5 is the only one remaining. Apart from that, this is now joined by a CX-50 and CX-90.) Though with a strikingly high and capable stance (featuring eight inches of ground clearance), the CX-30 also has a lower profile than the others, putting it solidly on the crossover path, leaning toward

their only current sedan and hatchback, still called the Mazda3. (The ever-popular MX-5 Miata also remains.) The double-digits first appeared on electrified models, currently used on the plug-in version of their biggest SUV, the CX-90 PHEV.

The disruptions in the world over the past few years have made much of this seem to quietly happen in background, which has probably helped the whole evolution wash over pretty transparently—successful change with continuity, as planned.

The CX-30 also arrives several years into Mazda's declared move into a more premium niche, though without pretense or expense, a fine niche indeed. As shown at right, there are five builds with a 191-hp powertrain, mostly in the \$20s, and even the two 250-hp turbos (when using optional premium fuel) are in the lower-to-mid \$30s.

Ours is the top of the two higher-horsepower

turbo trims. As it runs on regular gas, if you prefer, that power is 227 horses, not all that much more than the 191 in the rest of the series (which is a five percent increase this year), although its torque approaches double that of the non-turbo.

The CX-30 turbo has power, acceleration and shifts that are plenty satisfying, all with an equally satisfying soundtrack (ours included an engine harmonic enhancer as well as larger dual exhaust)—and all while achieving a healthy 30 mpg highway. (The smaller engine is three points higher on highway and four for city and combined ratings.)

All trims have the same SKY-ACTIV-DRIVE 6-speed automatic with easy-to-switch sport and manual modes by the shifter—all, as always, well implemented in the Mazda, though this is strong and quick enough right out of the box (as things should be) that we didn't really need them.

One of our favorite details on Mazda is their manumatic control, one of the very few that you pull toward you to shift up, push away to shift

down. This is contrary to the majority, but to us is correct—the same as climbing or descending in an airplane (and we're not even pilots, but it's ergonomically logical) or akin to doing biceps curls with weights at the gym.

Though rated in the subcompact category, this small crossover has big insides—legroom is well above 40 inches up front, its other dimensions ample even for a larger vehicle. Cargo volume is even higher than we might have expected, well more than a trunk even with seats up. Its 34.8-foot turning circle (a favorite feature of ours, when we find it) is notably tight and accurate. This is a package tailor made for hustling through errands.

We had our CX-30 while the weather was still quite hot, and while the interior feels spacious and the engine powerful, they are efficient enough that the cabin was cooling off by our first corner.

Ours was nicely optioned, including side mirrors with preset-backup in reverse and 12-speaker Bose premium audio. This build runs a little more than 50 percent higher than a base trim, but even that is still just a little over \$10 grand difference.

The CX-30 uses a torsion beam rear suspen-

sion, which may seem surprising in the face of the rest of its applied technologies. However, we only noticed this in one circumstance, speedbumps, and really only a time or two even then. The plus sides presumably are generally notable weight savings and that valuable interior space.

The CX-30 is not a major off-highway vehicle, but then again—with our eye on that high ground clearance—we wonder what a custom builder might do with a one-off of one of these. About the only thing you can't do with this is tow.

Available in seven colors, including Mazda's incomparable Soul Red, ours in Snowflake White Pearl Mica maximized the effect of the black rocker panel trim, which in turns maximizes the stance from its eight-inch ground clearance. As tame as any daily driver could be, the CX-30 also looks always ready to pounce. And it is.

Our logbooks tend to be full of nitpicks of varying importance or lack thereof—just the nature of the process. This one's notes, however, included such phrases as, "man, this just does everything right"; "this one's a keeper" and "a pretty solid A-plus for performance, content and value. ■

## SPECIFICATIONS

ASSEMBLY	Salamanca, Guanajuato, Mexico
ENGINE/TRANSMISSION	Mexico / Japan
PARTS CONTENT	Mexico 65%, Japan 25%, US/Canada 5%
PASSENGERS	five
ENGINE	Skyactiv-G 2.5 turbo 4-cylinder, advanced dir inj 16v VVT alum alloy
HP/TORQUE	(prem) 250 hp / 320 lb-ft (reg) 227 hp / 310 lb-ft
COMPRESSION RATIO	10.5:1
TRANSMISSION	Skyactiv-Drive 6-spd electronically controlled sport mode auto
DRIVETRAIN	i-ACTIV all-wheel-drive
SUSPENSION	F: MacPherson strut, stblzr bar; R: torsion beam
STEERING	elec power asst rack & pinion
BRAKES	F: 11.6 vented; R: 11.9 solid
WHEELS	18x7J black metallic alum alloy
TIRES	P215/55 R18 all-season
LENGTH / WHEELBASE	173.0 / 104.4 in
GROUND CLEARANCE	8.0 in
TURNING CIRCLE	curb-to-curb 34.8 ft
HEADROOM (F/R)	37.8 / 38.3 in
LEGROOM (F/R)	41.7 / 36.3 in
CARGO CAPACITY	20.2 / 45.2 cu.ft
WEIGHT	3525 lb
FUEL / CAPACITY	reg or prem / 12.7 gal
MPG	22/30/25 (city/hwy/comb)

BASE PRICE	\$35,400
TURBO PREMIUM + PREMIUM PLUS:	engine harmonic enhancer, black heated reverse-tilt memory side mirrors (auto dim driver's side), turbo badge, shark fin antenna, wiper deicer, larger dual exhaust, bright finish engine start button and glove box lid knob, frameless auto dim interior rear mirror, heated steering wheel, Bose 12-speaker premium audio (w SiriusXM/Traffic trial), 360° view monitor, parking sensors front/rear, smart brake support rear, rear cross traffic braking, traffic jam assist, black wheels, adaptive headlights
PAINT: Snowflake White Pearl Mica	incl 395
REAR BUMPER GUARD: stainless	135
DESTINATION CHARGE	1275

TOTAL \$37,205

## 2023 MAZDA CX-30 LINEUP

SKYACTIV-G 2.5L : 191 HP / 186 LB-FT	
2.5 S	\$22,950
2.5 S Select	25,400
2.5 S Preferred	28,220
2.5 S Carbon Edition	29,290
2.5 S Premium	31,060
SKYACTIV-G 2.5L TURBO : 250 HP / 320 LB-FT	
2.5 Turbo Premium	33,800
2.5 Turbo Premium Plus	35,400 ▼





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## MOTORSPORTS : PHOENIX RACEWAY FALL 2023 NASCAR CHAMPIONSHIP WEEKEND

# NASCAR CHAMPIONSHIP WEEKEND NOVEMBER 3-5, 2023

Experience all Phoenix Raceway has to offer—from concerts, to pre-race and more—during the exciting NASCAR season finale in November. Fall The 2023 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.

To buy or resell reserved seats, you can also visit SeatGeek.com.

**2024 SEASON:** Spring 2024 NASCAR Weekend at Phoenix Raceway has been set for March 9-10 and the Fall 2024 NASCAR Championship Weekend is set for November 8-10, 2024. ■

### TUESDAY, OCTOBER 31

NASCAR Racing Experience ..... 8:00 AM - 2:00 pm  
Halloween Bash (trackside) ..... 5:30 - 7:00 pm

### THURSDAY, NOVEMBER 2

NASCAR Craftsman Truck Series practice and qualifying ..... tbd  
ARCA Menards Series West practice and qualifying ..... tbd

### FRIDAY, NOVEMBER 3

NASCAR Xfinity Series practice ..... tbd  
NASCAR Cup Series practice ..... tbd

**ARCA MENARDS SERIES WEST CHAMPIONSHIP** ..... 11:30 am  
**NASCAR CRAFTSMAN TRUCK SERIES CHAMPIONSHIP** ..... 7:00 pm

### SATURDAY, NOVEMBER 4

NASCAR Xfinity Series qualifying ..... tbd  
NASCAR Cup Series qualifying ..... tbd

**NASCAR XFINITY SERIES CHAMPIONSHIP** ..... 4:00 pm

### SUNDAY, NOVEMBER 5

**NASCAR CUP SERIES CHAMPIONSHIP RACE** ..... 1:00 pm

Schedule and details subject to change





# One-machine comparo

MIDDLE OF THE MUSTANG MACH-E MATRIX - BY JOE SAGE

It may seem counterintuitive, as fast as things are moving in the world of EVs, but here we are in late 2023 with a 2022 model. Demand for the Mustang Mach-E is so strong, they sent a new one to a customer rather than to us. That's the smarter move, and nothing has fundamentally changed, anyway—except pricing, which has now *dropped* dramatically, by anywhere from \$600 to \$5,900, for 2023 over 2022 (see chart).

Keys to this one are its 91-kWh Extended Range (ER) battery and rear-drive. Standard battery range of 247 miles is bumped up to 306 with the ER. And lighter RWD is more range-efficient than eAWD,

where standard range is 224 and ER is 290 miles.

The 290-hp rear-driver forgoes the 346 horses of dual-motor eAWD, and its zero-to-60 time becomes 6.1 seconds, slower than either the two-motor eAWD's 5.2 (or 4.8) seconds or the lower-horsepower RWD Standard Range at 5.8 seconds.

Those are for our Premium trim—the only level offering all four battery and drive variables—but numbers vary among trims, too, with comparisons and tradeoffs galore. Peak power ranges from 266 to 480 hp, torque from 317 to 634 lb-ft, zero-to-60 times from 6.1 seconds down to 3.5, and range from 224 to 312 miles—but best-of-each stats rarely go

2023 MUSTANG MACH-E	kWh	motors	hp/lb-ft	0-60	range	\$-was	(\$-drop)	\$-NEW
Select RWD Standard Range	70	1	266/317	5.8	247	\$46,895	(\$900)	\$45,995
Select eAWD Standard Range	70	2	266/428	5.2	224	49,595	(600)	48,995
▼ Premium RWD Standard Range	70	1	266/317	5.8	247	54,975	(3,980)	50,995
+ Premium RWD Extended Range	91	1	290/317	6.1	306	8,600	(\$1,600)	7,000
Premium eAWD Standard Range	70	2	266/428	5.2	224	57,675	(3,680)	53,995
+ Premium eAWD Extended Range	91	2	346/428	4.8	290	8,600	(\$1,600)	7,000
Calif Route 1 eAWD Extended Range	91	2	346/428	4.8	312	63,575	(5,580)	57,995
GT Extended Range	91	2	480/600	3.8	270	69,895	(5,900)	63,995
+ GT Performance Edition Ext Range	91	2	480/634	3.5	260	6,000	->	6,000



hand-in-hand. New base prices range from about \$46k-70k. It does get quite complex. If you're planning to actively shop Mach-E, hang on to our chart.

As for our version driven here—with the slowest zero-to-60 spec, the best range and mid-range price—it's a great drive. We have driven many variations, yet never any two back-to-back. But this layout corners well in town, as you would expect from a good rear-driver, so well in fact that it made us wonder whether you'd even need all-wheel-drive in this, although this is of course inseparable from the question of more horsepower.

This ride is nice and solid, firm but not harsh even on routine speed bumps, and braking is superb, with no dramatic oddities sometimes found with regenerative systems.

Giving it a good blast up a freeway ramp in the quiet hours, our Mach-E was a rocket. And again, this is the one with the slowest zero-to-60, which just shows the state of EVs overall, with even the "slowest" beating top gasoline performance numbers of not long ago. In fact, despite people's apparent ability to adapt readily to just about anything, it's fair to guess that a great many might be happiest with this notably quick "slow" version—there's really only just so much you can do in the

real world, shy of boasting about bragworthy but arguably borderline-ludicrous specs.

In addition to extensive driving around town and on the freeways, we took a long mountain and desert drive, as well, and as our long logbook notes suggest at one point, the driving experience is essentially flawless.

One note on features: door handles and locks are unconventional in that you touch one place to lock and another to unlock. Once you're attuned to this, you wonder why it would be any other way, as it usually is. No more wondering "did that lock? I don't know; click it again?"

As for this sample's Extended Range, our actual readouts matched the promised specifications pretty much exactly, even in triple-digit temperatures, and recharging seemed anecdotally quite quick.

Predictable were a handful of comments on our social media saying #notastang. We've owned gasoline Mustangs ourselves and understand this. But if the world truly goes all-EV, at least the name will survive. (Some even say it looks like an SUV, to which we envision Ford product planners having a chuckle as they said, "then, hold on to our hats and watch this" as they developed the Mach-E Rally at right.) So does it feel like a Mustang? Or an EV? Or both? It would be interesting to draw a Venn diagram from a broad survey on this, to see how much overlap there actually is. But one phenomenon of note: when sharing the road with Mustang's long-standing segment competitors, we found they react to this exactly as they do to any Mustang—and many regret it. Thus we conclude you will not regret, but rather embrace the electric 'Stang. ■

## SPECIFICATIONS (2022-2023)

ASSEMBLY	.....Cuautitlán, Mexico
MOTOR	.....primary electric motor (rear) only
BATTERY	.....Extended Range (ER) 91 kWh, 376 Li-ion cells, 8-yr 100,000-mi warranty
HP/TORQUE	.....peak 290 hp / 317 lb-ft
TRANSMISSION / DRIVETRAIN	.....single speed / RWD
DRIVETRAIN	.....RWD
0-TO-60 MPH	.....(ER, RWD) 6.1 sec
SUSPENSION	.....F: indep MacPherson strut, hollow stblzr bar; R: indep multilink, hollow stblzr bar
STEERING	.....elec assist
BRAKES	.....F: 362mm vented, 4-piston fixed; R: 316mm solid, 1-piston sliding
WHEELS / TIRES	.....19-in machined-face alum w high gloss black-painted pockets / 225/55R19 a/s BSW
LENGTH / WHEELBASE	.....185.6 / 117.5 in
RISE HEIGHT	.....5.8 in
TURNING CIRCLE	.....38.1 ft
HEADROOM (F/R)	.....(glass pano rf) 40.4 / 39.3 in
LEGROOM (F/R)	.....43.3 / 38.1 in
CARGO CAPACITY +FRUNK	.....29.7 / 59.7 / +4.7 cu.ft
WEIGHT	.....4647 lb
RANGE	.....(std 247) ext range RWD 306 miles
MPGe	.....105/92/99 (city/hwy/comb)

BASE PRICE	.....*(2022) \$54,975
EQUIP GRP 300A 91 kWh Extended Range battery	.....*8600
DESTINATION CHARGE	.....1300

TOTAL.....\*(2022) \$64,875  
*\*Prices have been significantly REDUCED; see chart.*

## 2024 MACH-E RALLY

### First Mustang for pavement or dirt

In case the lineup wasn't complex enough already, meet the Mustang Mach-E Rally, a tuned version of the Mach-E GT with two-motor 480-hp 650-lbft (or more) powertrain, suspension raised 20mm, specially tuned springs and MagneRide shocks, 385mm front rotors with red Brembo calipers, gloss white 19-inch rally alloys and 235/55 R19 Michelin CrossClimate2 tires for more sidewall and loose-surface grip, under-side shielding for motors, protective film on doors and fenders, available mud flaps, and a recovery point built into the front with a hook included.

Its 91 kWh extended range battery targets 250 miles of range and 10-80 percent DC Fast Charge in ±36.5 minutes.

Mach-E Rally was developed on an



Here's one more comparative to remember, this time between EV Mustangs and one particular gasoline model: Mustang Mach-E is hyphenated, while Mustang Mach 1 is not.

all-new course at Ford's Michigan Proving Ground in 500-mile rally-cross durability tests, producing a new RallySport Drive Mode for yaw in off-road slides, linear throttle response for better control, and more aggressive damping for loose corners. This mode and these tires also improve performance in snow and other slick on-road conditions.

Styling points include a Focus RS-inspired rear spoiler, new front splitter, black painted steel roof, front fascia with built-in rally fog lights, racing stripes and contrasting accents including upper and lower body moldings.

Target starting price is about \$65,000, with orders in early 2024 and deliveries beginning shortly afterward. ■



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## ARIZONA CONCOURS 2024 SCOTTSDALE CIVIC CENTER: SUNDAY, JANUARY 21

**T**he Art of Automotive Design" is the theme for the sixth edition of the Arizona Concours d'Elegance, to be held on January 21, 2024 at the newly renovated Scottsdale Civic Center, with a splendid array of 100 rare and historic automobiles on display, some of the world's most superb examples of the art of coachbuilding and car design, in the atmosphere of a stylish garden party.

The Arizona Concours is a professionally judged and curated assembly of rarely seen dream cars and highly valued collector vehicles, examples that impress and excite not only car lovers but anyone who appreciates the beauty of expressive design.

Previously held at the Arizona Biltmore Resort in Phoenix, the Arizona Concours is now presented in partnership with Scottsdale Arts, an organization responsible for multi-disciplinary artistic services in Scottsdale. Proceeds from the Concours benefit local artists and the arts community.

January 2023 marked the event's first time at the Scottsdale Civic Center, where a \$35 million renovation had been still underway, confining the show to a finished section. Construction is now complete, and the 2024 Concours will be expand-

ed to fill the entire landscaped space, with the awards ceremony held on an elegant new outdoor stage. "The award presentations for 2024 will be the most dramatic ever presented by the Arizona Concours," notes event co-chairman Ed Winkler.

### ARIZONA CONCOURS 2024 ENTRY CLASSES

The deadline for entries was October 31. Awards will be presented in 15 vehicle classes, ranging from antiques at the dawn of motoring through pre-war classics, sports and competition cars, to modern-day exotics, along with special awards and the coveted Best of Show trophy. Classes are:

- 1: The Earliest Designs: Carriages & Brass Era (pre-1916)
- 2: Exceptional Early Designs: Antique (1916-1927)
- 3: Pre-war Sports and Race Cars: American
- 4: Pre-war Sports and Race Cars: European
- 5: Art-Deco Age: 1930s American Coachwork
- 6: Art-Deco Age: 1930s European Coachwork
- 7: Avant Garde Design: 1940s and 1950s Coachwork
- 8: Mid-Century Design: Stylish 1950s Coachwork
- 9: Preservation Class: At least 50 years old in 2024
- 10: Modern Development & Design: European Sports/Racing Cars (1948-1975)
- 11: Modern Development & Design: American-powered Sports/Racing Cars (1948-1975)



- 12: Exotic Sports Cars with Historic Roots: 1975-2000
- 20: Sixty Years of Lamborghini Design
- 21: Personal Styling/Design Interpretations: Modern interpretations of classic customs
- 22: Featured Designer: Carrozzeria Touring Superleggera

### ARIZONA CONCOURS 2024 TICKETS

Single admission tickets are \$85, increasing to \$100 on January 1, 2024. Concours Plus tickets including admission to a collector car lecture series on Saturday, January 20 and early "Dawn Patrol" admission to the Concours starting at 7 am are currently \$110, increasing to \$125 on January 1.

### TICKETS AND SPONSORSHIPS

To purchase tickets or to learn more about sponsorship opportunities, visit:

[ArizonaConcours.com](http://ArizonaConcours.com)  
[CivicCenterLIVE.org/events](http://CivicCenterLIVE.org/events)



Photo: Patrick Darby



# Market geniuses

BY JOE SAGE

The spacious brand new 2023 Toyota Crown sedan bears a name with long Toyota heritage. Born in 1955, it hasn't been sold in the US since 1972, though (less known) its flagship status has been the basis for several Crown-derivative Toyota model names all along—Corona and Corolla (from Latin), Camry (from Japanese kanmuri), even Avalon (a stretch to King Arthur). Now Toyota Crown itself is back with us, in generation sixteen.

Toyota dances lightly around tying the Crown, decidedly a sedan, to crossover or SUV leanings—which had caught our eye favorably, with a notably high beltline, visually high rocker panel and mildly extended roofline—but they do mention its taller

driving position and easy step-in access in those terms, and its approach and departure angles are in its basic specs. We can easily see the car's appeal, not only to thirsty buyers in a currently highly neglected sedan segment, but to anyone liking its fastback SUV styling with the security and organizational plusses of a sedan's locking trunk.

Call it what you will, it's a knockout. From inside it's spacious, from outside it signals strength and power, and it's handsome from all around.

Three versions run \$39,950 to \$52,350, all hybrids and all all-wheel-drive. Top price brings you not only Platinum trim but an increase from 236 to 340 hp with its MAX powertrain. Pick your pleas-

ure: fuel mileage in the 40s on two standard-engine trims (with a zero-to-60 time of 7.6 seconds), or zero-to-60 in 5.7 seconds in Platinum MAX (with fuel mileage still running into the 30s). Our 236-hp Crown Limited sits in the middle, at \$45,550.

We set out for a nearby freeway, starting with that familiar double-lane merging turn as soon as the light turns green (reminiscent of NASCAR since they relocated the starting line to just before the first turn.) This is the slower powertrain, yet it is quick. Torque is so immediate, it reminded us of acceleration in an EV bearing double the horsepower—not numerical fact, but impression, which can be just as important, and it's fun. And while an EV runs silently, the Crown has a satisfying growl.

The two non-turbo versions do have a CVT, an electronic unit, with its own growl less satisfying in

some situations, such as long uphill acceleration on a mountain highway. Note that the turbo MAX version has a direct-shift six-speed automatic.

One of the last Detroit luxury sedans still on the road came from behind on another freeway ramp, an uphill, but couldn't beat our acceleration. Our Toyota Crown held its own here not just in competitive performance, but in its general style and experience. We could think of no reason we'd rather be in that. Crown starts to be a solid match to premium European sedans, too, and at maybe about 60 percent the typical price.

Anecdotally (as opposed to by hypermiling), we realized we had driven a couple of hundreds miles, aggressively in town and on rural four-lane highways, yet saw we had used only about an eighth of a tank of gas. The 41 mpg rating seems honest.

We often drive one version of a vehicle, with a

mention of its alternate versions sufficing. In the case of Toyota Crown, we are curious to give the turbo-plus-automatic MAX an extended drive. The two are a strong pairing, both very compelling.

Some years back, one of the Detroit automakers was introducing a replacement for their long-running big sedan, early in the looming trend. We asked what they'd do to keep their legions of devoted owners. "Where are they gonna go?" was the confident reply. Seems now they can go to Toyota.

Toyota has built what such buyers want, as they leverage their longstanding electrified powertrain leadership into a measured approach to evolution, while delivering vehicles people want. If you are one of many who miss the large sedan category, abandoned now by nearly all, this may be just what you're looking for, particularly if not on a luxe budget. Hats off to Toyota for recognizing this. ■

With so many manufacturers currently shunning the sedan market, might we see Toyota—a well-established member of the NASCAR trio—make a move to conquer the highly desirable law enforcement market, itself a huge endorsement of strength, function and performance, with a new Crown Police Cruiser?

## SPECIFICATIONS

ASSEMBLY	.....Toyota, Aichi, Japan
CLASS / SEATS	.....midsize sedan / five
ENGINE	.....2.5L Dynamic Force 4-cylinder, 16v DOHC w VVT-iE and VVT-i, dir ignition
COMPRESSION RATIO	.....14.0:1
HP/TORQUE	.....184 hp / 163 lb-ft
ELEC MOTOR	.....perm magnet synchronous
BATTERY	.....Ni-metal hydride 230.4V, 5.0 Ah
TORQUE (F/R)	.....149 / 89 lb-ft
COMBINED SYSTEM NET	.....236 hp / 400.4 lb-ft
TRANSMISSION	.....electronic CVT
DRIVETRAIN	.....electronic on-demand AWD
0-TO-60 MPH	.....7.6 sec
SUSPENSION	.....F: indep MacPherson strut w 26.5mm hollow stblzr bar; R: multi-link w 21.0mm hollow stblzr bar
STEERING	.....rack parallel elec power
BRAKES	.....F: 12.9 in vented; R: 12.5 in solid
WHEELS	.....(std) 19-in multi-spoke machined two-tone alloy; (as outfitted) 21-in 10-spoke dark metallic alloy
TIRES	.....(std) 225/55R19; (as outfitted) 225/45R21
LENGTH / WHEELBASE	.....196.1 / 112.2 in
GROUND CLEARANCE	.....5.8 in
APPROACH / DEPARTURE	.....13.9 / 19.3°
TURNING CIRCLE	.....38.8 ft
HEADROOM (F/R)	.....38.2 / 37.5 in
LEGROOM (F/R)	.....42.1 / 38.9 in
CARGO CAPACITY	.....15.2 cu.ft
WEIGHT	.....3980 lb
FUEL / CAPACITY	.....87 reg or higher / 14.5 gal
MPG	.....42/41/41 (city/hwy/comb)

BASE PRICE	.....\$45,550
PREMIUM PAINT: Supersonic Red	.....425
ADVANCED TECHNOLOGY PKG: 21-in 10-spoke dark metallic alloy wheels, panoramic view monitor, remote connect w digital key capability (4G; trial or subscrip req'd)	.....2950
DESTINATION CHARGE	.....1095
TOTAL	.....\$50,020

## 2023 TOYOTA CROWN LINEUP

(All are Hybrid AWD w diff size front/rear motors)	
2.5L Dynamic Force 4-cyl, Electronic CVT	
XLE	236 hp net .....\$39,950
Limited	236 hp net .....▼ 45,550
2.4L turbo 4-cyl, Direct Shift 6-spd auto	
Platinum MAX	340 hp net .....52,350



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PREVIEWS									
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RM Sotheby's									
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## Arizona Auction Week 2024

After a high of eight events in 2020, pandemic restrictions entered the realm, with the next couple of years juggling through various live, remote, restricted, canceled or rescheduled events. By last January, things were back to familiar times and locations, though down to six events. This year, we are down to five, as a couple of longstanding events and one once-ever have dropped off the calendar, with no further word. Check online for any updated details.

### Barrett-Jackson 53rd Annual Scottsdale Auction

Nine days: Sat Jan 20 - Sun Jan 28, 2024  
WestWorld of Scottsdale (AZ Loop 101 & FLWright Blvd)  
16601 N Pima Road, Scottsdale AZ 85260  
www.barrett-jackson.com

**Bonhams**  
13th Annual Scottsdale Auction  
Thursday, January 25, 2024 (starts 10am)  
(viewing Tuesday-Thursday, Jan 23-25 t.b.c.)  
Westin Kierland Resort & Spa  
6902 E Greenway Pkwy, Scottsdale AZ 85254  
www.bonhams.com

**MAG Auctions**  
January 2024 Collector Car Auction  
Thursday-Saturday, January 25-27, 2024  
(check-in Monday-Wednesday, Jan 22-24)  
We-Ko-Pa Casino Resort, Fort McDowell AZ 85264  
(Arizona 87 Beeline Highway northeast of Fountain Hills)  
www.motorsportauctiongroup.com

**RM Sotheby's**  
25th Annual Automobiles of Arizona  
Thursday, January 25, 2024  
(preview Wednesday, Jan 24)  
Arizona Biltmore Resort and Spa  
2400 E Missouri Ave, Phoenix AZ 85016  
www.rmsothebys.com

**Worldwide Auctioneers**  
8th Annual Arizona January Auction  
Friday, January 26, 2024 (starts 11am)  
(preview Weds-Thurs, Fri 9-11, Jan 24-26)  
Singh Meadows, 1490 E Weber Drive, Tempe AZ 85281  
(southwest of Hayden/McClintock and McKellips)  
www.worldwideauctioneers.com





# KONA V2.0: RECONCEIVED ELECTRIC-FIRST

BY JOE SAGE

We gave the first Hyundai Kona its shake-down drive at launch on the Kona Coast of Hawaii's Big Island in spring 2018. We have driven iterations a number of times since, back in Arizona, also in Georgia, and at comparo events in the Pacific Northwest and Texas (see photos at right). A full-EV version was added in 2019, a component of the company's accelerated electrification strategy to bring eleven new EVs to market globally by 2030. All have had great acclaim.

Kona in 2018 was conceived to fill the hottest growing segment of that moment—smaller than a compact crossover (in Hyundai's case Tucson, by far their top seller). Despite its smaller outside dimen-

sions, Kona has highly competitive interior volume.

The larger Palisade, the even smaller Venue and the Tucson-sized Santa Cruz pickup (sport adventure vehicle) also came to market since that time. While SUVs were 37 percent of brand sales in 2017, prior to Kona's launch, they are 73 percent today.

Time has both flown and stood still since then (with lockdowns and so on), and now we arrive at a new gen-two Kona for 2024. We first drove it briefly in Texas (see at right), soon flying to South Carolina for a formal introduction and first drive. Here, Hyundai product planning manager Melvyn Bautista confirmed the nature of this time span, terming the new Kona a "covid car," a global collaboration done against all odds from kitchens and

home offices in Korea, Germany and California.

The gen-two Kona comes in four powertrains—two gasoline and two electric. The basics including trims and prices are broken out in our chart at the end. Generation two of Hyundai Kona is a bit the same as gen one (referred to as "a continuing source of inspiration"), while at the same time different. The new Kona was conceived as an EV first—an uncommon approach—thus its internal combustion (ICE) powertrains are the adapted version.

Sales are sure to be strong for the ICE Kona for the time being—as we would be driving—but its full-electric basis makes it ready for the long haul.

Exterior styling includes rugged wheel arches and cladding (with far less cladding on the EV), along with Hyundai's crisp "parametric" side surface sculpting. The upscale EV influence brings "pixelated" details—tightly packed squares—to ICE now, too, seen in headlight and taillight bars.

The cabin has almost 42 inches of front legroom and close to 40 inches (38.2) in the rear. Seat thickness is reduced by 30 percent, with full comfort; most of the gain goes to the rear seats. Rare in the

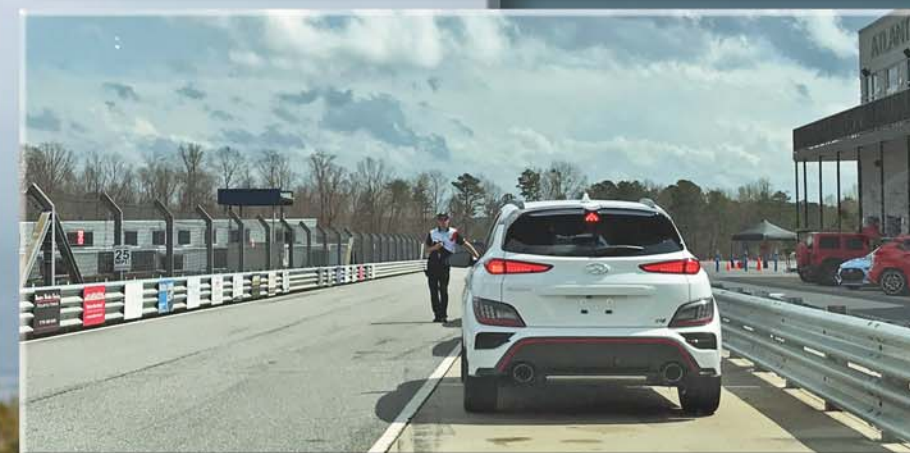
OUR HYUNDAI KONA NATIONAL TOUR OF SORTS: We've had quite a bit of time in the gen-one Kona. First was at its launch drive, on the Big Island of Hawaii (of course). We've had a couple for a week each back home in Arizona. We drove the Kona N on track at Atlanta Motorsports Park (and Kona back to Atlanta) last year. And we've had it in the mix at a few comparo events over the past five or six years. Our first run in gen two was a surprise—just a couple of weeks before our scheduled South Carolina launch drive, it was entered in the TAWA Texas Truck (and SUV-crossover) Rodeo comparo, where we took it for a short road drive.

segment are front seats that are both heated and cooled. Placement of controls and functions adds to the driver's commanding feel, in turn emphasizing cabin width. Clever storage and stash spots abound, along with a wireless charging pad and phone stand. The new Kona moves from Bluelink to new Bluelink+ connectivity, with basic functions now included at no further cost, for original or subsequent owners. An advanced plan is also included for new owners, with three months free then subscribable for subsequent owners.

With weights running just 3005 to 3505 pounds across the full lineup, fuel mileage is as high as 35 highway and 31 combined for the lower-powered engine, or 32 and 28 for the turbo, with fuel tank

(cont'd)

The generation one Kona had lively paint colors, in line with its Hawaiian vibe—Surf Blue, Sunset Orange, Lime Twist, its red even called Volcano, as well as a handsome dark grey and white. For gen two, ten new colors are available—three of these ICE-only, one EV-only, six shared by both—most of them tamer than before, with Neoteric Yellow and Soultronic Orange the liveliest. Shown here is Mirage Green.





capacity of 12.4 or 13.2 gallons, respectively.

As with gen one, towing is not recommended.

The sizing strategy has been a winner for Kona, as gen-one blew away original sales projections, rising to fifth-place seller in Hyundai's 14-model US lineup. Its sales have grown 24 percent year-over-year for the first three quarters, with Q3 sales up 44 percent, putting it right on the heels of the big three-row Palisade (with Santa Fe, Elantra and Tucson above that). Knowing what a huge hit the big Palisade has been, it's clear that small is hot.

Small is larger than it used to be, too. Grouping its segment as those with width of 69 to 72 inches and length of 162 to 172 inches, where gen-one Kona used to reside, shows a shrinking handful, while the group of those from 70.5 to 73.5 inches width and 170 to 182 inches length, where gen-two Kona resides, has a growing number combining existing, new, or also resized and effectively migrated. (Competitors they freely compare with most directly include Honda HR-V, Toyota Corolla Cross and Subaru Crosstrek.) Against a larger set of nine competitors, the new Kona is tops in passenger volume (whereas the old Kona would have been next-to-last against current models) and a

tight fifth, by a tenth of a cubic foot, in cargo volume (the old one would be last), with clever customizable cargo space via a configurable folding shelf and luggage board.

Though anyone is likely to shop via relativity, Hyundai basically presents the Kona's attributes in their own right. In addition to its practicalities—convenience-oriented tech, maneuverability in tight spots, increased interior space—its less tangible factors include stylish, youthful design focus and fun-to-drive lifestyle support. Individually not unique to Kona, their collective presence is clear.

Overall evolution includes improvements to body rigidity, handling, steering and brakes, collision safety, and noise-harshness performance, all engineered for US roads and all benefiting from the starting point of the modular ICE/EV platform.

Our drive in South Carolina was diverse, from inevitable urban grid, exurban shopping stretches and freeway time, to lively two-lane country roads and even an unpaved forest road.

We had the Limited trim, with the larger 190-hp 1.6-liter turbo GDI and eight-speed automatic, which proved every bit as lively as the roads. Entering busy main roads from parking lots or side

roads, we could accelerate and carve a turn into position with great enthusiasm and confidence.

Lower trims have a 147-hp 2.0-liter Atkinson cycle 4-cylinder engine and SHIFTRONIC intelligent variable transmission. All have a nifty, tactile shift-by-wire controller on the steering column.

(The Kona Electric has either of two batteries and with that two ranges, standard and extended, and two power outputs.)

Though ultimately basically the same result, the gen-two Kona's EV-first design process means the ICE version has additional interior volume, without the battery, rather than the EV having less. Our vehicle carried two co-drivers both over six feet, and we can confirm it as spacious and comfortable—we never even thought about its size or space during a full day of driving.

As the number of vehicle sizes grows and market shares continue to shift to SUVs overall, smaller crossovers in particular, our take on the gen-two Hyundai Kona is the same as for the original. It's stylish, comfortable, roomy and quick. Unless you have a family of six or need to tow, Kona offers a size and shape—with great variety, all at attractive prices—that should cover your needs. ■



(At right) An unpaved road in the Spanish moss woods of South Carolina. • The cockpit of the Kona Limited. • Kona Electric is identifiable, especially in the rear, without the cladding of the other versions.

## 2024 HYUNDAI KONA LINEUP

### Kona gasoline models.....FWD.....AWD

2.0L ATKINSON CYCLE 4-Cyl : 147 hp / 132 lb-ft Intelligent Variable Transmission SHIFTRONIC®		
SE .....	\$24,100	\$25,600
SEL .....	25,450	26,950
SEL+Convenience Package .....	27,650	29,150

### 1.6L TURBO GDI 4-cyl : 190 hp / 195 lb-ft 8-Speed Automatic Transmission

N Line .....	30,650	32,150
Limited .....	31,650	33,150

**KONA N:** Gen-one had a 276-hp 2.0L "Flat Power" turbo-4 and 8-speed wet dual-clutch transmission and started at \$34,200 in 2022. Gen-two has not yet been announced.

### Kona Electric .....2WD

STANDARD RANGE : est range 200 miles 48.6 kWh battery : 133 hp / 188 lb-ft	
SE .....	33,550

EXTENDED RANGE : est range 261 miles 64.8 kWh battery : 201 hp / 188 lb-ft	
SEL .....	37,300
Limited .....	41,550



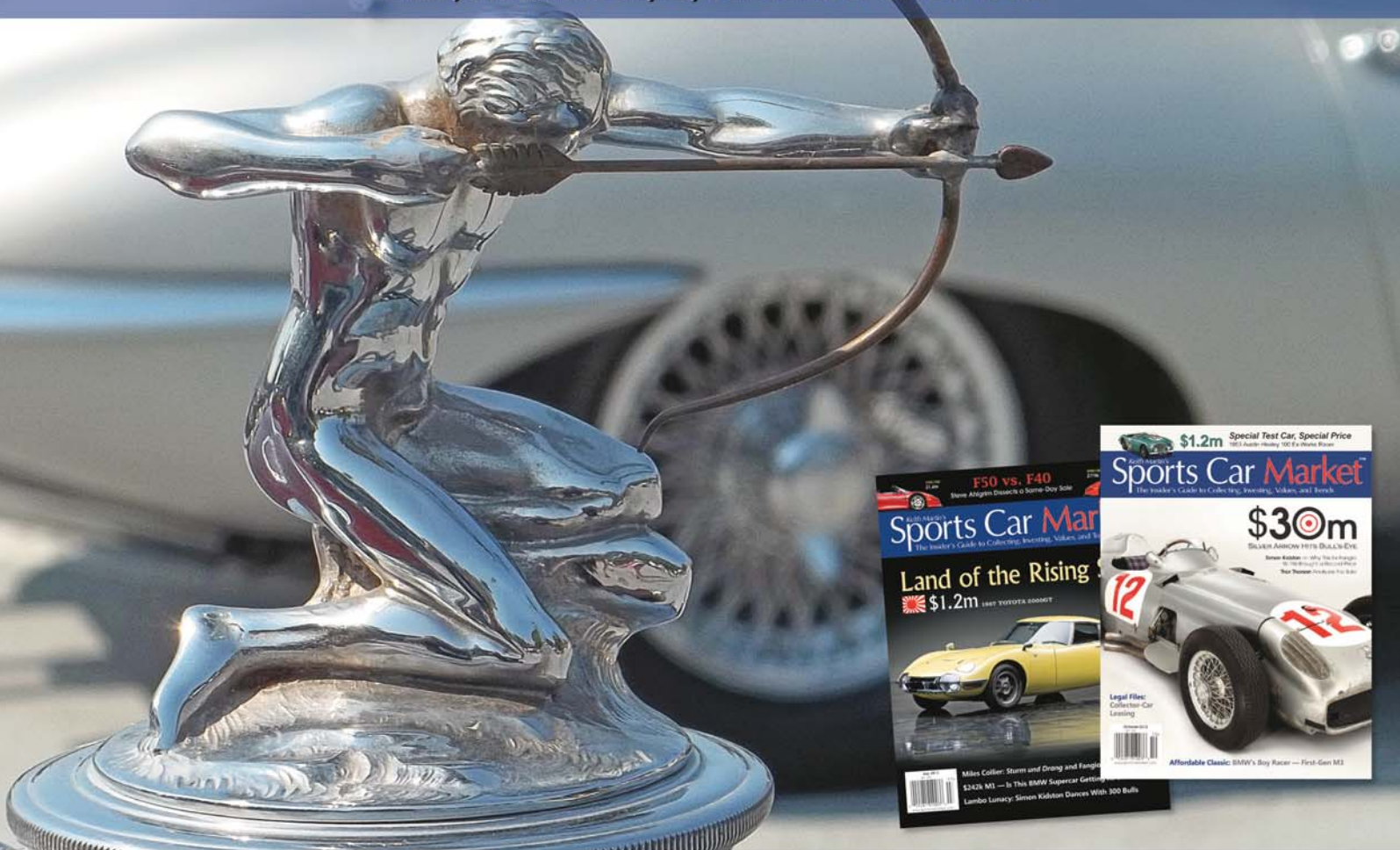


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SPECIAL EVENT : HOT WHEELS LEGENDS TOUR : GILBERT



## HOTTEST HOT WHEELS

### HOT WHEELS LEGENDS TOUR ARIZONA WINNER HEADS TO FINALS

Now with stops in 17 countries and billed as the world's largest traveling car show, with vehicle submissions made online, the 2023 Hot Wheels Legends Tour presented by Mobil 1 kicked off in-person events in May in Miami, Florida, arriving in metro Phoenix on September 23 at Walmart on S Market Street in Gilbert, Arizona.

Michael Brown of Deputy, Indiana claimed the top spot here with matching BMW Isetta builds. “Big Dill” is a 1957 BMW Isetta-based dragster powered by a 1200cc Harley-Davidson Shovelhead motor. Isetta body aside, the vehicle is completely

original, as Brown designed and built every aspect of the vehicle himself, from custom frame and metal fabrication to its custom gold interior and the green paint that gives it its name. Brown says Big Dill took an estimated 438 hours to create.

As if the Harley-powered micro dragster wasn't enough, Brown also transformed a matching Isetta into a hauler named “The Pickle Jar,” to carry tiny Big Dill. This Isetta flatbed is powered by a Chevrolet 230 straight-six engine mounted on a custom-made subframe designed to accommodate its tilting load bed. To achieve its unique styling, Brown

retrofitted Ford Model A front fenders to the rear of the extended frame and Volkswagen Beetle rear fenders to the front.

Judges including Hot Wheels designers and others evaluate entrants and finalists on creativity, authenticity and garage spirit. Built, not bought, is the spirit of the Tour, with custom creations of all makes and models, shapes and sizes encouraged to enter.

After one more in-person event in early October at Hot Wheels headquarters in El Segundo, California, the Tour culminates with a virtual Global Semi-Final and Grand Finale, November 2 and 11 respectively. The ultimate goal is to have an owner's passion project adapted to 1:64-scale as the next Hot Wheels Garage of Legends inductee. ■





# Hey, good-lookin'!

BY JOE SAGE

There has been a boom in this niche lately—lively compact crossovers tending toward the wagon or hatchback scale of things, with a light degree of ruggedness built into their formula, as well. But this is the one that wrote the book: the Subaru Crosstrek, combining the smaller size of the Impreza (along with WRX and Forester) with the utility of the Legacy (and Outback), while bearing a personality all its own. And though it looks familiar, it's all new in generation three for 2024.

Introduced to the US last winter at the Chicago Auto Show, the new Crosstrek carries forward its same two engines, but drops the availability of a manual transmission. It of course remains all-wheel-drive, as do all Subaru models except the Toyota-shared BRZ rear-drive sports car (and with a note that a front-drive Crosstrek was introduced

in Japan for this generation).

Reengineering includes a 10 percent stiffer chassis, which enhances performance dynamics and general ride quality, with the model receiving additional upgrades to its display and controls, driver assist features and communications connectivity.

While bearing an active outdoorsy personality of its own, last spring Subaru Crosstrek received a Wilderness build—following suit to Outback and now also Forester—featuring upgraded suspension and larger wheels and tires (bringing ground clearance to a healthy 9.3 inches), along with various style points.

The entire five-trim range retains its incredible value, running from \$24,995 to \$31,995. Our Limited, at \$30,895, now sits in next-to-top position with the arrival of Wilderness. The first two have

a 152-horsepower 2.0-liter 4-cylinder boxer engine (another Subaru hallmark); the upper three a 182-hp 2.5-liter. Fuel mileage drops by only one point—from 27/34 mpg city/highway in the 2.0L to 26/33 in the 2.5L (In the beefy-tired Wilderness, highway mileage drops another four points). Beyond what seems like a small horsepower difference, the bigger 2.5-liter engine also has a tow capacity of 3500 pounds, versus 1500 for the 2.0-liter. All but the most specifically budget-driven buyers are likely to favor the 2.5-liter trims.

But the biggest news for gen three is surely its restyling. Such efforts can be radical or they can be subtle, but to be successful, they will be glorious in their own right, while losing no brand or model identity, and while keeping the prior version looking solid, just as good for what it was as the new one is for what it is now. The main defining change for 2024 is a new grille, with accompanying headlight treatment and evolution of the ele-

ments that connect it all. The grille has grown larger throughout the Subaru lineup, very welcome when you see old and new side by side. But on the Crosstrek, it receives a quite clever treatment, both visually and technically—a burly, three-dimensional character that impacts its frame slightly. Net result: the Crosstrek looks handsome and strong. It will make you smile upon approach and look over your shoulder as you walk away, more than any before. On top of all its other positive attributes, and with complete continuity from its prior generation, its looks have been transformed.

Subaru's boxer engines (with opposing cylinders, like a Porsche 911) are always smooth and strong. The one here moves right along, with power sufficient to its mission (including its high fuel mileage)peppy even, but with not a lot in reserve. Accelerating up a freeway ramp, you'll keep up just fine, but are unlikely to grab the other lane to try to pass. Auto start-stop could be very noticeable, so we turned it off (the switch is conveniently located). The transmission is a CVT, which some people actively dislike while others never even

notice. We tend to think most are the latter, but this one did make itself known to us, via its sound and its feel, at pretty much all times. Using the manumatic conquers this well, though better on upshifts than down. But this is paddles-only, with no controller on the shift lever, making it difficult to carry through with this method during turns.

(For theoretical alternative logic, see sidebar.)

All in all, we fell for the new Crosstrek in a pretty big way. Subaru has one of the highest loyalty rates in the business, so you can bet that a whole lot of people are already going to know they want it, and we're here to tell them they are going to love it. For others who are looking at alternatives, too—a set that is quite large, depending what you count, as it can get quite apple'n'orangey—anything with a real transmission is likely to have an edge. But only if this is something you notice, and again, we're convinced many people do not care.

Most of all, with only subtle styling evolution, this still instantly recognizable vehicle, with its personality and purpose fully intact, has been transformed into being masterfully good-lookin'. ■

## SPECIFICATIONS

ASSEMBLY	Lafayette, Indiana
CONTENT	5% US/Canada / 85% Japan
ENGINE/TRANSMISSION	Japan / Japan
ENGINE	2.5L boxer 4-cyl, 16v DOHC, dir inject, DAVCS, alum/alum
HP/TORQUE	182 hp / 178 lb-ft
COMPRESSION RATIO	12.0:1
TRANSMISSION	Lineartronic CVT w incline start assist, dual-function X-Mode w Snow/Dirt & Deep Snow modes
DRIVETRAIN	ACT-4 active torque split AWD
SUSPENSION	4-wheel indep, raised: F: MacPherson-type struts, lower L arms, coils, dampers, stblzr bar, hydraulic engine mounts; R: dbl wishbone, coils, dampers, stblzr bar
STEERING	dual-pinion elec pwr asst rack & pinion
BRAKES	F: 12.4 vented w dual-piston; R: 11.2 vented w single-piston
WHEELS	18x7 alum alloy
TIRES	225/55 R18 98V a/s
LENGTH / WHEELBASE	176.4 / 105.1 in
GROUND CLEARANCE	8.7 in
TURNING CIRCLE	35.44 ft
HEADROOM (F/R)	(w moonrf) 38.7 / 38.0 in
LEGROOM (F/R)	42.9 / 36.5 in
CARGO CAPACITY	19.9 / 54.7 cu.ft
WEIGHT	3349 lb
TOW CAPACITY	3500 lb
FUEL / CAPACITY	regular unl / 16.6
MPG	26/33/29 (city/hwy/comb)
BASE PRICE	\$30,895
PAINT: Crystal White Pearl	na
OPTION PKG 33: power moonroof, Harman Kardon audio speaker system, Subaru Starlink 11.6" multimedia nav	2445
DESTINATION CHARGE	1295
TOTAL	\$34,635

## 2024 SUBARU CROSSTREK LINEUP

Base	2.0L	\$24,995
Premium	"	26,145
Sport	2.5L	28,995
Limited	"	30,895
Wilderness	"	31,995

If you crave more power, you may find yourself looking at the larger Outback as an alternative. Its lineup runs from about \$4,000 higher base to about \$8,000 higher at the top end. Most bear the same engine as our top-end Crosstrek, but the Outback range moves to a 260-hp turbo at its top end. (Outbacks also all have a CVT). The Outback also has more cargo volume, though lower fuel mileage by several points. But comparative logic quickly takes us full circle. If only the Outback existed, many buyers might be dreaming, conversely, of something a little smaller, with better fuel mileage, for thousands less. And they would invent exactly the answer we already have right here—the Crosstrek.



# PLUG AND PLAY

By Joe Sage

Vehicle photos: Doug Berger / DBPics.com for NWAPA

We've driven in the Northwest Automotive Press Association (NWAPA)'s Run to the Sun event since 2014, ten years' worth now. Born before our time as a performance convertible drive from the rainy lowlands of Oregon or Washington to the sunny Cascade peaks, the event featured an open road course of hundreds of miles, divvied into about 20- or 30-minute segments (eight to 25 miles or so, depending on terrain). As convertibles waned, the event evolved to a broader performance set, ranging from Focus RS to Rolls-Royce, Viper to Miata. A hallmark of this event, versus all other comparos we've done, is that the driver-and-vehicle sequence is predetermined, ensuring every media analyst drives every vehicle, with little time lost between each, no inefficient decisions about what to drive next, leading to neither overload nor neglect of any entry.

We've attended spring's "Mudfest," the off-pavement-leaning Outdoor Activity Vehicle of the Year Awards, for just as long.

The group's third event is Drive Revolution, for "alternative" powertrains (hybrids, plug-ins, EVs and the occasional fuel cell). Originally tied to a multi-day alternative fuels conference (with consumer inclusion) in Portland, it never worked for our schedule from our distance. In 2018, however, it split off, moved across the Columbia River into Washington, and became a focused media comparo. (We've covered results of the various versions a few times without attending). Due to EVs' dependency on range and recharging, Drive Revolution, unlike Run to the Sun, has had a hub-and-spoke format, with each drive starting at and returning to the same staging point.

Undercurrents on multiple fronts over the past few years have sparked evolution.

(cont'd)

## Drive Revolution: Non-Luxury Electric or Plug-in Hybrid Vehicle



## Drive Revolution: Luxury EV or PHEV



## DRIVE REVOLUTION

### Non-Luxury Electric or Plug-in Hybrid Vehicle

Also entered in Run to the Sun	hp	lbft	*mpg	price as tested
2024 Dodge Hornet R/T PHEV	288	383	21/29/24	\$52,305
2023 Hyundai Ioniq 5 Limited AWD	320	446	113/90 /101e	58,405
2023 Hyundai Ioniq 6 Limited Long Range	320	338	111/94 /103e	57,425
2024 Jeep Wrangler 4xe High Altitude	375	470	20/20 /49e	71,520
2023 Kia EV6 GT: <b>CATEGORY WINNER</b>	576	545	85/74 /79e	62,865
2023 Kia Sorento PHEV	261	258	35/33 /79e	52,140
2023 Nissan Ariya Evolve+ AWD e-4ORCE	389	442	97/86 /92e	56,135
2024 Toyota Prius Prime	220	139	48/47 /114e	43,292

★2023 Kia EV6 GT: **CATEGORY WINNER**

\*mpg = city/hwy/combined or /MPGe

### Luxury Electric or Plug-in Hybrid Vehicle

Also entered in Run to the Sun	hp	lbft	*mpg	price as tested
2023 Genesis Electrified GV70: <b>CATEGORY WINNER</b>	483	516	98/83 /91e	\$74,340
2024 Lexus RZ 450e	308	320	102/87 /131e	67,270
2022 Lucid Air Grand Touring	819	885	130/132 /131e	137,500
2024 Lucid Air Pure	480	686	121/120 /131e	98,300
2024 Mercedes-AMG EQE SUV	617	701	77/71 /74e	127,400
2023 Volvo V60 T8 E-AWD Polestar	455	523	31/31 /74e	72,190

★2023 Genesis Electrified GV70: **CATEGORY WINNER**

\*mpg = city/hwy /MPGe

### DRIVE REVOLUTION ELECTRIC OR PLUG-IN HYBRID VEHICLE OF THE YEAR

★2024 Toyota Prius Prime: **OVERALL WINNER**

#### DRIVE REVOLUTION LUXURY CATEGORY WINNER : 2023 Genesis Electrified GV70



#### DRIVE REVOLUTION OVERALL WINNER : 2024 Toyota Prius Prime





RUN TO THE SUN

Non-Luxury Performance Vehicle

Also entered in Drive Revolution	hp	lbft	*mpg	price as tested
2024 Honda Civic Type R	315	310	22/28/24	\$44,385
2023 Kia EV6 GT CATEGORY WINNER	576	545	85/74 /79e	62,865
2024 Subaru Impreza RS	182	178	26/33/29	31,045
2023 Toyota GR Corolla Circuit Edition	300	273	21/28/24	44,884

★2023 Kia EV6 GT: CATEGORY WINNER \*mpg = city/hwy/combined or /MPGe

Luxury Performance Vehicle

Also entered in Drive Revolution	hp	lbft	*mpg	price as tested
2024 Acura Integra Type S	320	310	21/28/24	\$52,595
2023 Genesis Electrified GV70	483	516	98/83 /91e	74,340
2022 Lucid Air Grand Touring CATEGORY WINNER	819	885	130/132 /131e	137,500
2024 Lucid Air Pure	480	686	121/120 /131e	98,300
2022 Mercedes-AMG SL	577	590	14/21/24	206,285
2024 Mercedes-AMG EQE SUV	617	701	77/71 /74e	127,400
2023 Volvo V60 T8 E-AWD Polestar	455	523	31/31 /74e	72,190

★2022 Lucid Air Grand Touring: CATEGORY WINNER \*mpg = city/hwy/combined or /MPGe

RUN TO THE SUN PERFORMANCE VEHICLE OF THE YEAR

★2022 Lucid Air Grand Touring: OVERALL WINNER

Pandemic lockdowns interrupted event cycles, as well as manufacturing and product release cycles. And through it all, electrified powertrains have become arguably not as “alternative” as they used to be.

TWO RETURN TOGETHER

As Run to the Sun (RTTS) and Drive Revolution (DR) bounced back to life, challenge became opportunity, as the decision was made to combine them into one “double feature” this year. Might this mean having one on one day, the other on another? Or combining all vehicles into one event and/or format, but which? The solution included elements of each. As such, it was a bit of a touchstone, to see what worked best this year and evolve or adapt from there.

Run to the Sun’s typical 24 or so vehicles and matching number of drivers fit the natural balance among the clock and calendar, available membership and vehicles, and the map. Drive Revolution, without such a matrix, had settled at about 18.

The plan this time became for the two to be run in about a day and a half total—far less time, combined, than just Run to the Sun used to take on its own. The key was that the vehicles would be interwoven—a predetermined driver-vehicle matrix, as there had always been at Run to the Sun, but with vehicles for both events now falling into one overall sequence.

Drive Revolution vehicles would include full EVs and plug-in hybrids, while other hybrids would now be in the Run to the Sun

group. RTTS vehicles could be gasoline-powered (including non-plug-in hybrids), as always, but could also now, for the first time, be full EVs—up to the manufacturer.

THE VEHICLES

It turned out to be a good plan for getting it all done, but it also turned out that quite a few vehicles were entered in both events. In fact, this turned out to be roughly half of all vehicles. Of 25 total entries—14 in Drive Revolution and just 11 in Run to the Sun—six were entered in both. The blue dots in our charts show 12 out of 25 total slots were dual-event entries, the other 13 splitting out as just eight that were in Drive Revolution only and five that were in Run to the Sun only. Sorted and sifted, this totaled 19 actual different vehicles,

Run to the Sun: Non-Luxury Performance



Run to the Sun: Luxury Performance Vehicle



about the same as either past event on its own.

Of those 19, seven were from Japan (from six brands under four corporate umbrellas); five were South Korean (three brands, one corporation); four were from the US (three brands, two corporations); and three were European badges (two brands, two corporations, one of which is majority-Chinese-owned).

A look at our charts suggests the split between non-luxury and luxury aimed for \$70,000, with a couple of exceptions for vehicles that wanted to be in the other, surely in line with target market and brand image (e.g. one Jeep over \$70k entered as non-luxury and an Acura below \$70k entered as luxury). Of note, while non-luxury dual entries between DR and RTTS were minimal, luxury vehicles entered in the two groups were almost completely the same.

The whole thing was affected by RTTS becoming a hub-and-spoke affair this year—as DR had always been—rather than a distance route, eliminating range anxiety and opening the door to EVs in RTTS.

THE DRIVE & OUTCOME

Our base for the event was new—the Ilani Casino and Resort on the Cowlitz Reservation in Washington State, about 25 miles north of Portland, Oregon on I-5. Route options included rural two-lanes, small towns and a stretch of Interstate if desired.

The both-events approach, with its cross-pollination, proved interesting.

For example, Kia won the non-luxury categories for both Drive Revolution and Run to the Sun—with the same full-electric EV6 GT, the only vehicle winning in both events.

Lucid, despite entering the same two different price levels of full EV in both events, had no wins in EV-centric DR, yet won its luxury category and the overall event trophy for all-performance-powertrains RTTS.

Genesis Electrified GV70, which has done well wherever it goes, was entered in both events, but had its big category win in Drive Revolution, as you’d expect for a full EV.

(cont’d)



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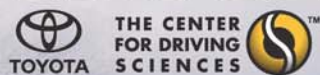
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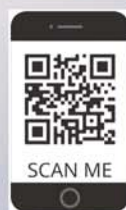
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The all-new Toyota Prius, on the other hand (also well received wherever it goes), did not win its category in Drive Revolution, yet took the top trophy in DR overall.

Thus, despite traditions of pedal to the metal in liquid-fueled RTTS, and despite advantages of plug-in hybrids in DR (especially while gasoline pumps remain more plentiful and quicker than charging stations), it turned out both category winners and the overall winner were full EVs, long the established turf of Drive Revolution.

## THE STATE OF THE SPLIT

Deeper dives into vehicle statistics always inform guesses as to whether voting in various categories may have leaned toward lower-price value and higher fuel mileage, hang-the-expense power and thrills, or combinations thereof. As individual shopping missions and buying decisions often follow the same variables, you'll find our comparative charts useful for making your own best conclusions.

It seems to add up to the mysteries of EVs and PHEVs fading more into the fabric of a general process that may increasingly involve any and all possible powertrains.

Reflecting its own trends—but also as the entire industry bounces back from the past few years' lockdowns, while working through supply chain and now labor issues—full EV sales nationwide were up 63 percent year-over-year by fall 2023, rising from 4.7 to about 7 percent of the total.

It's worth noting that Washington and Oregon—the event's host region and home to most of the voting drivers—have very high plug-in adoption rates, each over 15 percent for 2023 (the vast majority being full EV, plus a small percentage of PHEVs)—behind only California's almost 25 percent—making this fertile ground to check the state of things. This is at least four times Arizona's under-five-percent EV-PHEV share. Ours is, however, the ninth largest EV adoption rate per capita. It all suggests that results from this event skew away from Arizona's heavier interest in gasoline vehicles, though for those especially interested in EVs and PHEVs, it's of enhanced interest.

## EVENT(S) MOVING FORWARD

This year's combined event format was as much adaptive as evolutionary, as events everywhere, from these comparos, to the big auto and specialty shows, as well as

factory flow itself, have worked through a complex return fully to normal.

The dominance of EV entries and wins is in itself significant, but is this so much so that the two events—Drive Revolution and Run to the Sun—should simply merge into one, ongoing? Is this year's percentage of both-event entries only likely to increase? Or was this mix a response to this year's combination itself? Would a larger number of traditional powertrains likely return to a freestanding Run to the Sun?

All in all, the “double feature” approach ran smoothly and meaningfully enough to continue into at least next year, depending upon those many outside factors. The shorter-route hub-and-spoke format adopted from Drive Revolution was key for the EVs. As combined this year, the key differentiator of Run to the Sun was that it was not limited to EVs. But it almost seems that it may as well have been.

But the open-road format has been one of Run to the Sun's most significant—and enjoyable—defining elements. When you take another look at its non-EV entries, you certainly would not want to chase those off and would surely welcome more.

If the two *were* permanently combined, which name would be best? Drive Revolution might seem more appropriate if it remained a mostly-EV event, based on heritage. Then again, if EVs are to become so mainstream that they dominate the marketplace, is it really still a revolution? Or will they become status quo, in which case Run to the Sun remains a great name—with its own heritage—especially for an open road version. Range-risk remains an obstacle to that format for EVs, though will become less so all the time (through both technical progress and everyone's increasing familiarity and comfort).

Much will be analyzed and discussed by the group and the manufacturers, while all are now also keeping an eye on the many issues that could change the timeline of an ongoing overall EV shift, as well.

The best news is that this year's results are useful to all concerned. All brands and models are never present at such events (it surprises most people that there are some 450 different cars and trucks you can buy today), but a great cross-section of hardware from many motivated brands was on hand for this. We all gained a range of insights during a great series of drives, which will be solid reference, ongoing. ■

*Our special thanks go out to the hard-working fleet personnel who keep everything in top shape throughout; to the manufacturers, who send their most capable vehicles and the smiling faces to support them; to our host facility; and to our friends and colleagues in NWAPA for one of the best-conceived and best-executed events in the business.*



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OUR NORTHWEST WHEELS : 2023 TOYOTA COROLLA HYBRID SE AWD

Toyota Corolla—new in 1966, the best-selling car worldwide by 1974, surpassing 50 million sold by 2021—is tailor-made for the times, well-positioned by size, price, features and capability, as Toyota increasingly adapts this immensely popular vehicle to many clever new builds. These include sedans and hatchbacks, its first hybrids in just 2020, a 300-hp GR Corolla AWD performance hatch in 2022, and now, in 2023, all-wheel-drive applied to the mainstream hybrid lineup.

In Oregon and Washington for NVAPA Run to the Sun and Drive Revolution, we got to and fro in the latest combination, both hybrid and all-wheel drive, the new Toyota Corolla Hybrid SE AWD. With some miles to cover and heavy rain in the forecast,

2024 TOYOTA COROLLA LINEUP

2.0L 169hp, CVT.....	FWD	
LE.....	21,900	
SE.....	24,340	
Nightshade.....	25,340	
XSE.....	27,000	
Hybrid 1.8L 138+93+40.2hp, ECVT.....	FWD	AWD
Hybrid LE.....	23,300	24,700
Hybrid SE.....	25,740	27,140
Hybrid Nightshade.....	26,740	28,140
Hybrid XLE.....	27,050	---
G16E-GTS 1.6L turbo-3, 300hp, 6-spd MT.....		AWD
GR Corolla Core.....	36,100	
GR Corolla Premium.....	39,920	
GR Corolla Circuit Edition.....	44,740	

this would be a winning combination. Instead of transfer gears and driveshaft to the rear wheels, Electronic On-Demand AWD uses a separate rear-mounted electric motor as needed, seamlessly distributing force to the rear wheels preemptively to counter any front wheel slip in acceleration or understeer in cornering. Torque distribution graphics are displayed on the screens.

Everybody, on some level, wants a car that does everything—and this is certainly a contender. It's sporty (a net system total is not given, but the sum of gasoline plus front and rear electric horsepower is impressive). Cabin size is generous. It's lightweight and immensely fuel-efficient, up to 53 mpg for the front-drive LE or XLE, upper 40s in town in others. All-wheel-drive makes it weather-friendly. It's affordable, as expected, but also just 60-70 percent the cost of the AWD GR Corolla—yet not lacking in pep. And the technical marvels of its eCVT and eAWD never distract, always provide.

Just days before our drive, Toyota announced an Electrified Diversified Beyond Zero campaign, celebrating the alternative powertrains they have led the world in for decades, of which their engineers and product planners are proven masters.

Our time with it in the Northwest was limited, yet conditions were diverse. Our conclusion was that this new execution is basically flawless. ■

SPECIFICATIONS

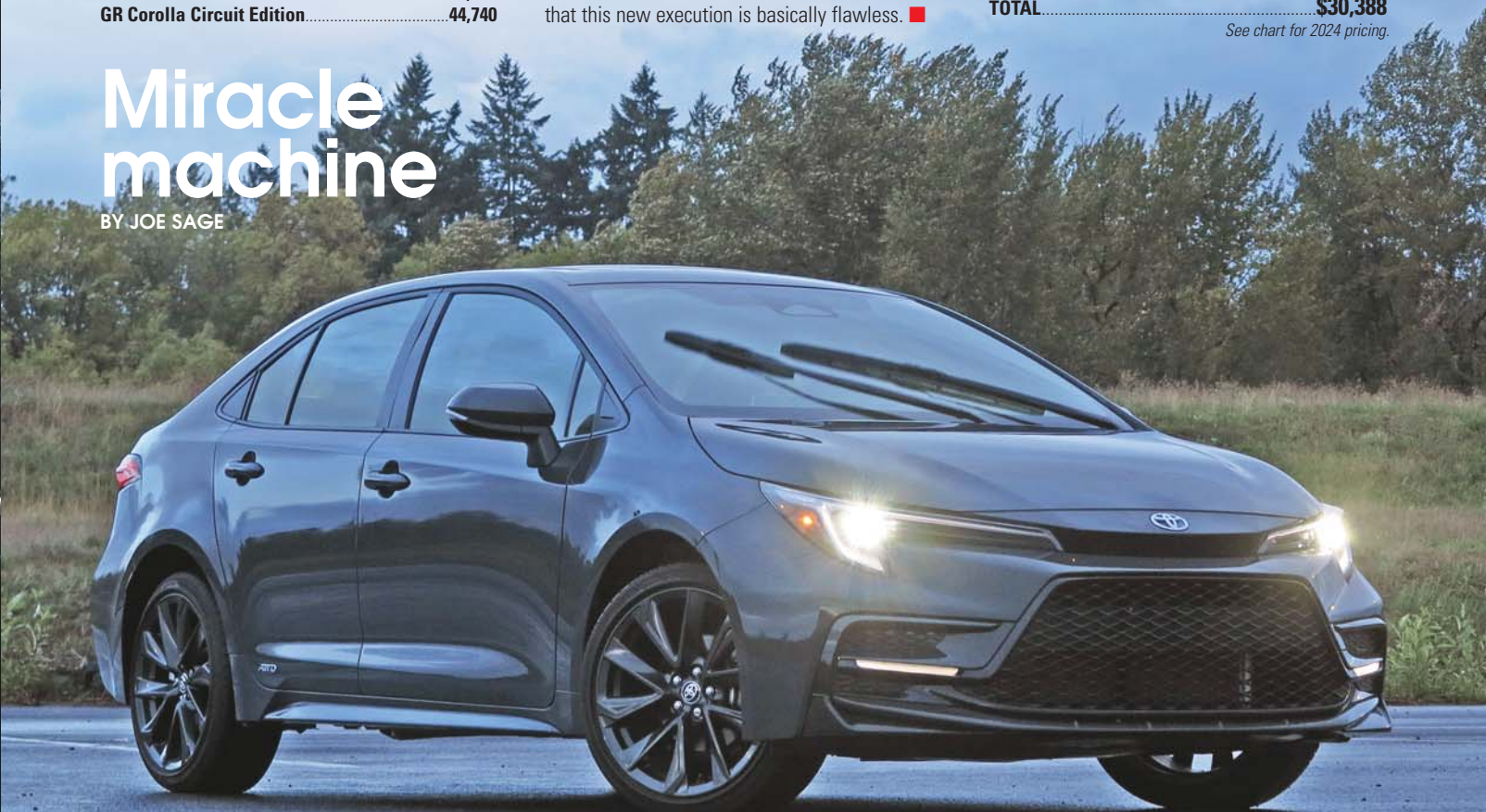
ASSEMBLY.....	Toyota, Aichi, Japan
ENGINE.....	1.8L 4-cyl Dual VVT-i hybrid
HP/TORQUE.....	138 hp / 105 lb-ft
COMPRESSION RATIO.....	13.0:1
ELECTRIC MOTOR.....	permanent synchronous magnet
HP/TORQUE.....	front 93 hp / rear 40.2 hp
NET SYSTEM HP.....	combined not separately stated
HYBRID BATTERY PACK.....	Li-ion 600 V max
TRANSMISSION.....	electronic contin variable (ECVT)
DRIVETRAIN.....	Electronic On-Demand AWD
SUSPENSION.....	F: indep MacPherson strut, stblzr bar; R: multilink, stblzr bar
STEERING.....	elec pwr rack & pinion
BRAKES.....	F: 10.8 in vented; R: 10.2 in solid
WHEELS.....	18-in graphite-colored alloy
TIRES.....	P225/40R18
LENGTH / WHEELBASE.....	182.3 / 106.3 in
GROUND CLEARANCE.....	5.3 in
TURNING CIRCLE.....	35.6 ft
HEADROOM (F/R).....	38.3 / 37.1 in
LEGROOM (F/R).....	42.0 / 34.8 in
CARGO CAPACITY.....	13.1 cu.ft
WEIGHT.....	2850 lb
FUEL / CAPACITY.....	.87 oct reg unl / 11.3 gal
MPG.....	47/41/44 (city/hwy/comb)
BASE PRICE (2023).....	\$26,600
SE PREMIUM PKG: power tilt/slide moonroof w sliding sunshade, color-keyed heated pwr mirrors w turn signal indicators, blind spot monitor, rear cross traffic alert.....	1220
AUDIO: JBL premium 9-sprk incl subwoofer & amp.....	600
PREF ACCESSORY PKG w all-weather floor liner.....	631
ALLOY WHEEL LOCKS.....	67
FRAMELESS HOMELINK MIRROR.....	175
DESTINATION CHARGE.....	1095

TOTAL.....\$30,388

See chart for 2024 pricing.

Miracle machine

BY JOE SAGE





# Eating well in the great outdoors

BY SANDRA MUÑOZ DOREE  
PHOTOS BY WILLIAM DOREE  
AND SANDRA MUÑOZ DOREE

The art of eating well in the great outdoors is all about being creative as well as organized. For many, a fireside camping meal comprises pouring hot water into a bag and waiting the requisite half-hour or so for your meal to rehydrate. Don't get us wrong, MREs are great in a pinch while overlanding. But there's a better way.

With the proper prep work, campers can enjoy freshly prepared gourmet campsite meals in the same time it takes your pasta to re-fluff itself.

It doesn't matter whether you are overlanding in a tricked-out off-roader with rooftop tent or bunking on an air mattress in the back of your SUV. Here are some quick and easy tips and recipes for eating well in the great outdoors. All of them are campfire tested and camper approved.

## Setting camp

Like a daily alarm, the setting sun signals that it's time to set up camp. After a long day trailing upon dusty dirt roads, you reach the designated wild camping spot using Gaia GPS mapping.

As you marvel at the beauty of the scenery, you realize it's cocktail hour somewhere. Grab one for you and your sidekicks. It's also the perfect time to unpack and arrange your cooking tools so everything is ready for outdoor cooking.

## Prep work

Planning and prep work are critical factors in making your off-road meals successful. Prep the ingredients at home so chopping, slicing, and marinating are the least of your campsite tasks. These items will last a couple of days.

Also, bring only the pots and pans you will use. In other words, your entire cast iron collection will most likely not be needed.

## Hatch chile smoked pork chops

An example of a delicious meal is Hatch Chile Smoked Pork Chops with pan-fried new potatoes. To get the smokey flavor, we recommend the Traeger Ranger pellet grill.

### INGREDIENTS:

- Pork chops
- Hatch Chile Seasoning
- New potatoes cut into coin sizes
- Salt
- Pepper
- Olive oil

Overlanding at Sheeps Bridge,  
Verde River, Yavapai County

## Fireside breakfast

As the sun peaks through the dense trees into your tent, it is time to rise and shine. A new day of adventure awaits, and so does a hearty, tasty breakfast—we suggest fresh warm eggs in purgatory with a twist. The excitement makes you stir in your sleeping bag, unzip your tent and brew coffee.

### INGREDIENTS:

- New potatoes
- Olive oil
- Two large cloves thinly sliced and one whole
- One can of diced tomatoes
- Salt, black pepper seasoned to taste
- One large spring fresh basil fine chopped or a pinch of rosemary
- One tablespoon of butter
- Six eggs
- Hatch chile seasoning
- Sliced crusted bread for serving
- Parmesan

In a large skillet, heat the oil over medium heat, and add the potatoes. Season them to taste. Once they are golden brown, add diced tomatoes, salt, pepper, basil and parmesan to taste, and turn the heat to medium-low.

Simmer the tomatoes until the they have thickened into a sauce, in approximately 20 to 25 minutes. Follow by adding the parmesan, butter, salt and hatch chile to taste

Using the back of a spoon, make six divots into the tomato sauce, then crack an egg in each divot. Cover the pan and cook the eggs to taste for 2-3 minutes if you like the yolk runny. Caution: if you do not cover the eggs, they will not cook.

In the meantime, your sidekick can start toasting the bread. Rub the warm toasted bread with garlic, drizzle with olive oil and sprinkle with salt.

Plate and enjoy a warm, hearty meal with fresh brewed coffee. As you can see, there's a lot to love about cooking in the great outdoors. ■

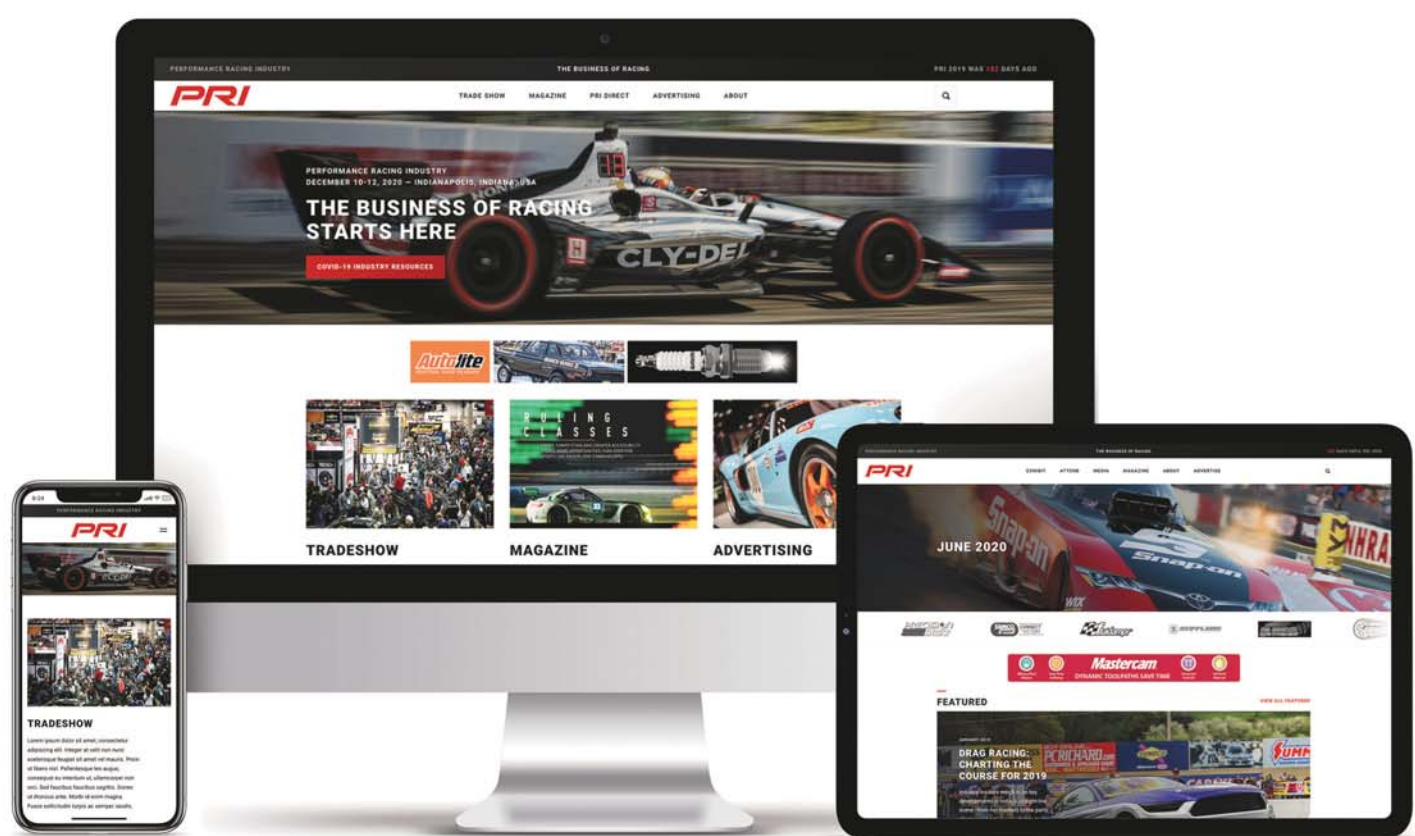






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## SPECIAL EVENT : CONCOURS IN THE HILLS 2024 / FOUNTAIN HILLS

### 10th Annual Fountain Hills Concours in the Hills: Saturday, February 3, 2024

Don't get too comfortable at the end of Arizona Auction Week in late January, because there's one more big thing to get revved up for—come out to the 10th Annual running of Concours in the Hills, on Saturday, February 3 from 10 am to 3 pm at the gorgeous Fountain Park in Fountain Hills. “The Greatest Car Show on Grass” features truly breathtaking vehicles, all benefiting world-class care at Phoenix Children’s.

Concours in the Hills began in 2014 with 220 cars and 3,000 spectators. In 2023, there were approximately 50,000 spectators, 1,200 vehicles and more than 100 vendor and sponsor booths.

Categories featured at Concours in the Hills include contemporary and classic race cars, exotic foreign and domestic high-performance cars, muscle cars, sports cars, hot rods, military vehicles and helicopters, and motorcycles.

This free, family-friendly event benefits Phoenix Children’s Hope Fund, a critical source of funding for the hospital’s areas of greatest need. These funds support pioneering research, state-of-the-art technology, recruitment of leading physicians and implementation of programs designed to create a more comfortable hospital environment for children.

While the money raised has always gone to the Phoenix Children’s, event founder Peter Volny handed the reigns of the event over to Phoenix Children’s in 2022. The auxiliary group, PCH50, now leads Concours in the Hills, with member Dr Peter Birkland as chair. The group, also known as “The Fifty,” has a mission to harness the energy, enthusiasm and experience of 50 driven community leaders as the next generation of supporters of Phoenix Children’s.

The show is heavily supported by leading car clubs and dealers, including Ferrari, Lamborghini, Porsche, McLaren, Corvette, Viper, Ford GT, Audi, BMW, Mercedes-Benz, Mustang, Jaguar, Cadillac, Lo-

tus and others. The value of vehicles is many hundreds of millions, with several individual cars worth over \$10 million.

Event admission and parking are FREE to spectators, but donations are welcome. The exhibitor entry fee is a minimum \$55 donation for vehicles, \$35 for motorcycles and has sold out for the past 2 years.

**WHEN / WHERE / FURTHER INFO:**  
Saturday February 3, 2024, 10am – 3pm  
Fountain Park, 12925 N Saguaro Blvd  
Fountain Hills AZ 85268  
[www.concoursinthehills.org](http://www.concoursinthehills.org) ■

## Concours in the Hills 2024

Photo by Rob Mains  
[www.robmainphotography.com](http://www.robmainphotography.com)





# RIDE 'EM

By Joe Sage

From among various vehicle comparo events hosted by different regional media groups, the Texas Auto Writers' Association (TAWA) Texas Truck Rodeo has long been recognized as a very big deal, with a top win here often going straight to billboards and prestigious Super Bowl ads. After all, "Texas means trucks."

The event has evolved a bit over the years, moving (during the decade or so we've been participating) from one big Texas Hill Country ranch to another, then to a small engineered course on a very small property for a few years, now back to big acreage in North Texas, at Eagles Canyon Raceway outside Decatur, which has about doubled its size beyond its 2.7-mile paved road course and club racing facilities (where TAWA Texas Auto Round-up often takes place in the spring). The new land has a variety of open dirt roads, with space for specially prepared features to be added for our event, as well.

Manufacturer participation and specific entries always offer insights, reflecting

market directions themselves. In today's industry climate, having something new is big news, as it always has been, but keeping the tried and true alive can be equally welcome. This event had plenty of both. Model years are still lagging a bit after the pandemic years, with about half the entries being 2024 and half 2023.

## SUVS

### Compact SUV

2023 Honda CR-V Hybrid Sport Touring AWD	.....\$39,845
2024 Mazda CX-50 2.5 Turbo Meridian Edition	.....43,860
*2024 Dodge Hornet R/T Plus	.....53,245
2024 Hyundai Kona Limited AWD	.....35,145

### Midsize SUV

2023 Jeep Grand Cherokee Altitude 4X4	.....\$54,070
2023 Kia Sorento X-Line	.....43,590
2024 Nissan Pathfinder Rock Creek 4WD	.....45,305
2024 Volkswagen Atlas SE	.....N/A

### Full-Size SUV

2024 Toyota Grand Highlander Platinum Hyb MAX	.....N/A
2023 Dodge Durango SRT Hellcat	.....\$106,420

### Off-Road SUV

2024 Jeep Wrangler 4xe Rubicon X	.....\$74,770
2024 Jeep Wrangler Rubicon 392	.....95,945
2024 Toyota Sequoia TRD PRO Hybrid	.....77,565

### Luxury SUV

2023 Grand Wagoneer Series III	.....\$114,180
*2023 Genesis Electrified GV70 AWD Prestige	.....75,275
2024 Acura MDX Type S with Advance	.....75,295

\*(Noted vehicles were also entered in Green category.)

## PICKUPS

### Midsize Pickup

2023 Nissan Frontier PRO-4X	.....\$46,380
-----------------------------	---------------

### Full-Size Pickup

**2023 Ram 1500 Limited Elite	.....N/A
2024 Toyota Tundra 1794 Limited Edition	.....N/A

### Heavy Duty Pickup

2023 Ram 2500 Rebel	.....\$93,910
---------------------	---------------

### Off-Road Pickup

2023 Ram 1500 TRX	.....\$105,735
2024 Toyota Tundra HV 4X4 TRD PRO	.....N/A
2023 Ram 2500 Power Wagon	.....87,465

### Luxury Pickup

**2023 Ram 1500 Limited Elite	.....N/A
-------------------------------	----------

\*(Noted vehicle was entered as both Full-Size and Luxury.)

## GREEN VEHICLE

2023 Jeep Grand Cherokee 4xe Trailhawk	.....\$73,125
*2023 Genesis Electrified GV70 AWD Prestige	.....75,275
*2024 Dodge Hornet R/T Plus	.....\$53,245

\*(Noted vehicles were also entered in SUV categories.)

## SELF-NOMINATED AWARDS

Manufacturers also enter "self-nominated" technologies and features for awards, with voting this year among a few presented infotainment systems and powertrains.

By brand and model—after consolidating category repeats (Hornet, GV70, Ram 1500) and multiple trims (Wrangler, Grand Cherokee, Ram 1500)—there were a core total of (15) SUVs and (4) pickups in play.

Voting is first performed within (11) cat-



egories, each generating an award. These are tallied via a formula of subjective attributes—each rated below, average, above or best in class, then scored for interior, exterior, performance, value and personal appeal. With so many categories, these produce a lot of outcomes, each from among just a handful of contenders (in several instances even just one).

The event culminates in two grand trophies via one more totally subjective vote—the SUV of Texas and the Truck of Texas.


Final results are always full of both affirmations and new insights. Voting used to be done and awards presented at the close of driving, but now are both done at later dates. We've all voted, but have no word yet on when results will follow. We generally never reveal our own votes, but do keep track, so we'll look forward to comparing them with groupthink. ■




Vehicle photos: Eric O'Hara and Kelby McGaughey of 1Off Productions  
Miscellaneous photos (waffle and freeway): Joe Sage



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OUR TEXAS WHEELS : 2023 TOYOTA 4RUNNER 40TH ANNIVERSARY SPECIAL EDITION

There's nothing like being in a popular vehicle, to notice just how many of them there are on the road. Toyota 4Runner is a case in point. For our local wheels during the TAWA Texas Truck Rodeo, we picked up this Special Edition at DFW Airport and headed northwest toward Decatur, seeing plenty of others along the way. It really struck us when we pulled in to the main event site the next morning, parked adjacent to two other 4Runners, then before we could even grab a snapshot of that, were joined by a fourth one. It was the same on the drive back to the airport that evening—this is an exceptionally popular vehicle.

The 2023 Toyota 4Runner 40th Anniversary Special Edition is a decidedly classic representation of a contemporary classic vehicle that has sold over 4 million units over its 40 years. Based on the SR5 Premium, the Anniversary Edition—of which 4040 are being built—comes in black, red or white and bears 17-inch bronze-colored alloy wheels, along with “40th” badging and other styling cues inside

and out. (We were surprised our dash plaque read “1 of 4040,” for a moment thinking it was a sequential plate and that Toyota USA's headquarters being in Plano, Texas had perhaps landed the first one in our hands. But no, they are all “1 of 4040,” much as each of us is “one in a million.”)

As with its sibling, the Toyota Tacoma pickup, 4Runner's owner and fan base is largely of the “please don't ever change a thing” mindset, as are we, although we all know it's getting overdue for a refresh. There are differences, though, between the pickup and the SUV. While both are tough, tall and capable off-road-ready builds, which gives the Tacoma satisfying grunt but a less exciting highway drive, 4Runner has a different (though similarly powered) engine and notably a different transmission—a five-speed vs Tacoma's six. When the opportunity arises to pass slow traffic on a two-lane Texas hill, 4Runner's responsiveness is quite surprising (and pleasing) if you're more used to the pickup—the ratios are not that different overall, but its gearset just seems perfectly paired.

So yes, this is a please-don't-change-a-thing vehicle, yet we all know change is likely coming. Our confidence remains very high, however, that Toyota knows exactly the position this puts them in, as they develop an update. And we expect a new please-don't-change-a-thing vehicle to arrive in its place when the time comes.

For now, cheers to 40 years, 4 million 4Runners, 4040 of these, and all those yet to come. ■

SPECIFICATIONS

ASSEMBLY	Tahara, Aichi, Japan
ENGINE	4.0L 6-cyl 24v DOHC TDI EFI, alum alloy
HP/TORQUE	270 hp / 278 lb-ft
COMPRESSION RATIO	10.4:1
TRANSMISSION	5-spd ECT automatic
DRIVETRAIN	4x4
TRANSFER CASE	1.0/2.566
SUSPENSION	F: coil spring indep dbl-wishbone w stblzr bar; R: coil spring 4-link rigid type w stblzr bar
STEERING	pwr asst variable gear rack & pinion
BRAKES	F: 13.3 in vented; R: 12.3 in vented
WHEELS/TIRES	17x7.0 bronze-color alloy / P265/70 R17
LENGTH / WHEELBASE	190.2 / 109.8 in
GROUND CLEARANCE	9.6 in
APPROACH / DEPARTURE	33 / 26°
TURNING CIRCLE	37.4 ft
HEADROOM (F/R)	39.3 / 38.6 in
LEGROOM (F/R)	41.7 / 32.9 in
CARGO CAPACITY	47.2 / 89.7 cu.ft
WEIGHT	4675 lb
TOW CAPACITY	5000 lb
FUEL / CAPACITY	.87 oct reg unl / 23.0 gal
MPG	16/19/17 (city/hwy/comb)

BASE PRICE (2023)	\$46,370
(KEEP IT WILD SAVINGS)	(750)
DESTINATION CHARGE	1335

TOTAL	\$47,085
Prices have increased; see chart.	

2023 4RUNNER LINEUP	4x2	4x4
SR5	\$39,555	\$41,430
SR5 Premium	42,615	44,490
40th Anniversary Limited	48,790	50,825
TRD Sport	42,415	44,290
TRD Off-Road		43,400
TRD Off-Road Premium		45,980
TRD Pro		54,020

Classic classic  
BY JOE SAGE





# Luxurious top performer

BY JOE SAGE

This big, beautiful sedan occupies an interesting spot. Lexus sits atop the Toyota-Lexus family as its luxury brand, yet in this economy, the less expensive brand may have an edge. Full-size sedans traditionally sit atop the sedan range, yet smaller ones have been the bigger sellers for years. Sedans themselves had been the default benchmark vehicle for any lineup for decades, yet have been largely supplanted by crossovers. Put it all together, and you have an absolute top dog vehicle that is produced in smaller volumes. The LS has always been desirable, and these factors of rarity may only make it moreso.

The build we are driving here—Lexus LS 500 F Sport AWD—also sits in a special spot. There are just three LS trim levels, yet as a

lower volume car, that should be plenty, and it makes the shopping and decision process easier. Though F Sport sits in the middle of the three, it's far closer in price to the base trim than to the top-dollar six-digit hybrid.

The variables do get more complex. There are only two engines in the LS lineup—a 3.4-liter twin-turbo V6 in the first two, or a 3.5-liter non-turbo V6 in the hybrid. F Sport adds bigger brakes, performance tires and variable suspension, as well as style cues inside and out, and seating upgrades. (Though arguably the catchier name, F Sport is not to be confused with a full F model, of which, with the departure of the V8 GS, there are currently none.) The LS F Sport has the same 416 horsepower as the base LS, considerably more than the

295 hp of the hybrid's V6 itself or even its combined hybrid system power of 354 hp. These add up to a zero-to-60 time of 4.6 seconds for the twin-turbos, 5.2 for the hybrid.

On top of that, the hybrid's highway fuel mileage is the same as a base rear-driver (29 mpg), though four points higher city and three more combined. Is that worth almost \$33,000 more for the hybrid? Not financially, nor really for range or convenience, as a half-gallon larger tank on the hybrid is not likely to have you stopping to refuel noticeably less often. The base or F Sport seem the far better deal.

The hybrid is also the heaviest, a full 5,302 pounds, more than 600 pounds heavier than a base LS with coil springs and RWD. Weights also vary as you choose coil or air suspen-

sion, RWD or AWD, and perhaps an F Sport Handling package to the twin turbos (adding rear steering and active stabilizer bars to certain builds). Our F Sport AWD with coil suspension still weighs about 400 pounds less than the hybrid (which is AWD and coils only).

Setup of controls and features is now completely user friendly—the screen is quick and well organized, massively improved from the painful era of center console jumpy joysticks and trackpads to now one of the best.

Ours in Atomic Silver is complemented by an interior of Circuit Red leather and Naguri aluminum trim, a well suited combination for stately status outside and a reminder of your hot possibilities within.

And hot this big sedan is, from its 416 twin-turbo horses right on through. The engine is fabulously powerful and smooth, the transmission seamless and drop-free, its all-wheel drive transparent and uniform (varying from almost 70 percent rear on dry roads to almost

a perfect 50-50 when slick). The drive experience overall is of a rock solid heavyweight and nimble magic carpet, all in one.

We did turn off a very active lane-keeping feature, which at first we took for a disconnected steering feel, but this change solved everything. And we did notice just one very harsh speedbump, which interests us possibly in the air suspension (just \$1400)—we'd have to try both in succession.

Our time was spent in the northern regions of metro Phoenix—a combination of freeway time, surface streets and near-rural two- and four-lanes. Though a large car, the LS maneuvers easily, turns tight, and meets and conquers any of the fast-changing challenges and opportunities of busy highways. Quite impressive. It can do all this in eco mode, too, providing surprisingly high fuel economy.

Even in this era of SUVs, the Lexus LS remains by all rights a true flagship. The LS F Sport is a top luxury cruiser, all sported out. ■

## SPECIFICATIONS

ASSEMBLY	Tahara, Aichi, Japan
SEATS	five
ENGINE	3.4L twin-turbo V6, 24v DOHC, Dual VVT-i, EFI D-4ST dir inj, alum/alum
HP/TORQUE	416 hp / 442 lb-ft
COMPRESSION RATIO	10.478:1
TRANSMISSION	10-spd auto
DRIVETRAIN	AWD
0-TO-60 / TOP SPEED	4.6 sec / 136 mph
SUSPENSION	F: high-mount multi-link; R: multilink; (air suspension available)
STEERING	vehicle speed-sensing elec power rack & pinion
BRAKES	(F SPORT) F: 15.7 vented w 6-piston opposed alum calipers, normal brake pads; R: 14.1 vented w 4-piston opposed alum calipers, normal brake pads
WHEELS	20-in alloy dark vapor chrome
TIRES	(F SPORT) F: 245/45R20 summer, R: 275/40R20 summer
LENGTH / WHEELBASE	206.1 / 123.0 in
GROUND CLEARANCE	(coil susp) 5.9
TURNING CIRCLE	(AWD) 39.4 ft
HEADROOM (F/R)	(pano rf) 36.8 / 36.4 in
LEGROOM (F/R)	41.0 / 38.9 in
CARGO CAPACITY	16.95 cu.ft
WEIGHT	(F SPORT, coil susp) 4839 lb
FUEL / CAPACITY	premium unl / 21.7 gal
MPG	(AWD) 17/27/21 (city/hwy/comb)
BASE PRICE	\$83,235
HEADS-UP DISPLAY	1220
AUDIO: 23-spr Mark Levinson Surround Sound	1940
PANORAMA GLASS ROOF	1000
(BUNDLE): cargo net, trunk mat, wheel lock, key glove, rear bumper appliqué	420
DESTINATION CHARGE	1150
TOTAL	\$88,965
Prices have increased; see chart.	

## 2023 LEXUS LS 500 LINEUP

	RWD	AWD
LS 500	\$77,385	\$80,635
LS 500 F SPORT	80,985	84,235
LS 500h Hybrid		113,485

As their \$80-115,000 or so luxury flagship, the Lexus LS is inherently a lower-volume vehicle. As such, it has not yet received the front sheet metal restyling that we've seen on others—evolving the longstanding spindle grille to what they call the spindle body, or we call a sharknose—but if and when it does, it should look especially sharp.





## Nxu news

**Nxu, Inc.** recently announced a \$3 million public offering of common stock, expected to close on or about October 23, 2023, subject to customary closing conditions. This capital raise can position Nxu to execute against the key milestones they are working toward in the near future: continued revenue-generation through charging field trials and development of their first public charging site in Quartzsite, Arizona.

Additionally, this capital raise would strengthen their balance sheet, a pivotal part of their strategy to maintain compliance with Nasdaq. An appeal hearing has been scheduled for December 14, 2023.

Mesa-based Nxu is continuing a march toward their vision of a future in which energy is harnessed in a way that is abundant and accessible, as a foundation for making electric mobility viable.

### Nxu One Megawatt+ Charging System: Product Launch and Public Field Trials

Nxu is creating EV charging and energy storage solutions for the infrastructure to power an electrified future. The first product in their lineup is the Nxu One Megawatt+ Charging System, which they launched to the public on September 28 during National Drive Electric Week. They surpassed 1.6MWh in the opening weekend alone and say public use and response to date have been overwhelmingly positive. A variety of EV OEMs have charged with Nxu, from Tesla and Audi, to Rivian and Fisker. And interest is growing,

as they see additional new and repeat customers each week.

### First Major Highway Megawatt+ Charging Station: Quartzsite, Arizona

Nxu is under contract to purchase land in Quartzsite, Arizona, that will be the permanent site of their first Megawatt+ charging experience on a major highway.



Strategically located on Interstate 10 between Arizona and California, the Quartzsite location will alleviate EV drivers' charger anxiety, allowing them to charge up while enjoying much-needed amenities like bathrooms and air conditioning.

These past few months have been pivotal. They haven't been easy, they note, but they've been important, and revealed some important learnings along the way.

## Nikola news

**Nikola Corporation** (Nasdaq: NKLA), Arizona-based specialist in zero-emissions transportation and energy supply and infrastructure solutions, via its Hyla brand, achieved a significant milestone in late September as they celebrated the commercial launch of their Nikola hydrogen fuel cell electric vehicle at their state-of-the-art manufacturing facility in Coolidge.

The ceremony was attended by fleet customers, dealers from Nikola's sales and service network and government officials, with remarks from Phoenix area business and community leaders and Nikola executives. The event also included truck and hydrogen demonstrations, sustainability impact overviews, production line tours and informal technology Q&As with Nikola engineers on hydrogen safety, the Hyla ecosystem and the Nikola human-machine interface system.

Nikola's hydrogen fuel cell electric truck features a range of up to 500 miles and an estimated fueling time as low as 20 min-

utes. The truck is expected to have among the longest ranges of all commercially available zero tailpipe emission Class 8 trucks, with applications ranging from drayage and intermodal to metro-regional truckload and less-than-truckload, to certain specialized hauling use cases.

Nikola and its dealers have received 223 non-binding orders for their hydrogen fuel cell electric trucks from 23 customers, with

notable fleet operators such as JB Hunt, AJR Trucking, Biagi Bros and TTSI are among a growing list.

Completion of Phase 2 assembly expansion at the Coolidge manufacturing facility includes a versatile mixed-model production line capable of manufacturing both hydrogen fuel cell and battery-electric trucks. The facility is ready for an annual production capacity of approximately 2,400 trucks across three shifts. A fuel cell power module assembly line in Coolidge is also scheduled for completion this year, with Bosch supplying the modules.

The latest state and federal incentives nationwide will also make it even more economically viable to be a customer, as Nikola's trucks are eligible for the California Air Resources Board Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project, opening up access to incentives starting at \$120,000 and ranging up to \$288,000 per truck. A recently re-opened Innovative Small e-Fleet program in California also offers incentives to small fleets, starting at \$240,000 and ranging up to \$408,000 per vehicle.

New York, Canada federally and British Columbia specifically all offer additional incentives for these vehicles. Nikola customers will also benefit from a \$40,000 clean commercial vehicle tax credit per vehicle from the federal government due to passage of the Inflation Reduction Act.

As Nikola accelerates toward mass-producing hydrogen fuel cell electric trucks, the Hyla team is committed to securing a reliable hydrogen supply to meet the demands through partner collaborations. The company has been awarded potential grant funds to help facilitate ongoing development of hydrogen refueling stations along key California freight corridors and with a previously announced joint effort with Voltera to establish up to 50 Hyla stations across North America over the next five years.

With these awards and collaborations, Nikola says they are firmly on track to create an open network of commercial hydrogen refueling stations, initially in California, and expanding across North America, with Hyla also working to deploy a fleet of hydrogen mobile fuelers to provide flexible infrastructure where it may be required.

Nikola is headquartered in Phoenix, with a manufacturing facility in Coolidge. ■

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# New goalposts

The Mercedes-Benz and closely related Mercedes-AMG lineups include some two and a half dozen SUVs (add Mercedes-EQ electrics, and it's well over three dozen). Out of the total, over half of the trims and variants are GLC and GLE.

Some tastes or needs run in specific directions—say smaller or larger, like the GLC- or GLS-Class. Some seek extremes; for them there are the even smaller GLA and GLB, or the big G-Class. But many are happy in the all-purpose middle—and here sits the GLE-Class. Of over five million SUVs sold by Mercedes, the GLE (and its ML-badged predecessor) account for about 40 percent—their best selling SUV, inhabiting one of the hottest segments.

Here we drive the refreshed 2024 Mercedes-AMG GLE 53 SUV, with a 429-hp AMG-enhanced 3.0L turbo-inline-6 with hybrid assist, 9-speed AMG automatic, AIRMATIC-based suspension and AMG

Performance 4MATIC+ AWD. At \$86,750 base, our add-ons bring this sample to \$95,150. Built in Alabama, bearing a German engine and transmission, the current GLE was also largely developed in the US, to be well suited to our harsh road conditions.

We've had GLE variants in our fleet quite regularly. Our last, a year ago, was just like this one, other than its color, wheel size and a few options. All can be revisited in detail in our online archives.

Reviewing our impressions from those, fundamentals remain the same. Part reminder and part specific to this one, we have some updated notes.

**CONTROLS:** Mercedes has long been well ahead of the curve on development of systems and interfaces. A two-times-12.3-inch-screen doublewide but single pane instrument panel accesses an extensive set of features, with more creature comforts than average, more drive options than average—this one has a whole off-road section (despite pavement-oriented tires and wheels), as well as a whole AMG performance section—with fea-

ture-rich alternatives for many settings. Expect to spend time with this system, to master the details.

Seats, windows and some other functions are controlled via flat metal switches, welcome after black plasticky membranes on some others recently often triggered a neighboring button's actions.

We were unable to get AC out of the biggest vents up front, and at above 100°, we sure wished to. We'll seek an answer to this, if there is one.

**DRIVE:** At first, we found pedal response could be delayed, then abrupt, and steering jerky at slow speeds. But these perceptions faded quickly, so if you test drive, perhaps you'll note the same, perhaps not. Once acclimated, the power curve is strong and satisfying, with immediate response. Cornering and handling are superb, and U-turns seem even tighter than their admirable spec.

The former EQ Boost system is now known as a mild hybrid, more specifically 48-volt hybrid assist with electric auxiliary compressor, rebranding with upgraded engineering. It helps offset any thirsti-

ness in this AMG while delivering the engine's 429 horsepower plus another 21 hp of its own, along with 148 lb-ft of torque atop the original 413—all while delivering very decent fuel mileage.

We found comfort mode somewhat dull around town, so tried sport. We had set up preferences in Dynamic Select, which is easily confused with Individual, both of which we had trouble accessing freely for further experimentation while on the go. Sport was not wildly different, which we actually prefer in ways, but did seem generally better. And on this model, we still have Sport+ to go.

Something in the overall system does produce a massive hum at times, generally at startup, not ideal when setting out early. Then it (mostly) stops (a light hum remains) as abruptly as it had started.

Put it all together, and this AMG has power and precision to tackle local traffic tangles and the open road, both, with power and precision, all from within the comfort and confidence of a nicely appointed cabin, in a dominant size and format.

**POSITIONING:** We started out asking ourselves about the importance of this size in a compact-dominated era and within such a widely diverse lineup.

And we concluded that it is totally necessary. You can blend right in, or you can establish supremacy. As the industry produces more crossovers all the time—in different sizes, with more powertrains and performance alternatives all the time—this model remains. Nobody gets rid of this size. And the GLE itself is masterful, inside and out.

There are intriguing differences since our 2022 AMG GLE 53 a year ago, however. First, there was no V8 version that year, due to lockdown-related supply chain constraints, making the six-cylinder 53 the top dog—a chance to grab maximum bragging points at about \$40 grand lower cost. The AMG GLE 63 S has now returned, and with it that big decision for some. But pricing has risen notably. The AMG GLE 53 base price is up 18 percent, less of a bargain now, itself, though the GLE 63 S with its handcrafted V8 returns with a 12 percent bump since before its time away. The percentage differential is less now, but the dollar difference is still \$40 grand. Which is a better buy remains a personal call in line with the usual gotta-have-it factors. But if it satisfies your neighborhood pecking order, the AMG GLE 53 is plenty satisfying. ■

## SPECIFICATIONS

ASSEMBLY	Vance, Alabama
ENGINE/TRANSMISSION	Germany / Germany
PARTS CONTENT	US/Canada 10%, Germany 25%
ENGINE	AMG-enhanced 3.0L inline-6 turbo w 48V hybrid assist & elec aux compress
HP/TORQUE	429 hp + 21 hp ISG 413 lb-ft + 148 lb-ft ISG
COMPRESSION RATIO	na
TRANSMISSION	AMG Speedshift TCT 9-spd automatic
DRIVETRAIN	AMG Performance 4MATIC+ AWD
0-60 / TOP SPEED	4.9 sec / 155 mph
SUSPENSION	AMG Ride Control+ based on Airmatic
STEERING	na
BRAKES	na
WHEELS	21-in AMG twin-5-spoke w black accents
TIRES	F: 275/45 R21 XL R: 315/40 R21 XL
LENGTH / WHEELBASE	194.4 / 117.9 in
GROUND CLEARANCE	na
TURNING CIRCLE	39.4 ft
HEADROOM (F/R)	40.5 / 36.9 in
LEGROOM (F/R)	40.3 / 40.9 in
CARGO CAPACITY	33.3 / 74.9 cu.ft
WEIGHT	5236 lb
TOW CAPACITY	7700 lb
FUEL / CAPACITY	premium unl / 22.5 gal
MPG	18/23/20 (city/hwy/comb)
BASE PRICE	\$86,750
PAINT: Manufaktur Diamond White Met	1750
AMG CARBON FIBER INTERIOR TRIM	1750
STEERING WHEEL: AMG Performance in Nappa leather / microfiber	500
WINTER PKG: heated steering wheel and windshield washer system	450
WHEELS: 21-in AMG twin-5-spoke w black accents	1300
AMG NIGHT PKG: high-gloss black front splitter, front & rear apron trim strips, window trim, exterior mirror housing and roof rails; AMG exhaust system & twin tailpipes in black chrome	1150
DESTINATION CHARGE	1150
TOTAL	\$95,150

(Note: available manufacturer specs are limited and are all from this generation, but not necessarily all from 2024 and not always from AMG.)

## 2024 GLE LINEUP

(all are 4MATIC)	
GLE 350 SUV	\$63,960
GLE 450 SUV	69,500
GLE 450e SUV (PHEV)	69,500
GLE 580 SUV	88,100
(all are AMG Performance 4MATIC+)	
AMG GLE 53 SUV	86,750
AMG GLE 53 Coupe	89,800
AMG GLE 63 S SUV	128,850
AMG GLE 63 S Coupe	129,050
(And then there are the full-EV Mercedes-EQ EQE SUVs, not to mention EQE Sedans.)	

And just announced: arriving in 2025 as model year 2026

536-hp / 553 lb-ft plug-in hybrids (PHEVs), the AMG GLE 53 Hybrid SUV and AMG GLE 53 Hybrid Coupe.....prices tha



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## Connected Motorcycle demo features Ducati, Lamborghini

The Connected Motorcycle Consortium (CMC) is an international association of leading two-wheeled vehicle manufacturers aiming to include motorcycles in the future of automotive "connected mobility." A recent CMC-organized demo event on the track at Lausitzring, Germany demonstrated systems developed over the course of the consortium's research to date.

While automakers have been developing vehicle-to-vehicle (V2V) communication technologies for years, CMC works on adding information sent by motorcycles (which have different needs and dynamics), so systems can be standardized as the technology is integrated into the entire bike and car fleet in circulation. Automobili Lamborghini and Ducati share this commitment to a higher level of safety for motorcyclists, via motorcycle-to-car communications.

Founded in 2016 (the same year Ducati joined), CMC began with precise analysis of the most dangerous accidents between motorcycles and cars, by frequency and seriousness of harm to motorcyclists. Cases where connectivity could help most were selected, to develop methodologies to reduce the number of impacts and their physical risk. A crucial aspect of this research is to reduce system reaction times as much as possible, as the risk of an accident depends on how far in advance parties involved are warned.

Lamborghini helped Ducati in the trial stage by providing a Urus for use case simulations. Ducati looked at the most critical and dangerous accident cases

—those that place bikes in an obscured position in relation to oncoming cars or in a situation where they don't have visibility of what is happening in front of them—where communication between on-board sensors could help. Analysis demonstrated at the Lausitzring concentrated on three areas.

**IMA (Intersection Movement Assist)** considers a reduced-visibility intersection where a bike on a busy road approaches an intersection while a car is arriving at the same time from a secondary road. To make this even more critical, Ducati added a fixed obstacle to totally obscure the bike from both the car driver's sight and the car's auxiliary systems. In this case, a warning signal is displayed on the car dashboard alerting that motorist to the bike.

**LTA (Left Turn Assist)** covers intersections with a car and bike traveling on a main road in opposite directions, and the car planning to turn left. Here, the bike is less visible than the car—even through auxiliary systems—risking the bike not being well evaluated by the oncoming car. In this case, as soon as the car turns on its signal(!), a warning signal is displayed for the bike.

**DNPW (Do Not Pass Warning)** is for the case where a bike in a line of traffic wants to overtake a large vehicle in front of it, but which in turn has a car ahead of it that wants to make a left turn, but is not visible to the motorcyclist. In this case, it is the motorcyclist that sees the warning as soon as the system detects that both the car and the motorcycle have turned on their blinkers.

The technology was developed in collaboration with a number of suppliers, including Bertrandt for hardware and Nfinity for the operating system and algorithms. In this phase, the prototype has a dedicated screen on the motorbike with warning signals to let the motorcyclist know about any danger. ■





# Blade runner

BY JOE SAGE

Launched in 2017, the original Kia Niro broke new ground by, in a sense, not breaking new ground—it was a dedicated hybrid that could be taken for any general model, unheard of to that point in a segment known for quirky styling that was embraced by some, actively unappealing to others. It was prime time for such a move, and the entire industry has largely followed suit, as hybrids move from “segment” to widely implemented powertrain detail.

Kia has added plug-in hybrid and full EV versions of Niro in the intervening years. And for 2023, they turn the page again, with the gen-two Niro.

Highlights include larger dimensions inside and out; an enhanced and more efficient powertrain lineup including a 32-kW electric motor on the hybrid model (contri-

buted to a best-in-class 53 mpg combined); a digital key that can be transferred phone-to-phone; better cold-weather cabin heating; dual 10.25-inch panoramic displays; 14 standard driver assist and safety technologies; extensive use of recycled plastics and vegan leather inside; and for the EVs, 50 kWh of charging included at Electrify America.

We drove the Kia Niro hybrid at its launch in the Texas Hill Country in 2017, again at home later that year, then the full EV version for a week in 2019, but hadn’t driven it again since (unless perhaps briefly at comparo drives). Till now. The new generation offers five hybrid trim levels from \$26,590 to our top SX Touring at \$34,890, or nine counting the PHEVs and EVs. They all live among a broad lineup of some 15 Kia SUVs, crossovers, MPVs, hybrids, PHEVs and EVs (arguably also adding a nod to the Rio 5-Door).

The EPA, which admittedly has some odd categorizations, calls the Kia Niro a small station wag-

on, a term generally avoided in America currently, but they may be on to something. Its lower roofline and ground clearance push the limits of what the crossover term means (as do so many things). And that’s just fine. It’s a great little size, not too small at all, with over 40 inches of front legroom, almost 40 in the rear, headroom to match, and generous cargo volume. And all this comes with that 50ish fuel mileage and starts in the mid-\$20s.

You might conclude it picks up where Kia Soul leaves off. The Soul is a famously great little unit, but its standout styling is a little quirky for some. For those, Kia Niro is a solid antidote.

The black body element in the rear three-quarter area—what we call the blade, but they simply call black C-pillar trim—may still qualify as quirkiness. To some, it may seem styling overkill, but it’s an option, at just \$195. If it were pricey, we might do without, but this makes it tempting, as perhaps a key defining feature. Time and take rate will tell.

We had our usual range of notes and comments on user interface details, but ultimately the answers to any puzzles were found, often in their

own clever ways. All in all, you will orient easily and appreciate it all increasingly.

Our first note about the drive experience was a realization that we had no first note. This we took as refreshing—it’s rare to find a vehicle we can just get in and drive, without a prompt critique.

Stated horsepower numbers (from Niro’s combination of gasoline engine and electric motor) do not do the vehicle justice—it is a plenty lively driver. Considerably higher torque, more than doubled by the electric drive component, is surely a factor. Perhaps most noteworthy is its six-speed dual-clutch automatic transmission, in a segment otherwise populated by quite a few CVTs. With or without its exceptional fuel mileage in mind, you will find drivetrain power quite satisfying.

We do and don’t value drive modes, appreciating their range, but carrying a philosophy that the product should be maximized by default. In the Kia Niro, we forgot all about that, driving in eco most all the time (thus ensuring that maximum fuel mileage), remarking that we didn’t even notice.

The new Kia Niro has both daily driver and road trip written all over it. Seeming to fall outside established segments, it might just deserve a category all its own, called “don’t miss this one.” ■



The new narrow grille seems to move on from Kia’s long-running “tiger nose” treatment, but look again—that remains echoed along the top edge of the windshield and below the lower grille opening. It’s subtle, but the stylized KIA name badges have done well at taking over primary identity duties now.

## SPECIFICATIONS

ASSEMBLY	.....Hwasung, South Korea
ENGINE/TRANSMISSION	.....Korea/Korea
CONTENT	.....Korea 90% / US/Canada 1%
ENGINE	.....1.6L 4-cyl DOHC 16v GDI dual CVT alum/alum
HP/TORQUE	.....103.5 hp / 106.3 lb-ft
COMPRESSION RATIO	.....14.0:1
HYBRID TYPE	.....transmission-mtd elec device
HSG	.....perm magnet synchr motor
HP/TORQUE	.....10.7 hp / 26.1 lb-ft
MOTOR	.....perm magnet synchr motor
HP/TORQUE	.....42.9 hp / 125.4 lb-ft
BATTERY	.....15AH Li-ion polymer 240 V
COMBINED HP/TORQUE	.....139 hp / 195 lb-ft
TRANSMISSION	.....6-spd dual clutch auto
DRIVETRAIN	.....FVVD
0-TO-62 / TOP SPEED	.....10.8 sec / 100.7 mph
SUSPENSION	.....twin-tube shocks: F: MacPherson strut; R: multi-link
STEERING	.....rack & pinion, elec motor
BRAKES	.....integrated elec booster (IEB): F: 15.0 vented; R: 14.0 solid
WHEELS / TIRES	.....7.5Jx18 alloy / P225/45R18
LENGTH / WHEELBASE	.....174.0 / 107.1 in
GROUND CLEARANCE	.....6.3 in
APPR / DEP / BRKOVER	.....15.2 / 27.4 / 14.7°
TURNING CIRCLE	.....34.8 ft
HEADROOM (F/R)	.....40.5 / 39.5 in
LEGROOM (F/R)	.....41.5 / 39.8 in
CARGO CAPACITY	.....22.8 / 63.7 cu.ft
WEIGHT / DISTRIB	.....3071-3247 lb / F/R: 61/39%
GVWR	.....4210 lb
TOW CAPACITY / ROOF LOAD	.....na / 220 lb
FUEL / CAPACITY	.....na / 11.1 gal
MPG	.....53/45/49 (city/hwy/comb)
BASE PRICE	.....\$34,790
BLACK C-PILLAR TRIM	.....195
CARPETED FLOOR MATS	.....155
DESTINATION CHARGE	.....1295
TOTAL	.....\$36,435

Prices have increased; see chart.

## 2023 KIA NIRO LINEUP / HYBRIDS

LX	.....\$26,590
EX	.....29,190
EX Touring	.....31,490
SX	.....32,590
SX Touring	.....▼ 34,890



## THE BUSTED KNUCKLE GARAGE AN AUTOMOTIVE GIFT SHOP



### 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 durability, 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

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Free ground shipping in the lower 48 states!

### Neon Garage Clocks

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- 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!

♥ Not 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



♥ 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

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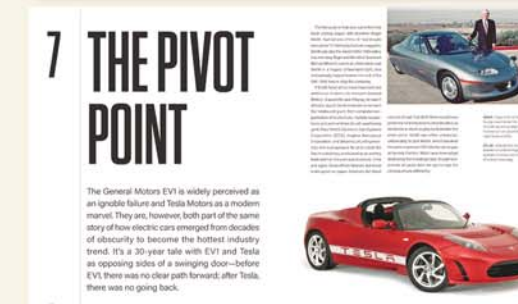
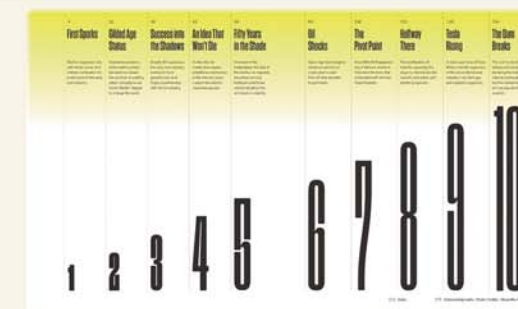
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# The Electric Vehicle Revolution

Kevin A. Wilson

The Past, Present, and Future of EVs



New from Quarto Group

## The Electric Vehicle Revolution

*The Past, Present, and Future of EVs*

by Kevin A. Wilson

IN *THE ELECTRIC VEHICLE REVOLUTION*, automotive journalist Kevin Wilson provides a thorough, engaging overview of where EV technology is today, how it got there, and where it's going.

Since the turn of the twenty-first century, EVs have gone from wonky who-cares vehicles like GM's EV1 and early Teslas to every manufacturer's must-have future.

Electric propulsion preceded fossil-fuel cars by decades and even vied for prominence in the early twentieth century auto industry against both steam power and internal combustion engines. From Electrobat (an early New York taxi fleet) through Columbia—which had built 1,000 electric cars before either Henry Ford or Ransom Olds had built a single gasoline car—viable business start-ups in the early auto age were as competitive and innovative as those in early twenty-first century Silicon Valley.

But it was not to be for electric cars in the early days of the 1900s, as the auto industry evolved to favor gasoline cars, thanks in part to the influence of the oil industry and the build-out of infrastructure to supply fuel across the country.

Gas-powered cars may have won the day, but post-WWII experiments with electric cars continued both within the established auto industry and from outside firms and visionaries, including cars developed by General Electric, Sears, and the Henney Kilowatt, alongside Ford and GM experimentals.

Rapidly evolving electronic technology beginning in the 1960s, along with growing concerns about emissions and pollution, set the stage for renewed interest in electric cars. Improved batteries for cellphones/laptops, electronic controls, computing, and beyond provided the impetus for a wave of more sophisticated and feasible electric vehicles, including GM's EV1 and the first Teslas.

Elon Musk's Tesla Motors proves the auto industry disruptor and sets the stage for responses by the mainstream auto industry, including Nissan's Leaf, Chevrolet's Bolt, and a host of high-end EVs from company's like Audi, Jaguar, and the like. Rival start-ups step in as well and government incentives, subsidies, and regulatory demands all drive unprecedented development.

Today, the rush to electrify has nations and companies competing to see who can declare the earliest end to internal combustion engines, but this radical transition won't be as easy as throwing a switch. *The Electric Vehicle Revolution* thoroughly explores the challenges of infrastructure, battery and vehicle tech, and the cost to consumers, as well as the long phase-in as EVs are set to replace existing gas cars over decades.

Whether you embrace EVs or have gasoline in your veins, *The Electric Vehicle Revolution* provides a fascinating, engaging, and stunningly illustrated overview of where the car world is today and where it's headed for the future.

KEVIN A. WILSON has been writing about cars, the industry, its history, and motorsports since 1986, initially for *AutoWeek* magazine, where he served in several editorial roles through 2009. As a freelancer through 2016, his work appeared in *Popular Mechanics*, *Road & Track*, *Automobile*, and *Car and Driver*, among others. He was on the *Car and Driver* editorial staff from 2016 to 2019. Long a member of the Society of Automotive Historians, Kevin has been chief judge of the Ypsilanti Orphan Car Show for more than 15 years. He lives in Waterford, Michigan.

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# SCANDINAVIAN MOON ROCKET

BY JOE SAGE

Volvo has their eye on big-picture changes at least as much as on individual models in the lineup right now—though each clearly influences the other—with a complete changeover to all-EV vehicles underway. These are transitional times, with a combination of mild hybrid, plug-in hybrid and pure EVs in the mix (but no non-hybrid gasoline vehicles). The plan is for Volvo Car USA to sell 50 percent pure EVs by 2025 and 100 percent by 2030 (all well along in development). And here's an evolutionary solution right now: the 2023 Volvo XC90 Recharge eAWD, a plug-in hybrid (PHEV) with up to 32 miles of pure electric

range and 58 MPGe combined cycle (or 27 gasoline) average MPG. All this adds up to 530 miles of range from its 455-hp 2.0-liter turbo powertrain—quite a formula and quite an achievement. Introduced in 2003, generation two of the Volvo XC90 arrived for model year 2016, with its refinement evolving throughout. The current lineup is built around three trim levels, but with powertrain and seating options you quickly arrive at 12 different basic builds, in a price range that climbs by 43 percent, all in the premium to premium-luxe realm. The version we are driving here is top dog. The XC90's cabin feels full-size, while it maneu-

vers and parks like the midsize it officially is. We were aware of its powertrain from our first red light—the electrified system contributes almost 50 percent again the horsepower of the gasoline turbo itself, providing launch power you will need to get used to. Underway, power is simply strong and ample—boulevard maneuvers are masterful, shifts from its eight-speed are smooth, and U-turns are efficient. Occasionally you may notice sound effects particular to this complex powertrain. While styled and shod as a street cruiser, the XC90 has significant ground clearance, approach-departure-breakover angles and wading depth—beyond its persona and expected usage. Much has been updated inside, as well. Its crystalline shift lever is not the most ergonomic we've handled, though it is the gateway to solid function,

including additional regenerative power. Volvo boasts an extensive suite of built-in Google functions across the whole lineup this year. We most appreciated its clean console, center stack and screen layout (remembering the Volvos of maybe 10-15 years ago, which bore dozens of tiny buttons to master). The new setup strikes us as having the classic best of Scandinavian design. Rather than another smartphone-on-wheels effort, as is so common, Volvo engineers seem to have developed a broad idea of the implementations and a specific idea of the purpose, then performing their own clean-sheet design—an approach long seen in that region's furniture, electronics and more—style, function and plenty of class. All in all, the XC90 Recharge PHEV is a nice performer. Just be ready for that first punch of the pedal to light you up like a SpaceX Falcon Heavy rocket—a surprise at first, but for many surely another strong selling point all its own. ■



## SPECIFICATIONS

ASSEMBLY	Gothenburg, Sweden
ENGINE/TRANS BUILD	Sweden / Japan
PARTS CONTENT	Sweden 36%, Finland 13%, US/Canada 1%
SEATS/PASSENGERS	seven
ENGINE	2.0L turbo 4-cyl 16v DOHC dir inj
HP	312 hp
ELECTRIC MOTOR / HP	143 hp
EXT RANGE BATTERY	18.8 kWh 270-400 V
HP/TORQUE	(combined) 455 hp / 523 lb-ft
TRANSMISSION	8-spd Geartronic auto
DRIVETRAIN	AWD
0-TO-60 / TOP SPEED	5.0 sec / 112 mph
SUSPENSION	opt 4-corner air suspension
STEERING	elec power asst
BRAKES	F: 14.4 x 1.2; R: 13.6 x 0.8
WHEELS / TIRES	21-in alloy / all-season
LENGTH / WHEELBASE	195.0 / 117.5 in
GROUND CLEARANCE	(air susp) 8.3-9.9 in
APPR / DEP / BRKOVER	21.0 / 21.0 / 21.3°
WADING ABILITY	17.7 in
TURNING CIRCLE	curb-to-curb 39.7 ft
HEADROOM (F/2/3)	38.9 / 38.5 / 36.3 in
LEGROOM (F/2/3)	40.9 / 37.0 / 31.9 in
CARGO CAPACITY	41.9 / 85.7 cu.ft
WEIGHT	na
TOW CAPACITY	braked 5000 / unbrk 1650 lb
FUEL / CAPACITY	na / 18.8 gal
RANGE / PURE ELECTRIC	up to 32 miles
MPG	27 MPG (comb) / 58 MPGe (comb)
BASE PRICE	\$65,850
ULTIMATE / BRIGHT THEME	bright chrome bars in grille, bright roof rails, bright chrome window surround, integrated 2nd row center booster cushion, perforated Nappa leather seating front, ventilated front seats, wood inlay, 21-in diamond cut alloy wheels, tailored dash & upper door panels, crystal shifter, Harman Kardon premium sound (not upgrade on ours), power front seat side support, power front seats cushion extension, sun curtains rear side windows, graphical heads-up display, heated steering wheel, heated rear seats, high-pressure headlight cleaning, 360 surround view camera, high level interior illumination, Recharge illuminated tread plates
AUDIO	Bowers and Wilkins premium 3200
AIR SUSPENSION	4-corner 1800
DESTINATION CHARGE	1095
TOTAL	\$85,495
Prices have increased; see chart.	

## 2023 VOLVO XC90 LINEUP

MILD HYBRID	SEATS	B5	B6
Core	7	\$56,000	\$60,900
Plus	7	59,900	63,400
	6		63,900
Ultimate	7		69,400
	6		69,900
RECHARGE PHEV	SEATS	T8	
Core	7		\$71,900
Plus	7		73,600
	6		74,100
Ultimate	7		79,600
	6		80,100

## E-VOLVO-LUTION

The first Volvo car rolled off the production line in Sweden in 1927. Volvo Cars formed part of the Swedish Volvo Group until it was bought by Ford Motor Company in 1999. In 2010, it was acquired by Zhejiang Geely Holding of China, as Volvo Car Group. The Volvo name is owned by Volvo Trademark Holding AB, in turn jointly owned by Volvo Cars and Volvo Group. While Volvo is well-known in about 100 countries, its global market share is 1-2 percent. Its largest market, China, had some 20 percent of their total sales volume in 2017, followed by the US (14%), Sweden (13%), the UK (8%) and Germany (7%). Head office, product development, marketing and administration are mainly located in Gothenburg, Sweden. Since 2011, Volvo Cars has offices in Shanghai and Chengdu, China. Shanghai includes a Technology Centre plus sales and marketing, manufacturing, purchasing, product development and all other supporting functions. Apart from main car plants in Sweden and Belgium, Volvo has long manufactured engines and body components in Sweden. They also have an assembly plant in Kuala Lumpur (Malaysia), R&D centers in Denmark and Silicon Valley, and design centers in Sweden, Southern California and China. Production at Volvo's Chengdu plant started in 2013, making cars for the Chinese and US markets. A second plant in Daqing, China opened in 2014, plus an engine plant in Zhangjiakou, China. In the US, Volvo Cars opened a new manufacturing facility in Berkeley County, South Carolina in 2018. By 2030, Volvo plans to sell only full EVs and to be "climate neutral" by 2040. They will end diesel models by early 2024, following their commitment toward no new combustion engines, in late 2022 selling their stake in Aurobay, the JV company that had all their remaining combustion engine assets. Volvo Car USA and Canada this fall reported sales up 31.6 percent month-to-month and 22.9 percent year-to-date over 2022, with Recharge models (full EV or PHEV) double the prior year, at 25.3 percent at that point, with fully-EV at eight percent. Now, Volvo Car USA and Canada are restructuring their operations, cutting over 10 percent of their nearly 1,000 white-collar work force, in an \$88 million global effort to tighten spending, drive efficiencies and update the work force for an all-EV future. Silicon Valley Tech Center has been downsized by 75 percent, Camarillo design center similarly, consolidating work "elsewhere globally." While much tech work was moved to Volvo's US headquarters in Mahwah, NJ, they are opening a tech hub in Singapore to focus on data and analytics, software and advanced manufacturing development, plus another tech center in Poland this year. The factory in South Carolina is said to be building the XC-90 for the US market since 2022, though ours was built in Sweden. As of now, South Carolina operations are said to remain on track. ■

E-Volvo-lution © September 2023 AdZone Arizona LLC

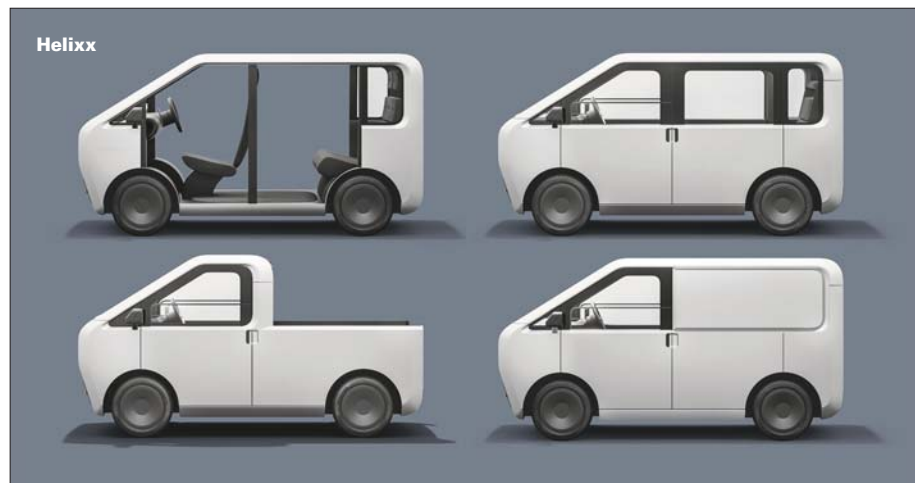


## THE INSIDE TRACK: BRIEFS & RUMORS



▼ **Porsche** Engineering believes the requirements of different markets for the quality and operation of new vehicles can only be verified on location, therefore deploying mixed teams of local drivers and engineers around the world, with knowledge gained in the process immediately fed back to the developers. In international validation, development engineers, testing and quality staff ensure an entire vehicle meets real-world expectations in market-specific context. The introduction of comprehensive Connect services has made market-specific function validation immensely more important. Validation drives are conducted at many different locations to obtain as complete a picture as possible, including local traffic conditions or specific online services infrastructure. For certain purposes, such as validating EV charging functions, intensive special programs are also conducted. Local validation drivers work in two shifts a day, with one third of the driving time each on city streets, country roads and freeways. Conditions during validation drives are highly variable—in Shanghai, they are primarily conducted in urban areas, while in Norway the driver might not see another person for hours. Norway is a pioneer in electrification, making interoperability with the charging infrastructure particularly important—Porsche carried out validation of the Taycan there prior to its market launch. While the model was subjected to continuous subzero temperatures during cold-country testing, international valida-

tion takes a different approach. For urban validation, road testing is performed in Oslo, through changing temperatures day and night. The driver must be able to open and start the vehicle in the morning without any functional impairments. Another focus is on comfort functions and preconditioning, such as the departure timer set using the app or engine-independent heating. As another example, while Germany uses salt on winter roads, the



Norwegians spread grit, subjecting bodywork and other parts to greater stress. Such market-specific feedback leads to corrections and improvements, or may inform requirements for future optimization. VP of corporate quality Christian Friedl notes, "Validation is very much a question of 'emotional quality assurance' (and I hope) that 20 years from now, we will still not be able to map emotional quality virtually."

▼ **Cario**, a new blockchain-based vehicle title platform, provides secure digitization of vehicle titles for auto dealers, lenders, consumers, MVDs and other entities. They promise an end-to-end, secure and private distributed ledger technology solution for any vehicle title and registration transaction in minutes, replacing current paper vehicle titles and manual processes, which traditionally take weeks or longer, with a digital record in the form of an NFT.

▼ UK-based global technology company **Helixx** has provided insight into its design principles and manufacturing system by revealing a first demonstrator of the Helixx commercial delivery van. Featuring a cube-like aesthetic, the van is designed for ease of assembly and optimum interior load space, taking into account the needs of both manufacturers and fleet operators in one mission-specific mobility solution. When it enters production in 2024, it will be joined by a pickup truck and open- and closed-body passenger vehicles for ride-hailing fleets. A specific set of design rules

enables the body system to be replicated in Helixx mobility hubs, while being flexible enough to support white-label customer designs and localized branding. This system comprises just five key structural components, which can "click and bond" together for effortless assembly, significantly reducing manufacturing costs and resulting in a highly durable vehicle. The vehicle represents what licensed

Helixx Mobility Hubs can produce in as little as 180 days from initial site survey to vehicles rolling out onto the street, offering subscribers access from \$0.25 per hour. The team used in-house 3D printing

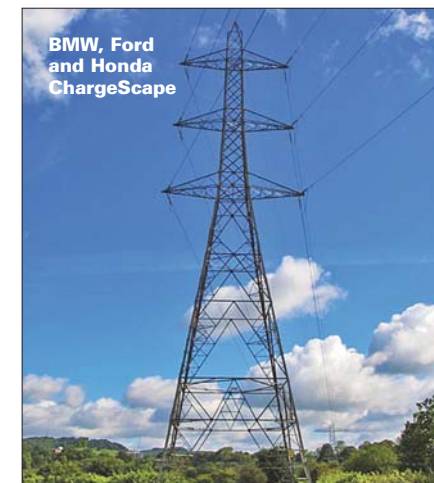


to create all the structural and cosmetic body components from scratch, with each piece captured digitally to provide the basis of an industry-first wide-scale internally recyclable polymer molding body system—entirely removing the need for energy-intensive and chemically-dependent sheet metal processes, simplifying manufacturing by up to 50 percent. The finalized body system was assembled achieving a first-time-fit during the bonding process, demonstrating that welding stamped body panels is not required within the Helixx platform. The end result is a body system with 30 percent less mass and hundreds fewer individual components than traditional vehicles. Following validation and in-market feedback on the demonstrator vehicle, Helixx plans a Gen Zero production run of 100 vehicles at its pilot hub in the UK, before customer vehicle and factory rollout commences at a concept hub in Southeast Asia.

▼ **Ford** Performance Racing School is offering Dark Horse Track Attack, a hands-on instruction and driving experience at Charlotte Motor Speedway for owners of Mustang Dark Horse, the most track-capable and powerful 5.0-liter V8 street-legal Mustang ever. Enjoying a near 3:1 attendee-to-instructor ratio, Mustang Dark Horse owners will receive personal attention on the skid pad, autocross, and Charlotte Motor Speedway Roval. This experience is included with the purchase of the Mustang Dark Horse (not including

transportation and lodging). This event starts with an evening reception at the CMS Champion's Club overlooking the track, then the next day expands into classroom and on-track instruction—

including learning how to use the Dark Horse's no-lift-shift system and taking to the skid pad and autocross. Owners then put their newfound skills to the test in lead-follow lapping on the fearsome Charlotte Roval in three 20-minute sessions, followed by a hot lap with the instructors in the driver's seat. Customers can register for this program starting in January 2024. Also, a series of roving cross-country events in ten US markets will in-



clude major automotive, lifestyle and motorsports events—an in-person opportunity to interact with other Mustang fans.

▼ **ChargeScape LLC** aims to unlock the full potential of EVs through conveniently managed energy services never possible with gasoline-powered vehicles, as equal ownership by BMW Group, Ford and Honda leverage years of cross-industry

research around an Open Vehicle-Grid Integration Platform (OVGIP), creating a single platform to seamlessly connect electric utilities, automakers and interested EV customers in the US and Canada. The effort aims to provide EV customers financial benefits through EV-enabled grid services, while supporting grid resiliency. ChargeScape's single platform will eliminate the need for individual integrations between each automotive brand and each electric utility, giving utilities access to EV battery energy across a wide pool of EVs. Participating EV customers will have the potential to earn financial benefits by charging at "grid-friendly" times through flexible and managed schedules. The closing of the transaction and subsequent formation of ChargeScape is pending regulatory approvals, with the company expected to be operational early next year.

▼ Inspired by the **Mercedes-AMG G 63** "Grand Edition," IWC Schaffhausen has unveiled the Big Pilot's Watch AMG G 63, a timepiece combining an elaborately finished 18-carat Armor Gold case with a textured black dial and black rubber strap with microfiber inlay. The black dial is distinguished by a relief-effect technical texture inspired by the front grilles and air intakes of Mercedes-AMG performance



cars. While the numerals and indices on the classic Big Pilot's Watch are printed, the AMG G 63 edition features 3D appliques, coated in black using PVD (physical vapor deposition, a vacuum-based form of thin-film technology) and filled with beige luminescent material. The white rings of the sub-dials for the small seconds at 9 o'clock and power reserve at 3 o'clock mimic the headlights of the G-Class. ■



## UPCOMING FEATURES

**Chevrolet Colorado Trail Boss**



**Ford Bronco Wildtrak**



**Nissan Pathfinder Rock Creek**



**Ford Mustang GT Coupe**



**Sally McNulty - Arizona racer and race car builder**



**Audi Q8 e-tron**



**January Arizona Auction Week**



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