

ARIZONA DRIVER

THE ENTHUSIAST'S GUIDE TO LIFE BEHIND THE WHEEL

VOLUME 23 NUMBER 6
NOVEMBER-DECEMBER 2024

ROAD TRIPS!
COMPARO EVENTS!
FALL AUCTION RESULTS & JANUARY INFO
TECH: HYDROGEN, COMFORT, COUNTERFEITING
HOT WHEELS LEGENDS
TRUCKS, EVS, SUVs, SEDANS
AZ511 TO PUERTO PEÑASCO
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Toyota RAV4 Hybrid
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Thursday, October 10, 2024: Drive Toward a Cure celebrates Sam Posey as a Legend of Motorsports and Champion of Parkinson's at Lime Rock Park, CT.

We are inspired by the **Cars and Camaraderie**® within automotive culture, found in equal measure among both enthusiast communities and industry professionals. **Drive Toward a Cure**® events harness the passion for cars and driving and turn that power into support for ongoing efforts to improve the lives of those living with **Parkinson's Disease**, as well as the research that will hopefully one day lead to a cure.

From our *signature* events, to the grassroots movement of programs from coast-to-coast, we invite you to join us as we **Drive Toward a Cure for Parkinson's Disease!**

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FOR PARKINSON'S RESEARCH

The Drive Toward a Cure
Special Assistance Fund

ARIZONA DRIVER

THE ENTHUSIAST'S GUIDE TO LIFE BEHIND THE WHEEL

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COVER: There may be no more scene in Arizona more familiar than Monument Valley, which, ironically, is really mostly in Utah. Timing is everything on our road trip to Colorado in the new Toyota RAV4 Hybrid Woodland Edition, as you will want to make good time, yet not miss this and many other scenic wonders in daylight.



START YOUR ENGINES : FROM THE PUBLISHER

Despite our focus on Arizona, our coverage can extend beyond our four walls. It may be for a new vehicle launch program or a big show in another state. Sometimes it's for a business or event that's headquartered here yet generates news elsewhere.

It's also fairly regularly because we belong to automotive press associations nationwide, several of which hold insightful regional comparo events. We generally catch the ones in the Pacific Northwest and Texas—partly due to their presence, structure and manufacturer participation and partly because there are solid commonalities between their markets and favored machinery—and our own.

We signed up for multiple regional comparos this cycle. NWAPA Drive Revolution (in Washington State, just outside Portland, Oregon) is an evolved consolidation of performance vehicle Run to the Sun and new-tech powertrains. Another is TAWA Texas Truck Rodeo. At both, vehicles, terrain and function bear great similarity to Arizona. This issue has full information on entries and winners at NWAPA, but just a phase one rundown of Texas, as they have decided to no longer let anybody know who won anything until considerably later, in fact in two waves, later and later still—frustrating, but still informative to a point. We were signed up for a third one, too—WAJ Best of the Bay, running out of Santa Cruz, California, a favored getaway for Arizonans, not far from the Monterey and Pebble Beach events of August. However, that hit a snag.

Another type of out-of-state coverage can happen when a host of factors align and turn into a road trip. Such a case turned out to conflict with Santa Cruz, but brought us on one of our favorite drives, up through northern Arizona, Monument Valley and Moab, and on into Western and Northwest Colorado—in a new version of the top-selling Toyota RAV4, the Hybrid Woodland Special Edition.

For you, armchair travel time, perhaps an inspiration to hit the same route. Enjoy the ride!

Joe Sage - Publisher/ Executive Editor

ARIZONA DRIVER
MAGAZINE



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RMAPRocky Mountain Automotive Press
SAMASouthern Automotive Media Association
TAWATexas Auto Writers Association
TxMPATexas Motor Press Association
WAJWestern Automotive Journalists

ACMLeMay—America's Car Museum
SturgisSturgis Motorcycle Museum & Hall of Fame
USFRAUtah Salt Flats Racing Association
USMAUnited States Motorsports Association

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AUTOMOTIVE NEWS UPDATE



Dodge Charger Daytona Scat Pack

▼ **Dodge** has revealed the final performance character of the all-new Charger Daytona's Fratzonic Chambered Exhaust system, a patent-pending system shattering preconceptions of the typical battery-electric vehicle, bringing a signature rumble and tactile sound wave output as the soundtrack for the all-electric 2024 Dodge Charger Daytona R/T and Dodge Charger Daytona Scat Pack. The Fratzonic name is inspired by the Dodge's brand's historic Fratzog logo, now a new symbol of Dodge brand next-generation vehicles and prominently featured on the all-new Charger. The Charger Daytona SRT Concept, revealed in August 2022, teased a prototype version of the Fratzonic Chambered Exhaust audio profile. Dodge continued to fine-tune the system's performance notes before locking in the new Charger's one-of-a-kind personality. The system is equipped with dual bespoke, high-efficiency extreme bandwidth transducers coupled with dual Fratzonic Chamber-loaded passive radiators, all housed in a custom enclosure and powered by a dedicated amplifier with up to 600 watts of power. System features work in concert to generate a deep rumble and visceral feel that aligns with Dodge identity. Four custom-designed elastomer isolator bushings support the Fratzonic system, working similarly to the isolators of an internal combustion engine exhaust to further enhance the vehicle's performance profile. The system incorporates driver and vehicle inputs, such as accelerator pedal position,

speed and torque. Distinctive vehicle sounds provide welcome driver feedback, especially on the track or at elevated speeds, to enhance an immersive in-car feel. Sport, drag, drift, donut and track modes all have varying acoustic intensity; a fully silent stealth mode is also available. Two-door coupe versions of Charger Daytona R/T and Dodge Charger Daytona Scat Pack began production this summer; production of four-door Daytona models will begin in the first half



Expedition Motor Company 1991 Mercedes-Benz 250GD Wolf

of 2025; and gas-powered two-door Dodge Charger SIXPACK HO and four-door Dodge Charger SIXPACK SO models are scheduled to begin production in the second half of 2025.

▼ **Expedition Motor Company (EMC)** specializes in restoring the vintage Geländewagen (G-Wagen), transforming each vehicle to meet modern driving conditions

while preserving their vintage charm. EMC prides itself in exceptional craftsmanship and intimate knowledge of the G-Wagen, as the basis for achieving everything possible from a vintage G. Their recently completed 1991 Mercedes-Benz 250GD Wolf was freshly restored and upgraded in about 2,300 man-hours over four months. The exterior features an all-new colorway in Meringue Yellow paint. The interior has Elephant gray-colored weatherproof upholstery. The car comes with two tops, the bikini and full soft top—bikini for open-air driving with front seat coverage, full soft top delivers comprehensive coverage against the elements, as well as a safari-style experience when the sides are rolled up. The custom rebuild also features wireless Apple CarPlay, a backup camera, and heat and AC. With adaptability in mind, EMC's revamped 1991 Wolf features the enduring OM602 diesel engine mated to a rebuilt 722.6 automatic transmission. Each EMC Wolf is subject to an in-depth inspection process upon completion. This vehicle was priced at \$204,400. For more information on available builds, please visit

www.expeditionmotorcompany.com.

▼ **Mercedes-Benz** Classic has brought an original racing car from 1924 back to life at international events. One hundred years after Mercedes' triumph in the legendary Targa Florio endurance race in Sicily on April 27, 1924, a Mercedes 2-liter racing car used at the time returns to the road. The racing car with its characteristic red

paintwork is a highlight in the 130 years of Mercedes-Benz motorsport. It has been restored from the company's own collection, to the highest standards of authenticity. In the early 1920s, the Targa Florio was



Mercedes Targa Florio red racer

a top event in European motorsports, offering German companies an important opportunity because, after the First World War, they were initially excluded from participating in the European Grand Prix Championship. Mercedes took second place overall in 1921, and a privateer won in a Mercedes in 1922. In 1924, the brand came back to compete with a new racing car, based on designs by Paul Daimler. Ferdinand Porsche, technical director and chief development officer of Daimler-Motoren-Gesellschaft from April 1923 on, developed it to the point where it was ready to race. The racing team travelled from Stuttgart to Sicily with four 2-liter competition cars, under their own power. Mercedes entered three of these in the Targa Florio and Coppa Florio. Its red paintwork, actually reserved for Italian vehicles, was a highlight, intended to prevent any potential interference by Italian fans during the race. (German racing cars were usually painted white back then.) Mercedes works driver Christian Werner won the Targa Florio over a distance of 432 kilometers (four laps of 108 kilometers each) in the number 10 car, clocking a time of 6:32:37.4 hours. It was the first victory in the Targa Florio for a driver from outside Italy. Werner also led the team in a triple class victory for racing cars with a displacement of up to 2 liters. In the overall standings, Christian Lautenschlager (number 32) finished in 11th place, Alfred Neubauer (number 23) in 16th place. The Mercedes team received the Coppa Termini as the best

factory team. Werner then put the icing on the cake—another lap was required for the Coppa Florio classification. The works driver from Stuttgart also won this contest with a total of 8:17:1.4 hours. His team-

mates finished 9th (Lautenschlager) and 13th (Neubauer). In 2022, Mercedes-Benz Classic decided to rebuild the original 2-liter Targa Florio racing car from the company's own collection, as authentically as possible, for the anniversary. It is the vehicle in which Christian Lautenschlager completed the Targa Florio in 1924, as Werner's winning car has not survived. Removal of the racing car from the Mercedes-Benz Museum was followed by a meticulous in-



Bentley Continental GT Speed

ventory analysis and extensive search in the Mercedes-Benz Classic Archive—the brand's "memory". Original technical drawings and historical photos are crucial sources for the authentic restoration. The Classic Center carries this out together with a network of experts. Repair of the supercharged engine included welding work on the housing, reworking the original camshafts and restoring screw connections

with hybrid threads typical of the time. Having been converted by a private customer in the 1920, the racing car's body work was restored to its original condition according to historical blueprints. And de-



tailed analysis of small remnants of the original paintwork provided information about the color scheme and method of painting in 1924.

▼ The new, fourth-generation Continental GT Speed has arrived in the US, **Bentley's** biggest market. Leading the charge is a bespoke one-off example commissioned through Mulliner, Bentley's in-house personalisation division. The new

Continental GT Speed coupe and convertible made their US public debut at The Quail, A Motorsports Gathering, in August, followed by an official US tour for the new model, including customer test drives. Its Ultra Performance Hybrid powertrain features a 4.0-liter twin-turbo V8 paired with a powerful electric motor rated at 782 PS

KEEP RIGHT >>

(771 bhp) and 1,000 Nm (738 lb-ft), making the new GT Speed the most powerful and dynamic Bentley yet.

▼ The new **Porsche 911 Carrera GTS** is



Porsche 911 Carrera GTS drive technology

the first road-legal 911 to feature a particularly lightweight high-performance hybrid powertrain. The newly developed, innovative engine not only allows for another significant increase in power and improved acceleration—it is also readying the vehicle for future emission standards. At the heart of the technology is the electrically assisted turbocharger, with an electric motor between the turbine powered by exhaust gas and the compressor. Its function is to hit high speeds in a flash upon acceleration and build up boost pressure immediately without delay. The turbocharger is given wings by the small electric motor. “The technology enables responsiveness similar to that of a naturally aspirated engine,” explains 911 combustion and hybrid system project manager Matthias Hofstetter, “and the acceleration figures are comparable with those of our all-electric sports cars.” Acceleration at lower speeds is sensational, with multiple measures leading to the desired outcome. Displacement has increased again from 3.0 to 3.6 liters, while the combustion engine now only needs one rather than two turbochargers thanks to its electric assistance—coupled with improved responsiveness and greater dynamism. As a benefit of the high-voltage system, the alternator and air-conditioning compressor could be powered by electricity, meaning the fan drive was no longer needed. The 20 percent flatter crankcase creates space for the additional components, such as the pulse-controlled inverter feed and DC/DC converter. This means

weight management coupled with a noticeable performance boost. The engine with electrically assisted turbocharger initially being offered in the GTS version delivers 398kW (534 hp) and 610Nm (450 lb-

ft) of torque. The powertrain also includes a permanently excited synchronous motor incorporated into the new, reinforced, eight-speed PDK dual-clutch transmission. This assists the boxer engine right from idling speed. All-electric locomotion as with a plug-in hybrid was not the objective with the 911 as a T-hybrid. Instead, the battery benefits from a system-based advantage of the electrically assisted turbocharger—exhaust energy recuperation. The electric



355 by Evolto

motor in the exhaust gas turbocharger also works as a generator, of up to 11 kW (15 hp) that it extracts from exhaust gas energy, a principle both simple and fascinating. The electric motor works like a speed control—as soon as boost pressure spikes due to higher revs per minute, the motor decelerates the turbine. This generates electricity, which is then fed into the battery or the electric engine. Thanks to

this efficient energy recuperation, the relatively small battery is more than adequate for day-to-day usage, especially as the cell chemistry has been specifically designed with the T-hybrid needs in mind. Another advantage of the electric turbocharger: the familiar waste gate is superfluous, a world first in this form. Energy that once bypassed the turbine used to evaporate, unused, but the pressure regulation now generates electrical energy, for a positive effect on engine efficiency and therefore also fuel consumption. The six-cylinder boxer engine in the 911 remains a compact powerhouse, entirely in keeping with the tradition of the innovative engine Hans Mezger invented for the original 911.

▼ **Evoluto Automobili** has arrived in the US for the first time, visiting Los Angeles and Monterey Car Week for private customer viewings of the 355 by Evolto, ahead of first production beginning in Q1 2025. The car is the first remastered icon from the brand, bringing together the best in British design and engineering to create a modern-day Peak Analogue driving experience, blending modern engineering with a passion for engaging driving. A development team of 250 have brought this car from concept, through feasibility and CAE simulation, to detailed engineering, chas-

sis development and design for manufacture. While in the US, the car begins its final dynamic road testing, to validate the DRVN Advanced Engineering team’s computer simulations, as dynamics and suspension are finely tuned and crafted. The location of bonded structural carbon panels increased torsional stiffness of the car by 23 percent and body efficiency by 13 percent, all targeted changes. ■

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Try this on for size

Subtle differences between fraternal and identical twins BY JOE SAGE

Mazda has been migrating to a new lineup over several years—partly in line with industrywide electrification efforts, variously meaning increased development of hybrid internal combustion powertrains, new platforms suitable for adaptation to either ICE or EV, or new pure EVs.

And the emphasis is on SUVs. The only other models remaining currently are one sedan—the compact Mazda3—and the everyone-hopes-eternal MX-5 Miata. On the SUV side, single-digit models, e.g. the CX-9, have migrated to double-digits, e.g. CX-90. But it's not pure replacement: for example, they currently still have the CX-5 as well

as a new CX-50. Along with those are the smaller CX-30 (the only pure EV as of now), a larger CX-90 and for 2025, their newest, driven here, the CX-70.

It's a complex evolution of sorts. A CX-7 (2007-2012) was discontinued when the similarly-sized CX-5 joined the family. That one has been so popular, it seems it has been around forever, and that's probably why it still is, even in the presence of the new CX-50. The new CX-70, however, is closer in size to the CX-90—in fact it is identical, the same vehicle in every key regard, except that the CX-70 is a two-row, to the CX-90's three.

Aside from the obvious difference in seating ca-

capacity, this gives the CX-70 default cargo capacity within four-tenths of a cubic foot of the CX-90 with its third row down. Information charted at lower right shows the two have almost identical lineups. If you are sure you'll never need a third row, your savings with CX-70 is just \$500 across the board. But the CX-90 and CX-90 PHEV also each have a lower base trim, saving thousands. Fuel mileage is exactly the same for either CX-70 or CX-90 in any of their three powertrains, with no change from removing that third row.

Yes, the addition of CX-70 is a head-scratcher. We might guess that it will be further differentiated in the future. Perhaps it will go full-EV, like the CX-30. But perhaps so will CX-90. Or perhaps full-EV had been the intent for this model, but they

held off for now, also happening industrywide.

The Turbo group has a 280-horsepower 3.3-liter inline-six, while Turbo S versions have the same but upped to 340 hp (with premium fuel), both with a 48-volt mild hybrid boost. Pricier PHEVs have a 189-hp 2.5-liter four-cylinder, combining with the hybrid component. Though the PHEVs are over 300 pounds heavier, they are rated the same for full gasoline MPG, though their stated 26 miles of all-electric range may clinch the deal for those whose driving and charging patterns specifically benefit.

Power is plenty in our Turbo S, and even the base Turbo compares well with a number of competitors. The CX-70 (or -90) can surprise you by looking larger than it seems or smaller than it seems, depending what it's parked next to. Its turning circle is fairly tight and feels even tighter.

A nitpick was with the rear and 360-degree

camera views—on the one hand cleverly combining multiple angles and content, but by default (no matter how we tried) giving a split image straight to the rear, plus along the rearward sides, which made it difficult to tell where the actual limits of the vehicle were when backing into a parking space—and the dive into the system to change to one conventional view was cumbersome and often would revert, anyway. Features overall can be a mix of straightforward, yet full of electronic complexities and confounding details.

The CX-70 is well packaged, considering its ample passenger and cargo capabilities. It's generally handsome, if somewhat nondescript. Mazda declared several years ago that they would distinguish themselves among other brands by offering a more premium level overall, while maintaining a high value formula. They have done this well. ■



SPECIFICATIONS

ASSEMBLY	.....Hofu, Japan
ENGINE/TRANS BUILD	.....Japan / Japan
PARTS CONTENT	.....Japan 90% / US/Can 0%
ENGINE	.....e-SKYACTIV G 3.3L inline-6 turbo high PT, alum/alum, 48V mild hybrid boost
HP/TORQUE	.....340 hp / 369 lb-ft
COMPRESSION RATIO	.....12.0:1
TRANSMISSION	.....SKYACTIV 8-spd auto
DRIVETRAIN	.....AWD
TOP SPEED	.....130 mph
SUSPENSION	.....F: double-wishbone; R: multi-link
STEERING	.....elec power rack & pinion
BRAKES	.....F: 13.7 vented; R: 13.3 vented
WHEELS	.....21-in alum alloy, black metal, machine cut finish
TIRES	.....275/45 R21 all-season
LENGTH / WHEELBASE	.....200.8 / 122.8 in
HEADROOM (F/R)	.....39.6 / 38.4 in
LEGROOM (F/R)	.....41.7 / 39.4 in
GROUND CLEARANCE	.....(21-in wheels) 8.1 in
TURNING CIRCLE	.....38.1 ft
CARGO CAPACITY	.....39.6 / 75.3 cu.ft
TOW CAPACITY	.....(w pkg) 5000 lb
WEIGHT	.....4863 lb
FUEL / CAPACITY	.....reg unl / 19.6 gal
MPG	.....23/28/25 (city/hwy/comb)

BASE PRICE	.....\$55,950
PAINT: Polymetal Gray Metallic	.....450
DESTINATION CHARGE	.....1375
TOTAL	.....\$57,775

2025 MAZDA CX-70 LINEUP

3.3 TURBO	.....AWD
Preferred	.....\$40,445
Premium	.....45,900
Premium Plus	.....48,900
3.3 TURBO S	.....AWD
S Premium	.....52,450
S Premium Plus	.....▼ 55,950
PHEV	.....AWD
Premium	.....\$54,400
Premium Plus	.....57,450

2025 MAZDA CX-90 LINEUP

3.3 TURBO	.....AWD
Select	.....\$37,845
Preferred	.....40,945
Premium Sport	.....46,400
Premium Plus	.....49,400
3.3 TURBO SAWD
S Premium\$52,950
S Premium Plus56,450
PHEVAWD
Preferred\$49,945
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Shown: Vintage Iron Speed Shop Clock / SKU: 09-BKG-VI

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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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Safety-relevant brand protection

Mercedes-Benz has taken on the fight against counterfeiters, in close cooperation with trade supervisory and law enforcement authorities. The focus is on safety-related counterfeits, which can be a danger to all road users if they do not have the quality of genuine parts. For example, in May and June 2023, paper air filters were seized, which can cause serious accidents after installation. Counterfeit brake, wheel, body and steering parts were also seized. All are destroyed after seizure. In 2023 alone, the authorities seized over 1.6 million Mercedes-Benz counterfeits in over 740 raids worldwide. The number of raids increased significantly, by almost 20 percent over the previous year.

"The counterfeiting industry generates enormous margins and has the structures of organized crime, says Renata Jungo Brüngger, member of the Mercedes-Benz Group AG board of management for integrity, governance and sustainability. "It endangers road safety, takes no account of the environment, and stands neither for fair wages nor for occupational safety. There are no quality controls.

"By taking action against these highly criminal structures, consistently and with all legal means, we protect not only the reputation of our brand, but also our customers, other road users and ultimately all victims of the counterfeiting industry.

"In close cooperation with the authorities, we were able to track down many counterfeit factories directly." In 2023, an average of more than two raids per day took place worldwide.

Raids are often preceded by months of investigation and preparation. The brand protectors at Mercedes-Benz check offers on websites, investigate indications of counterfeiting and conduct intensive research to identify the counterfeiters' factories. The team makes the results available to the authorities responsible for conducting raids. In order to reliably detect product counterfeits, a trained eye and many years of experience are necessary, because a counterfeit often hardly differs visually from a genuine part. The global Intellectual Property Enforcement Team at Mercedes-Benz are therefore repeatedly called in by authorities to quickly verify counterfeit parts.

Counterfeiting networks are increasingly moving to online platforms and social media to distribute counterfeit products on a large scale. When trading, counterfeiters use the extensive anonymity and decentralized nature of online marketplaces and technologies. Mercedes-Benz is therefore continuously expanding its strategic and operational anti-counterfeiting measures, including in online retail. In 2023, the brand protectors have deleted over 142,000 offers of counterfeit Mercedes-Benz products and content infringing trademark rights.

The brand protection strategy is based on three pillars: tracking down, attacking and preventing. Mercedes-Benz brand protectors regularly support customs authorities and service providers with training events and provide information material to raise awareness.



How to avoid falling for counterfeits

A few simple criteria can help consumers avoid falling for counterfeit products. It starts with the careful examination of conspicuous offers in everyday online life. Typical alarm signals to identify potential counterfeit products include significantly lower prices, abnormalities in product quality or sales via dubious sources. In some cases, it is immediately apparent that the products cannot be genuine by the product images or designations, for example if Mercedes-Benz does not manufacture these products itself. However, the layperson will hardly be able to visually distinguish many of the offers from genuine products. ■



FLYWEIGHT CHAMPION EV BY JOE SAGE

It seems most EVs have come to fruition quick, big, expensive and premium featured—quite distant from the original concept as a simple plug-and-play local vehicle. Fiat returns the concept to its roots with the new 500e—still quick and well featured, styled to beat the band, but notably small, with price following accordingly.

In fact—as they emphasized when we drove it at NWAPA Drive Revolution (also in this issue), the entire Fiat 500e weighs less (at 2952 pounds) than just the battery alone in some of the other EVs we drove at that event. Equilibrium achieved.

The Fiat 500e is breaking new ground by breaking old ground anew. Remember the first EVs a decade or more back? People were afraid we were facing a future of small, low-powered golf carts. Instead, the EV realm developed appeal through unexpected power, size and degrees of luxury. The 500e brings us back toward the original concept in terms of size, but with every benefit, advance,

advantage and breakthrough that has come to EVs through those years of evolution.

You can compare its specs among all ten EVs we had just driven at NWAPA, which in fact was just the week before, good prep for when this copy arrived at our offices for a full week.

The first thing most people note about the 500e is that it is small—and it is, but then again it isn't. Their redesign for generation three brings a car they say is marginally larger, but feels significantly larger. If you look at just the cabin, it can feel about as roomy as an extended cab midsize pickup. Front legroom is a fraction less than 42 inches, about as generous as anything gets. (Rear legroom is minimal.) Its tidy engine compartment and hatchback profile are what make it small overall.

For use around town, in particular, this is a best-of-both-worlds formula. This car is phenomenally maneuverable—its remarkable 31.5-foot turning circle proves that.

It's just not so optimal for long road trips, with minimal cargo capacity and relatively short electric range. (Minimalists, already likely attracted to the car, will unlikely be fazed by the cargo volume. And a 35-minute recharge time can still enable certain road trips, with a little planning.)

The 500e is stylish, too. Not only is it one of the most recognizable vehicles on the road, with a genuine European flair, but the attention to detail (see photos at upper right) makes you wonder why everybody else seems to miss a lot of opportunities. Everything has its own special Italian touch.

This electric Fiat's pep is what really hooks you. Power is one thing, but power-to-weight is what matters, and, along with the full-torque-from-zero aspect of an EV, the 500e puts a smile on your face with every mile. It's quick, with a highly responsive throttle, and very precise, with its battery-based low center of gravity leaving not a trace of front-drive build. Rear suspension is very simple, and it



has drum brakes in the rear, but you would never notice either, other than for how effective both are. The suspension, while appealingly firm, also gave us smooth passage over familiar, notoriously punishing freeway seams. Cabin visibility is fantastic.

A blast to drive, it's like being a teenager who just got a license—it'll have you thinking up more errands, just to take it for another spin.

This EV is the only Fiat 500 for 2024, starting at \$32,500, with most trims \$36,000 (including our "Inspired by Beauty" and a variety of other "Inspired by" versions). Also still available as of now, however, is the four-door gasoline 2023 Fiat 500X.

This thing should sell like hotcakes—or silver-dollar pancakes. It's responsive, accurate, economical and downright cute. But it has been off to a slow start, not yet widely discovered by the buy-

ing public, unfortunate in its own right, but also as the greater corporation navigates shifting sands of EVs, the latest flavor of EU directives and other factors. (It's just now making the rounds with the media, and we can't help but notice that our colleagues have also loved this little guy.)

Fiat, in fact, is the best-selling Stellantis brand worldwide, at 1.35 million units, out of 14 brands including our familiar Dodge, Jeep and Ram, as well as Peugeot and Opel in Europe. They say Fiat shows the world how relevant—and how Italian—the company is, with it acting as their "Trojan mouse" into the broader market overall.

We certainly hope people start to discover this, and soon, as it deserves a significant spot in the marketplace, in the whole EV story—and perhaps in your very own garage. ■

PINT-SIZE, PURPOSE-BUILT, POTENT, A BIT PRECOCIOUS, WITH GREAT ATTENTION TO DETAIL, AND WITH A SONG IN ITS HEART.



The Fiat 500e comes with its own soundtrack—making a joyful noise with various merry tunes it plays at startup and shutdown (which we never did figure out how to turn off), plus a faint sort of symphony as you pass about 20-21 mph.

SPECIFICATIONS

ASSEMBLY	Turin, Italy
VEH. TYPE	A-segment mini-compact hatch
SEATING CAPACITY	four
MOTOR	AC 3-phase w perm magnetic rotor
BATTERY	Li-ion, nickel magnesium cobalt, 352V 42 kWh, 96S 2P cell config
HP/TORQUE	117 hp / 162 lb-ft
TRANSMISSION	gear reducer 1-spd auto
DRIVETRAIN	FWD
TOP SPEED	94 mph
SUSPENSION	F: MacPherson strut; R: twist-beam axle
STEERING	elec power, column
BRAKES	F: 11.06 x1.02 vented disc; R: 7.99 x1.49 drum
WHEELS	17x6.5 cast alum, gloss black painted w diamond finish
TIRES	205/45 R17 BSW summer, Goodyear Efficient Grip Performance or Pirelli Cinturato P7 all-season
LENGTH / WHEELBASE	142.95 / 91.4 in
GROUND CLEARANCE	4.48 in
TURNING CIRCLE	31.5 ft
HEADROOM (F/R)	39.25 / 35.35 in
LEGROOM (F/R)	41.81 / 29.45 in
CARGO CAPACITY	7.51 cu.ft
WEIGHT	2952 lb
WEIGHT DISTRIBUTION (F/R)	58.9 / 41.1%
CHARGING CONNECTOR	CCS Combo1
CHARGING TIME:	
LEVEL 1 120V 13A	(5-100%) .....37 hours
LEVEL 2 240V 48A	(0-100%) .....6 hours
85 KW FAST CHARGE	(0-80%) .....35 min
RANGE	149 miles
MPGe	121/100 (city/hwy)
BASE PRICE	\$36,000
SELECT FEATURES:	one-pedal driving, electronic stability control, lane-departure warning-plus, drowsy driver detect, traffic sign info, rain-sense wipers, ParkSense rear park-assist, 7 airbags, keyless Enter 'n Go, cluster w 7-inch TFT display, Uconnect 5 Nav w 10.25-inch touchscreen, SiriusXM 360L, 6 speakers, wireless Apple & Android, 4G LTE Wi-Fi hot spot incl trial, Alexa built in (Wi-Fi req'd), wireless charge pad, front row USB A&C, pushbutton start, LED headlamps & tail lamps, Level 2 active driving assist (ADAS), blind-spot monitor & cross-path detect...incl
DESTINATION CHARGE	1595
TOTAL	\$37,595

CURRENT FIAT 500 LINEUP

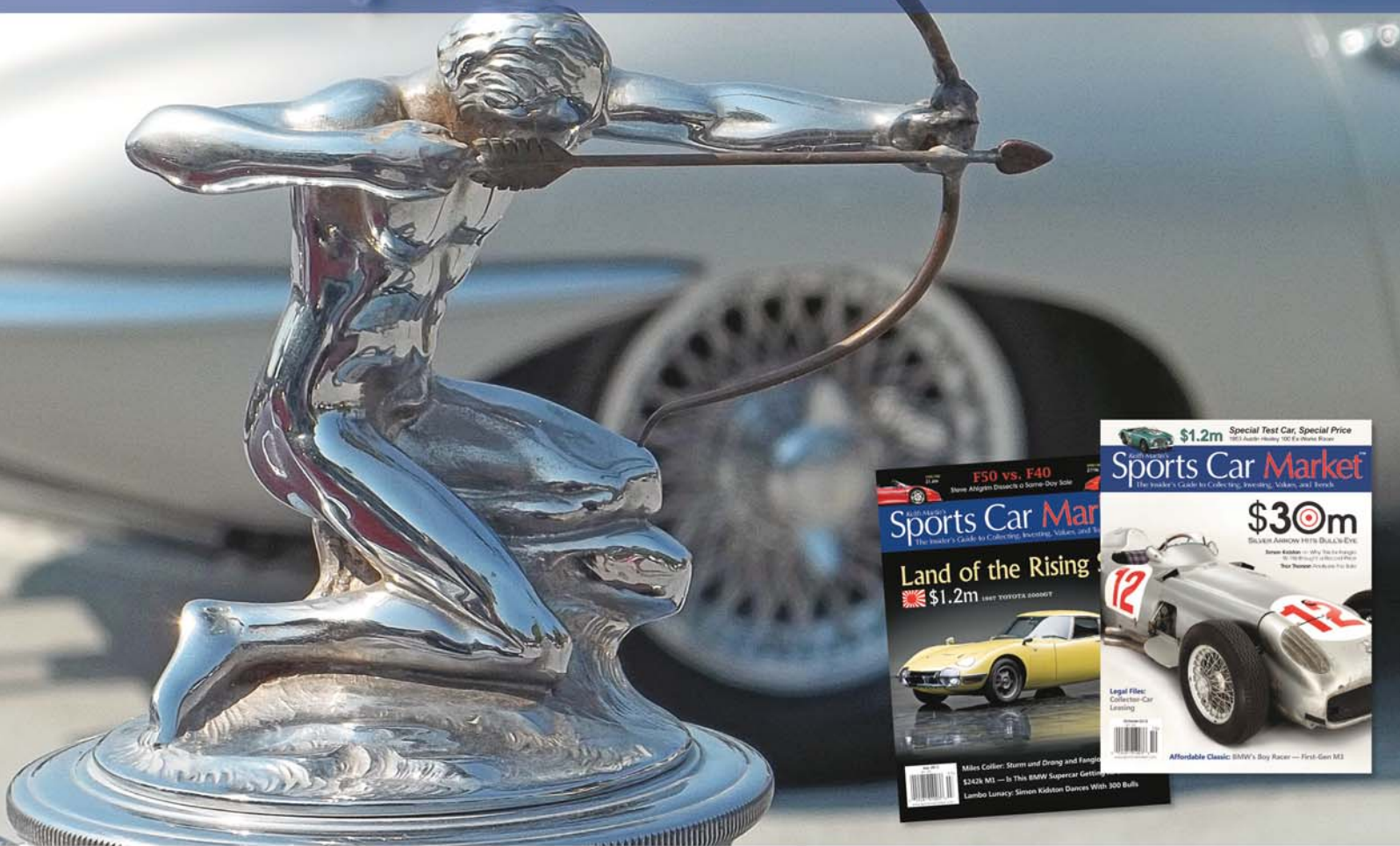
500e (2024 model)	
Inspi(RED)	\$32,500
Inspired by Beauty	▼ 36,000
Inspired by Music	36,000
Inspired by Los Angeles	36,000
500X (remaining 2023 inventory)	
Pop	\$30,245
Sport	33,275

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NIKOLA CONTINUES TO EXPAND HYDROGEN INFRASTRUCTURE

NEW HYL A STATION IN LA COUNTY SUPPORTS “HYDROGEN HIGHWAY”

Nikola Corporation, a global leader in zero-emissions transportation and energy supply and infrastructure solutions—headquartered in Phoenix, with a manufacturing facility in Coolidge—continues to deliver HYL A refueling solutions to support volume ramp-up for its Class 8 hydrogen fuel cell electric trucks in Southern California, with a new location just off the I-5 Freeway, one of the busiest truck routes in the US.

Located at 13443 Freeway Drive in Santa Fe Springs, this new HYL A modular refueling station is located at Tom's Truck Center, an important part of the Nikola sales and service dealer network. It supports Nikola's goal of 14 refueling solutions by year-end, reflecting a mix of HYL A and partner stations available for

their customers.

Nikola continues to launch stations and deploy assets based on anticipated demand, with the main objective of staying ahead of hydrogen fuel cell electric truck deployment to ensure fueling solutions are ready and available for end fleets. Complementing the infrastructure network is round-the-clock assistance through dedicated HYL A Ambassadors and Operation Technicians for seamless and efficient fueling.

The HYL A refueling network is structured to offer a diverse portfolio of solutions for Nikola's hydrogen fuel cell electric vehicles and additional Class 8 customers, including modular and permanent HYL A stations, “behind-the-fence” options, and partnerships such as with FirstElement Fuel in Oakland, California.

With the addition of the Santa Fe Springs station, Nikola has completed a crucial hydrogen fueling triangle in Southern California. This strategic location, together with its Ontario and Long Beach stations, now forms a network that spans multiple counties, serving a population of over 12 million people.

As an integrated truck and energy company, Nikola is pioneering solutions for a zero-emissions world, transforming commercial transportation, with Class 8 vehicles, including battery-electric and hydrogen fuel cell electric trucks, and energy brand HYL A, advancing the complete hydrogen refueling ecosystem.

Follow Nikola on Facebook, Instagram, YouTube, LinkedIn and X (formerly Twitter), or visit online at nikolamotor.com. ■



Smaller Toyota takes a big trip

WIN-WIN: IT BOTH BENEFITS FROM AND BELIES ITS SIZE BY JOE SAGE

Toyota RAV4 has evolved from a tiny vehicle in the 1990s, growing a bit larger as tastes grew smaller, a combination that has led to compact SUVs and crossovers being the hottest segment in the marketplace—and RAV4 the top seller in this segment for six years running.

We were so impressed with the fifth generation RAV4 when we first drove it, completely transformed in style and substance, it went straight to our cover (November-December 2019). It seems to have been a big player in moving the whole industry into a new age of utilities that move away from an era of curvy lookalikes and return to a more utilitarian form. And the marketplace says yes.

We've driven a number of iterations of the gen-five RAV4 since its introduction. Our first had been of the RAV4 Adventure. And our most recent was a new RAV4 TRD Off-Road last spring, as our local wheels in Washington State during an event. Both have special trail capabilities built in (see last paragraph of sidebar on final page).

Here, we're driving a new, third trail version—the RAV4 Hybrid Woodland Edition (or Woodland Special Edition, in some references). This has its own advanced off-roading build, along with specific style points and added features. (See that same

final sidebar for full Woodland details.) Woodland Edition is a Hybrid only, moving it toward the 40 mpg range, though a little less than others due to its larger wheels and other additional content.

We knew this RAV4 would be special, so we planned a nice long road trip with it. Or maybe it was the other way around—we had a road trip on the horizon and knew this would be great for it.

SCHEDULES & LOGISTICS: It started out busy but simple. We had a multi-day event coming up here in Arizona, directly followed by our third regional vehicle comparo event in a row, this one in Santa Cruz, California, our first time participating. But before we said yes to Santa Cruz, we had to check on a potential family milestone event in Colorado, to make sure it didn't conflict.

Good news. We confirmed the Colorado affair would be the following weekend, so we signed up for Santa Cruz, arranged wheels for getting around there, as well as wheels for a Colorado drive, and marked the calendar for a perfect back-to-back-to-back sequence: the four-day Arizona event, fly to three days in California, fly back, then drive to Colorado, via Utah, taking another six or so.

Then, surprise! The Colorado event was moved

to the weekend prior, conflicting directly with both Arizona event and California—we basically had to be in all three at the same time. Could it be done?

The harder we worked on it, the clearer it was that we would not only need our own jet, but time travel, as well. So we caught what we could of the Arizona event, replanned our Utah-Colorado details and unfortunately scrubbed the California event.

That whole drill also focused us on the 18 mpg of our originally planned wheels. Then we found we could move to the RAV4. We were already fans. We also knew it would be twice as good for fuel economy. It has AWD and good ground clearance, in case Colorado had snow (factors for the original vehicle). And forums said an over-six-footer could still lie down and sleep in the back, if need be.

RAV4 ROAD TRIP: Every inch of the Utah-Colorado drive, which we've done many times, begs to be seen in daylight—San Francisco Peaks, Painted Desert, Monument Valley, the Moab area, Colorado National Monument, Glenwood Canyon and all the rest. On top of the scenery, there are a great many deer and other large critters on the roads in Northwest Colorado at night. Pure drive time is about 14 hours. Though you can do it nonstop (and

we have), fuel, food and photo stops lengthen everything and most realistically lead to overnights, thus consuming the bulk of two calendar days each way. But then you do get mostly daylight.

Our Colorado event would be on Saturday night. We loaded up some warmer clothes and a sleeping bag and left the Valley midafternoon Thursday.

We had moved into the RAV4 from something with more than triple its horsepower and felt the difference at first, along with its CVT. But only at first. Seemingly endless major construction heading up I-17 makes us miss the two-lane twists and climbs through Black Canyon, which always provided good insights on any vehicle. Nonetheless, there was plenty of quick lane-changing to be done, and we commended the RAV4's pep and precision the entire time—and this even though we uncharacteristically ran in Eco mode for much of the trip, for added fuel efficiency.

This drive is a solid benchmark for considerations of range (and timing) with any vehicle. It's why a bigger gas tank, or more electric range, is not just a matter of filling up less often around home. On a wide open Western road trip, it can be a matter of not being possible to make it to the next town, thus having to stop far more often, in turn adding hours to a trip, in turn maybe adding another motel night and shortening time available at our destination. RAV4 Hybrid for the win.

We knew we'd be winging it on overnights—keep pushing ahead, but with one eye on the clock and one on the scenery we'd miss at night. From

2024 TOYOTA RAV4 LINEUP

RAV4 I.C.E.: 203 HP, ≤ 27/35/30 MPG	FWD	4WD
LE	\$28,475	\$29,875
XLE	29,985	31,385
XLE Premium	32,875	34,275
● Adventure	---	34,670
● TRD Off-Road	---	38,095
Limited	36,780	38,180

RAV4 HYBRID: 219 HP, ≤ 41/38/40 MPG	4WD
Hybrid LE	\$31,475
Hybrid XLE	32,985
Hybrid XLE Premium	35,875
Hybrid SE	34,170
● Hybrid Woodland Special Edition	▼ 34,695
Hybrid XSE	37,135
Hybrid Limited	39,780

RAV4 PLUG-IN HYBRID: 302 HP, 40/36/38 MPG	4WD
Prime SE	\$41,590
Prime XSE	45,460
● Off-road grades (see sidebar at end).	

Phoenix, potential plans include starting later the first day, getting a few hours out of the way and finishing the drive the next day—with motels in Flagstaff, Cameron or Kayenta; or pushing farther, to a series of small towns in Utah (tiny Bluff, Blanding, Monticello and busy Moab); and then a long stretch to Fruita and Grand Junction, Colorado, followed by a choice of routes (north, then east, or east, then north) to our destination, each with its own challenges on fuel stops and lodging.

We had started in the afternoon, so to see Monument Valley (in the morning), we'd have to overnight in one of those first towns.

We stopped for photos and social media posts near Sunset Point on I-17 at about 4:30 pm, rough-

(cont'd)

SPECIFICATIONS

ASSEMBLY	Woodstock, Ontario, Canada
ENGINE	2.5L Dynamic Force 4-cylinder, 16v DOHC w VVT-iE (variable valve timing-intelligent-electric) intake camshaft, VVT-i exhaust camshaft, alum alloy block/head
HP/TORQUE	176 hp / 163 lb-ft
COMPRESSION RATIO	14.0:1
ELECTRIC MOTOR & BATTERY	
ELECTRIC MOTOR	perm magnet synchr
TORQUE	149/89 lb-ft
BATTERY PACK	sealed lithium-ion (Li-ion)
NOMINAL VOLTAGE	244.8V
HYBRID SYSTEM NET HP	219 combined hp
TORQUE	variously combined per above
TRANSMISSION	electronic CVT (ECVT) w sequential shift mode
DRIVETRAIN	electronic on-demand AWD
SUSPENSION	
	F: indep MacPherson strut, 25.5mm stblzr bar; Woodland Edition is TRD-tuned; R: multi-link w 23.5mm stblzr bar; Woodland Edition w unique shocks, struts, jounce bumpers
STEERING	
	rack-mounted parallel-type elec power-assist rack & pinion
BRAKES	
	F: power-assist 12.0 vented disc; R: 11.1 solid disc; electronic parking brake
WHEELS	
	Woodland: 18x7.0 std alum alloy
TIRES	
	Woodland: 225/60R18; temp spare
LENGTH / WHEELBASE	
	180.9 / 105.9 in
GROUND CLEARANCE	
	8.1 in
TURNING CIRCLE	
	36.1 ft
HEADROOM (F/R)	
	37.7 / 39.5 in
LEGROOM (F/R)	
	41.0 / 37.8 in
CARGO CAPACITY	
	37.5 / 69.8 cu.ft
WEIGHT	
	Woodland 3775 lb
TOW CAPACITY	
	1750 lb
FUEL / CAPACITY	
	.87 oct reg unl / 14.5 gal
MPG	
	Woodland 38/35/37 (city/hwy/comb) (other trims: 41/38/40 city/hwy/comb)
BASE PRICE	
	\$34,695
TWO-TONE EXTERIOR COLOR	
	.500
DESTINATION CHARGE	
	1350
TOTAL	
	\$36,545





We took the same basic route up and back—through the red rocks around Moab (Fisher Towers Road at upper left, on the way back) and Monument Valley (a site commonly taken as emblematic of Arizona, although mostly in Utah). It's been 30 years since Forrest Gump hit the movie theaters, but its classic view of the road through Monument Valley still attracts a great many people today. Western Colorado welcomes you with red rocks reminiscent of everything from Moab to the Grand Canyon, not surprisingly, as it is all part of the same gargantuan Morrison Formation—also the source of more dinosaur finds than just about anywhere, which you can visit in more detail at Grand Junction area museums and park sites. Colorado's brief but famous fall colors also greeted us, along I-70 paralleling the Colorado River through Mesa, Garfield and Eagle Counties (though they had already passed as we headed north from there). Speaking of color, our sample's outdoorsy paint is called not Forest Green, as one might expect for a Woodland Edition, but rather Army Green—making it fit in well with this Bell UH-1 "Huey" helicopter at the Vietnam War Memorial in Fruita, Colorado. Somehow, we took a grand tour of everything but woodlands in our RAV4 Woodland Edition in Colorado or Utah, so we visited the Ponderosas of Coconino National Forest just north of Flagstaff, on the home stretch, at 7000 feet or so elevation (main photo).



ly 50 miles and roughly an hour and a half out.

We could stay in Flagstaff (140 miles) or Cameron (195 miles) and still achieve our destination in Colorado on Friday (575 miles from Cameron, a long day, all the moreso as we had a visit to make along the way). But it'd be better to go a little farther. We drove on to Kayenta (295 miles down, 475 to go), filling our tank at about 10 pm (with the change to Daylight Time on the Navajo Nation). We would always prefer to drive through Monument Valley in daylight, it is such a sight to see. But we decided to push on. Bluff, Utah has a fine inn, but it's relatively pricey and our night would be short. Blanding (roughly the halfway point) and Monticello have quick and easy motels with cafés nearby in the morning. But as it turns out, all those towns were full (and/or it was just getting increasingly too late to wake people up to ask).

We grabbed some water and quickmart snacks and forged on toward Moab, another hour north. It was now 64 degrees out, 50 degrees or so cooler than departure, but we were still fine in T-shirt and shorts. At about 40 minutes, there's a large parking lot, popular with truckers overnighting. It also has restrooms and vending machines, but those were closed. And there's not much privacy for catching a snooze in the back, unless you have a semi with sleeper cab. We'd want some decent sleep, as we had half the drive ahead of us, and we'd still want a shower, as we were stopping for that visit in Grand Junction.

So we forged on, hitting Moab about 2:30 am. There are plenty of motels there, but it was still high tourist season, with one room left, at almost \$400, pricey for 3-4 hours' sleep and a shower. The clerk tipped us off on where best to sleep in the RAV4 and shower at a recreational area in town. But, whereas we had knocked down half the rear seat quickly, upon departure, and roughly spread out our sleeping bag, at that point, it was looking tight. (We realized later it's a 60-40 fold, and we had folded down the smaller side, as we had hastily filled the rest with luggage and gear. Had we folded down the wider side, it would have been twice as inviting. Plus of course you can knock the whole row down.)

It was getting seriously late, impacting the coming day, but we increasingly wanted an actual room. We opted to aim for Fruita, Colorado, an hour and a half away. We headed north on US 191 toward I-70 (skipping scenic Fisher Towers Road, saving it also for the drive back).

We had the roads largely to ourselves by now, noting that our RAV4, even in Eco mode, is quite a performer, a little rocket. We were making time.

Nonetheless, when we hit I-70, we decided to drive 20-25 miles west, to Green River, Utah—

(cont'd)



(Above) Two-lanes and I-70 north of Moab and into Western Colorado offer elbow room and higher speeds (though signs warn of eagles on the highway). Staggered tiers and tunnels of I-70 in Glenwood Canyon along the Colorado River, about 120 miles from its source in Grand Lake. (Below) The Colorado River along Hwy 131 near Bond, about 70 miles from its source, and Fisher Towers Road in Utah, outside Moab, another 250 miles or so downstream.



closer and probably ready for travelers in the wee hours. About five miles along, though, we decided not to lose time going the wrong way—maybe a good idea now, but not as good an idea when the new day dawned. It took another five miles to find a legal turnaround. We arrived in Fruita about 4:30 am. Hello, Colorado. About 570 miles down, 200 or so to go. We had lost sleep-cycle efficiency, to be sure. Grand Junction amounted to a long overdue but too-short visit, a quick lunch and on our way.

There are two (or three) routes to Steamboat Springs from there, all about three-plus hours—up through either Rangely or Meeker to Craig, then east on US 40; or east on I-70, then north on Colorado 131. We took the latter, a chance to make Interstate time, with fewer deer and such on the road, the scenic drive through Glenwood Canyon, and theoretically more places to grab gas.

Grabbing gas easily proved to be highly theoretical, though. Exits are few and often obscured by truck traffic. We exited into the smaller towns and finally found an iffy unbranded station, cautiously putting in just \$15 worth, 80 miles to good gas.

If you think the roundabout people have been

busy in Arizona, you should see Colorado. Small towns are already intensely tightly mapped, and this pushes them toward madness. But it was one of many times we loved the RAV4's tight 36.1-foot turning circle and overall maneuverability.

Fall colors in Colorado are glorious, but brief and unpredictable. We knew we may or may not be lucky. We did have great timing along I-70 and the Colorado River. But heading north, we had pretty much missed the show with the aspens. It's quite colorless from then until the snow flies.

We were gaining altitude on Colorado 131, as well as working through many twists and turns at two-lane highway speeds. The electronic CVT was working hard here, but then again, we had that (partial) tank of mystery gas. Changing to sport mode made no noticeable difference. (Altitude can affect many things, but we did not note any such thing later, after refilling with name-brand gas.)

We got to town with about a quarter-tank left. It was now nighttime, too late for visits. And just as in Moab, they were down to their last affordable room, also pushing \$400. For a drive that can theoretically be nonstop, this was getting pricey.

Although we could have come via the Craig route, but didn't, we opted to push on for another 45 miles or so, despite the long hours so far, to grab a more affordable room west of Craig (then visit a close pal there on Saturday morning).

Steamboat Springs is, of course, a highly active ski-river-hiking-rodeo-and-more town. The joke is that when newcomers arrive in droves each fall for ski season, they are split up on two sides of main street, with one half being assigned big 4x4 pickups and the other side receiving active lifestyle compact crossovers. In other words, this is a prime Toyota RAV4 market, the new Woodland Edition all the moreso. Everywhere we went, there was great interest in our vehicle.

We spent Saturday night at our friends' house, then visited others on Sunday morning. We didn't have to be back till Tuesday night, but we'd never catch up with everybody, had about had it with motels, got restless and headed south.

We would have liked to stop in Grand Junction again, too, but in order to see Fisher Towers Road before it got dark, we drove on through. And just made it (main photo, below). From there, it was

a flip of the drive up—Moab, Monticello, Blanding and Bluff for potential overnights, with Monument Valley in daylight. Putting most of it behind us, we stayed in Blanding on Sunday night, about halfway home (380 miles down, 390 to go).

Monday was the balance of our drive. It was frustrating to realize our flight to the event in Santa Cruz had not even left Phoenix yet, but obviously it would be long gone by the time we could get there. Just fantasy math. Plus we no longer had flights or our car, nor were they expecting us, anyway. Plus we would want to stop for photos whenever and wherever. We fueled up in Blanding and continued south.

The RAV4 continued to impress us, the whole way—and to deliver whatever we needed. Though traffic is generally light, overall, this two-lane route attracts everything from performance cars, to convertibles, to fully loaded campers and trailers, to a fair amount of commercial truck traffic. If we needed to grab a chance to pass, we could always power up in an instant. The RAV4 just never let us down.

We had started the day at about 5 am MDT and

—including hitting extremely backed-up traffic on that stretch of I-17 construction through Black Canyon—arrived back home at about 5 pm MST.

AND IT'S A WRAP: The RAV4 Hybrid's tank holds 14.5 gallons. We had originally guesstimated our trip in round numbers, useful through all the variables—about 40 mpg and about five bucks a gallon. Our final readout was exactly 36.0 mpg (and gas, while expensive, was not quite that high). The RAV4 delivered.

In an era of cookie-cutter lookalikes, the RAV4 is distinctive, all Toyota up front, angular, fast and aerodynamic from the rear. RAV4's popularity has already been easy to spot, and on this trip, we saw its siblings everywhere we went (while we're pretty sure inspiring more sales in our wake).

With Toyota RAV4 now offering three off-road builds (and it would not surprise us if a TRD Pro joins the family in the future), you have a generous set of options, and their pricing lets you compare them on finer points.

The hybrid powertrain of the Woodland Edition is, however, a major point. ■

WOODLAND SPECIAL EDITION

"Go wild in style!" The outdoors-oriented **TOYOTA RAV4 HYBRID WOODLAND EDITION** (base price \$34,695 in its second year for 2024), is equipped with electronic all-wheel drive (e-AWD) and trail-tailored, TRD-tuned suspension with enhanced body control and small-bump isolation. Coil springs are tuned for the trails, with bump stops to maximize compression-direction wheel travel. Twin-tube shocks with internal rebound springs optimize roll control, and unique valving improves body control over large bumps and dips. Its 18-inch six-spoke bronze-color TRD flow-formed alloy wheels bear Falken WILD-PEAK AT off-road tires.

Woodland Edition's Toyota Hybrid System II (THS II) works in sync with the 2.5-liter 4-cylinder Dynamic Force Engine to deliver a combination of performance and efficiency, a 219-hp combined powertrain achieving a 37 MPG combined fuel economy rating. In addition to Sport and fuel-efficient Eco drive modes, Trail Mode acts as a virtual limited slip differential to deliver power to specific wheels for optimized traction as needed.

Style points include dual black chrome-tipped exhaust, black badges and exterior accents including mirrors, outside door handles and rear hatch touches. New this year are a two-tone paint combination and 1.25-inch rear activity mount standard (for a cargo carrier or tray style bike rack). Woodland Edition also has high profile black roof rails and standard cross bars, plus 120V power.

A Weather Package adds heated front seats, a heated leather-trimmed steering wheel, and rainsensing variable intermittent wipers with de-icer function.

A surprisingly spacious interior overall adds a number of details—from a large console, side-by-side cup holders and an open tray for small items, to an in-dash tray for phone and sunglasses. The rear area has a reversible cargo floor insert, as well as side nets for small items, and the 60/40 split rear seats flexibly expand the cargo area.

To tackle earth, water and sun, in addition to standard front and rear mudguards, there are exclusive Woodland-logoed all-weather floor mats and rear cargo mat; standard privacy glass on all rear side, quarter and lift-gate windows; LED projector-beam headlights standard; and integrated fog lights.

OTHER RAV4 OFF-ROAD GRADES

RAV4 ADVENTURE (\$34,670) and **TRD OFF-ROAD** (\$38,095) are standard with Dynamic Torque Vectoring AWD with Rear Driveline Disconnect. Directing up to 50 percent of torque to the rear wheels, this system can also direct more torque to the left or right rear to enhance on- or off-pavement handling. •

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Pilot program will add AZ511 updates to and from Puerto Peñasco

SYSTEM WILL HAVE INFORMATION ON MEXICAN FEDERAL 8 HIGHWAY DURING LONG HOLIDAY WEEKENDS

Arizona is expanding the reach of the AZ511 traveler information system on holiday travel weekends with a pilot program that will include highway restrictions and other traffic-related events on the highway between Lukeville, Arizona, and Puerto Peñasco in the Mexican state of Sonora.

Officials in Sonora will contact the Arizona Department of Transportation's Traffic Operations Center, where operators will enter information in the AZ511 system. The first Mexican Federal 8 highway updates will hit AZ511 over Thanksgiving weekend. The service will benefit travelers originating in both countries.

"ADOT's vision is safely connecting people and empowering the economy, and this joint effort with our partners in Sonora is helping us expand that to peak times for travel to and from Puerto Peñasco," says ADOT Director Jennifer Toth.

Mexico is by far Arizona's largest and most important source of Arizona's international visitors. Puerto Peñasco, also known as Rocky

Point, is a popular destination for Arizonans.

"This is a perfect time to expand the critical traveler services offered by AZ511, as we always welcome increased drive visitation from Mexico during this time of year," said Lisa Urias, Director of the Arizona Office of Tourism. "Visitors from Mexico love coming to Arizona to visit family and shop during the holidays, and AZ511 helps make the international travel experience as enjoyable and efficient as possible."

AZ511 enables the public to check on highway conditions and some local street restrictions by visiting az511.gov, by calling 511 within the state or by using the AZ511 app (download for Apple or Android devices).

This pilot program stems from collaboration among ADOT, the Arizona-Mexico Commission, the Arizona Office of Tourism and the State of Sonora's Comisión Sonora-Estados Unidos. It was announced on October 25 at an Arizona-Mexico Commission conference in Hermosillo, Sonora. ■



Image courtesy Google



POWERTRAIN REVOLUTION & EVOLUTION

By Joe Sage / Vehicle photos: Doug Berger / DBPics.com for NWAPA



We attend the Northwest Automotive Press Association (NWAPA)'s exceptionally well-run comparative drive events to bring you the pulse on the latest hardware and technology. It's a chance to learn a lot about the vehicles we also drive here, under controlled, time-intensive and competitive circumstances, and often with the manufacturers' representatives on hand to add product and development insights and background and to answer questions.

This is a region with quite a bit in common with our home turf—open roads, mountain twisties, rural and urban conditions, demographic mix, the works. Only the weather tends to be a bit different at times. Well, that and the fact that their urban regions in particular tend to be generally farther on the leading edge of such things as next-generation powertrains.

One event is Mudfest—the Outdoor Activity Vehicle of the Year Awards, generally held in spring. At its core, this is an off-road event, but with equal time spent on pavement, just as in real world usage.

Two others over the year—Run to the Sun and Drive Revolution—are pavement-only and have focused, respectively, on open road performance and what used to be called “alternative” powertrains.

Event evolution

The lockdowns and general disruption of the past few years—affecting everything from travel, to lodging, to group activities, to manufacturing itself, as well as to a big Portland consumer tech event that anchored Drive Revolution—led to consolidation of the two paved events, which has proven to be as much an opportunity as a consequence.

Last year, Run to the Sun and Drive Revolution were held together, unified in logistics, location and timing, while the categories were kept separate (with a number of vehicles appearing in both).

Internal Combustion Engine (ICE) Performance Vehicles

	hp	lbft	*mpg	price as tested
2024 Audi RS 6 Avant Performance	621	627	14/22/17	\$149,820
2025 Dodge Durango SRT Hellcat Last Call AWD	710	645	12/17/13	115,315
2024 Genesis G70 RWD 3.3T Sport Prestige	365	376	18/27/21	56,250
2024 Honda Civic Type R	315	310	22/28/24	45,890
2024 Hyundai Elantra N	276	289	20/27/23	36,820
2024 Mazda MX-5 Miata RF Grand Touring	181	151	26/34/29	38,925
2024 Nissan Z Nismo	420	384	17/24/19	68,290

*city/hwy/comb



CATEGORY WINNER: INTERNAL COMBUSTION PERFORMANCE: 2024 Audi RS 6 Avant Performance

RUNNER-UP: 2025 Dodge Durango SRT Hellcat Last Call AWD



This year, this was simplified further, all held under the Drive Revolution name, with powertrains as the clear point of distinction—ICE (internal combustion, keeping its Run to the Sun emphasis on performance); BEV (full battery electric commonly known as EV); and PHEV (plug-in hybrid, the long-standing but increasingly top-of-mind and popular combination of hybrid internal combustion systems with plug-chargeable batteries and a degree of all-electric range).

Winners would be chosen among each of those three powertrain categories. Then a separate vote would pick an overall performance winner (regardless of powertrain) and an overall electrified winner (whether full BEV or PHEV).

Run to the Sun used to run over hundreds of miles of open road, most often in north-central Oregon.

Drive Revolution always ran a hub-and-spoke set of routes, for the sake of recharging logistics.

As one category of vehicles—the largest this year—is pure battery electric, the hub-and-spoke format was used for last year's dual event and again for this year's unified event.

A key attribute of Run to the Sun that has carried forward into this event, however, is one that is unique to this organization. The rotation of drivers and vehicles is mapped out in advance, meaning every driver is guaranteed (as required) to drive every vehicle. This also keeps things on schedule, as wasteful decision time about what to drive next is eliminated, along with potential bottlenecks around particular vehicles, common at other events.

An unexpected plus with hub-and-spoke is that—unlike the point-to-point open road method—the number of vehicles and drivers does not have to match perfectly, though that is still the ideal goal. This year, the event had 20 automotive media professionals driving 23 different vehicles. Rotation predetermined, efficient and on time.

The vehicles

Of the hundreds of new vehicles available in the marketplace, those entered are a cross-section from manufacturers with the staff and budget available, particular interest in the particular market (though news and results from regional comparos always spread worldwide), and/or those with new or special product in particular categories

(cont'd)

Full Battery Electric Vehicles (BEVs = EVs)

	hp	lbft	*mpg	range	price as tested
2024 Acura ZDX Type S Perf Tire	499	544	83/74/78	278	\$ 76,450
2024 Audi Q8 e-tron	402	490	80/83/81	285	88,990
2024 Fiat 500e Inspired By Beauty	117	162	121/100/110	149	37,595
2024 Genesis GV60 Performance	429	516	97/82/90	235	72,245
2024 GMC Hummer EV 3X SUV	830	1200	55/45/50	298	117,435
2024 Honda Prologue AWD Elite	288	333	99/84/92	273	59,750
2025 Hyundai IONIQ 5 N AWD	641	568	84/72/78	221	67,685
2024 Kia EV9 GT-Line AWD (Long Range)	379	516	88/72/80	270	78,430
2024 Lucid Air Pure	430	406	71/79/74	394	77,150
2024 Rolls-Royce Spectre	584	664	134/127/130	266	558,700

*city/hwy/MPGe



CATEGORY WINNER: FULL EV (BEV): 2025 Hyundai IONIQ 5 N AWD

RUNNER-UP: 2024 Lucid Air Pure



represented—which is especially significant at this event.

Based on this targeted sampling, it's always interesting to try to interpret the state of evolution around the world by who enters what.

Of the 23 vehicles total, three were from the US—two from the Detroit Three, plus Lucid. Six were European, though two were from the same manufacturer (Audi, one gasoline and one EV), and Fiat is of course a

Detroit first cousin. Japan had the most representation, with eight vehicles from a full range of manufacturers, with Honda-Acura hitting both gasoline and EV and Mazda both gasoline and PHEV. Korea's Hyundai group brought six direct cousins (Kia, Hyundai and Genesis).

The US entered more EVs than gasoline (and the one American gasoline model is in its last year).

Japan brought gasoline (including PHEV) at a ratio of three-to-one versus pure EV, as these pioneers of hybrid and other innovative powertrains seem to continue to put an emphasis on further perfecting these.

Europe was tied for EV and gasoline (when gasoline includes PHEV) or went five-to-one electrified (when PHEV is looked at that way).

Plug-in Hybrid Vehicles (PHEVs)

	hp	lbft	*mpg	e-range	price as tested
2025 Kia Sorento PHEV SX-Prestige AWD	227	258	33/74	31	\$54,690
2024 Lexus TX550h+ Luxury AWD	404	247	29/76	33	82,534
2025 Mazda CX-70 PHEV Premium Plus	323	369	25/56	26	59,275
2025 McLaren Artura Spider	691	531	19/45	11	344,718
2024 Mercedes-AMG GT 63 S E Perf PHEV	831	1084	18/25	1	224,820
2024 Mitsubishi Outlander PHEV SEL S-AWC	181	181	26/64	38	51,835

*comb/MPGe



CATEGORY WINNER: PLUG-IN HYBRID (PHEV): 2024 Lexus TX550h+ Luxury AWD

RUNNER-UP: 2025 McLaren Artura Spider



Korea's ratio similarly leans EV, although they also continue to develop enhanced-performance-specific ICE models, notably N variants.

Such events often split vehicles by price groups or luxury designations. As organized here this time, it's all about powertrains, with a wide range of pricing in each.

Categories and voting

Each driver pauses at the end of each half-hour drive slot to score each vehicle on a range of attributes. This data, however, is not how the winners are chosen, per se, although it provides supremely useful perspective or confirmation during the time-sensitive final voting process. In this, each driver votes a first and second within each of the three categories. These will likely be based on the sum of individual attribute scores, but do not have to be. (Second place votes in this process are applied to a tie-breaking algorithm, if need be.)

One more Best Overall vote is also informed by all of the above, but even more fluid—pick a favorite. This year, there were two of Overalls—one for performance (essentially a vote among all 23 vehicles, as there are no slackers) and one combining pure battery electric and PHEV as “electrified,” as the industry itself has been doing.

Winners are highlighted and illustrated here per the group vote tallies.

A few vote notes

A wide range of attributes within each category, as well as a number of apples-and-oranges scenarios, suggest a few observations and some speculation.

While Honda has come to the EV game a little later than some, their Prologue EV brings a formula of power, price and range, along with style and function, that seems sure to find a big audience. Its first cousin Acura ZDX being in the same group (similar format, but higher price, higher power, lower range) most likely split some votes.

As consumers continue to develop some resistance to EV price, purpose, charging options and so on, along comes Fiat 500e—a city commuter car, very small (but spacious inside) and very affordable—more like the original EV idea. This whole car weighs less than just the battery in some EV beasts. Since distance and weather road trips are still tough in most any EV, this approach, even with its low range, may

(cont'd)

OUR PICKS

We have a tradition, for various reasons, of not presenting our own picks at these regional comparos, just those awarded by the group overall. Usually, it's sufficient to note that some of our choices were the same as the group's and some were different. But breaking with that tradition, we're compelled to revisit our own votes. The group votes sometimes suggest emotion (disregard the expense) over logic. But then again, so do our own. Here's a look at how we may have considered both factors in our own selections. This doesn't (necessarily) mean these are the ones we would buy, just the most well-rounded and/or inspirational solutions.

Category picks

INTERNAL COMBUSTION PERFORMANCE (ICE).....hp.....lbft.....city/hwy/comb.....—.....as tested

1. 2024 Genesis G70 RWD 3.3T Sport Prestige365.....376.....18/27/21.....—.....\$ 56,250
2. 2025 Dodge Durango SRT Hellcat Last Call AWD710.....645.....12/17/13.....—.....115,315

Our number one vote was a logical one, a solid formula of decent power, fuel economy and price.

Number two may be the emotional choice, knocking it out of the ballpark on power, though being lowest on fuel economy and second-highest on price. It also hits at a time when this manufacturer group is wrestling between European ownership wanting to go full bore on full-EV evolution and US dealers who want to hold off on that a bit. However all that turns out, this Durango's Last Call name says it all—grab an ICE SRT Hellcat while you still can.

FULL EV (BEV).....hp.....lbft.....MPGe.....range.....as tested

1. 2024 Honda Prologue AWD Elite288.....333.....92.....273.....\$59,750
2. 2024 Fiat 500e Inspired By Beauty117.....162.....110.....149.....37,595

Our number one vote was an entirely new vehicle to us, as Honda is just amping up their full-EV efforts. And the Prologue struck us as a home run on styling and format, as well as all its statistics. As a fraternal twin to the Acura ZDX, we wonder if the vote was split and how either would have scored if there had been only one. The Acura has far more power, a higher price and lower operating economy and range, but we liked the Honda's styling.

Number two could have been number one, winning us over on both logic and emotion. This effort goes to the core of EV thinking, a small, local convenience vehicle with plenty of spirit and sportiness. We may have voted it second just because it's likely to have more of a niche market—which, of course, could also give it extra appeal.

PLUG-IN HYBRID (PHEV).....hp.....lbft.....MPGe.....e-range.....as tested

1. 2025 McLaren Artura Spider691.....531.....45.....11.....\$344,718
2. 2024 Lexus TX550h+ Luxury AWD404.....247.....76.....33.....82,534

This is why we vote on the spot, when impressions are fresh, as this choice surprises us, ourselves, a few days later. But there's no denying the power, thrill and distinctive ownership of the McLaren—thus an emotional choice.

The Lexus is clearly the more logical choice. This luxury cousin of the Toyota Land Cruiser (related in build, but quite different in style and content) already impressed us in our local fleet, as presented in our prior issue.

Drive Revolution Best Overall picks

PERFORMANCE VEHICLE (ICE-EV-PHEV).....hp.....lbft.....mpg.....e-range.....as tested

1. 2024 Mercedes-AMG GT 63 S E Perf PHEV831.....1084.....MPGe 25.....1.....\$224,820
2. 2025 Dodge Durango SRT Hellcat Last Call AWD710.....645.....comb 13.....—.....115,315

As the Best Overall awards are more of a clean-sheet dart-throw, equal parts analysis and gut, we have two pricier, high-powered options getting our votes here. The AMG's hybrid powertrain differs from other PHEVs in competition here, as it aims toward a boost throughout all drive states, with EV-only range purely an asterisk. But its combination of power and fuel economy, in a package of top German engineering, is hard to beat, if you have the price of entry. As you can tell from Category notes above, these were both largely emotional choices.

ELECTRIFIED VEHICLE (EV-PHEV).....hp.....lbft.....mpg.....range.....as tested

1. 2024 Honda Prologue AWD Elite288.....333.....MPGe 92.....273.....\$59,750
2. 2024 Lexus TX550h+ Luxury AWD404.....247.....comb 76.....(e) 33.....82,534

Both of these, also as noted in Categories, above, fall toward the logical end of the scale. A question then may be: does an EV purchase inherently lean more toward logic than emotion? Statistical analysis, over gut? Perhaps. But most likely this is just an appearance of random happenstance with the choice of these two favorites.

be most realistic. And with easy parking.

Lucid goes the other way. Last year, they entered two models, but this year's is a third, a rear-driver with the most range of any from them and by far the highest range in this event.

Hyundai IONIQ 5 was the biggest winner overall, taking its category (Best BEV), as well as not one both both overall wins (Best Overall Performance Vehicle and Best Overall Electrified Vehicle). IONIQ 5 has been with us awhile, but the big difference is that this is an "N" version, a high performer in its own right, but also evidence that there is serious effort being put into not only electrifying classic internal combustion, but into amping up electrics.

Put it all together, though, and the biggest electrified winners are all Goldilocks models—not too pricey, not too small, not too big, decent range, and from popular bigger brands with established reputations for reliability and dealer availability.

We've noticed that votes often go to far more expensive vehicles at many comparos, even as pricing (or at least value) is one of the attributes ranked. Judges can easily skip over that, to a degree, as they will not actually be pulling out the checkbook. On the ICE side, the priciest, second most powerful and second-thirstiest Audi RS 6 Avant took home the trophy.

On EVs and PHEVs, there seems to have been more cost consideration. Perhaps this is because these are a newer topic, themselves, and their price ranges, wide-ranging powertrain options and other tangibles have more of the judging drivers thinking more directly about actual purchase.

Then for every trend spotted, there's one to refute it, or maybe it's more of a mix. The priciest, the over-half-million-dollar Rolls-Royce Spectre EV, did not win this time (though Rolls has won before), yet the second-priciest, the McLaren PHEV, did come in second as Overall Best.

Also noteworthy is that McLaren's second place finish overall was under Performance (ICE-EV-PHEV), not Electrified (EV-PHEV), even though as a PHEV, it qualified for either trophy.

Combined event(s)

After last year's simultaneous Run to the Sun and Drive Revolution events, we speculated about the future and what name might be used if they were thoroughly integrated into one, as they now (or for now)

DRIVE REVOLUTION BEST PERFORMANCE VEHICLE OVERALL (ICE-EV-PHEV):

2025 Hyundai IONIQ 5 N AWD (BEV)

RUNNER-UP: 2025 McLaren Artura Spider (PHEV)

DRIVE REVOLUTION BEST ELECTRIFIED VEHICLE OVERALL (EV-PHEV):

2025 Hyundai IONIQ 5 N AWD (BEV)

RUNNER-UP: 2024 Lucid Air Pure (BEV)



have been. Drive Revolution seemed appropriate if it remained a mostly-EV event, based on its "alternative powertrain" heritage. But as EVs become mainstream, and may end up dominating the marketplace (as has been intended for a few years), they can become status quo. Run to the Sun's name originates in a drive for convertibles to the Pacific Northwest's mountaintops, above rainy weather, but evolved to be synonymous with the open road. Charging range considerations for EVs remain an obstacle to the open road format. And we will be collectively keeping an eye on the many factors that could color the revolutionary nature of an ongoing overall EV shift.

The Drive Revolution name prevailed, at least this year. This works, as even the internal combustion entries continue to push the envelope on engineering and—using the other key word that defines the ICE category's title, but also one of the two Best Overall awards—performance.

As you can tell by the variety of entries, as well as the general pulse outside this event, electrification for some (buyers, analysts and manufacturers) is a primary mission. For others, it's mitigation or increasingly a regulatory necessity. For example, it's unlikely anybody is buying the McLaren first and foremost because it's electrified. It offers its own familiar thrills and bragging points, but adds certain bonus benefits and perhaps a defense as a hybrid.

Be all this as it may, as always not all brands and models are ever present at such events (it surprises most people that there are some 450 different vehicle models on the market each year), nor are all powertrain solutions (hydrogen, say). But we had a particularly great cross-section of hardware from brands all around the world on hand, making the results useful to all concerned—you, the buying audience; us, the collective media; and the manufacturers themselves. All gain a range of insights that will be a solid reference, ongoing.

Special thanks go out, as always, to the hard-working fleet personnel; to our hosting venue the Ilani Casino and Resort, on the Cowlitz Indian Reservation near Ridgefield, Washington; to the manufacturers who sent their most pertinent vehicles and the smiling faces to explain and support them; and to our friends and colleagues in NWAPA for one of the best-executed events in the business. ■



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OUR NORTHWEST WHEELS : 2024 HONDA PASSPORT TRAILSPOUR AWD

A peek over the horizon

is a hot item now. by Joe Sage

Honda brought back the Passport in 2019, after an 18-year absence, filling a two-row SUV space with something closer to the three-row Pilot than the smaller CR-V and HR-V. These were our wheels in the Northwest, to get to and from NWAPA Drive Revolution. Ours was a 2024, but you can already buy a basically identical 2025, if so desired (any trim other than the top Black Edition is just \$500 more for the newer model year).

The format is inherently friendly to heading off-pavement, and in 2022, they took a step closer to the dirt by adding the brand's first TrailSport build to the Passport lineup. Though quite capable for off-highway weekend duty, it was not intended to be a full-on rock conqueror, but, along with the model's new, more trucklike styling, bringing a burlier look and feel. Style and feature details point in this direction. Its tires are tough enough, but more-so have the looks, with a beefy off-road tread mimicked in its sidewall treatment.

We had the Passport TrailSport for a week at home then (see our May-June 2022 issue), noting,

2024/2025 HONDA PASSPORT LINEUP

	2024	2025
EX-L	\$41,900	\$42,400
TrailSport	▼ 44,500	45,000
Black Edition	45,430	48,470

"Honda Passport is a pretty tough SUV already, (without) a pressing need to be amped up. Fact is, this new Honda Passport TrailSport is a stepping stone to even rougher and tougher looks and features to follow. Watch for TrailSport to be developed into much more.") That time is now upon us.

The first materials for an all-new 2026 model simply say, "The development of the next-generation Passport TrailSport—the most adventure ready and capable Honda SUV yet—is underway. With a truly rugged design, authentic off-road capability, next-level versatility and innovative features, the 2026 Honda Passport is set for arrival early next year"—which is now a matter of mere months. A teaser photo taken in the dark shows "PASSPORT" embossed across the front fascia and new amber daytime running lights.

This is not only a coming attraction for 2026, but an opportunity for last call on the 2024 and 2025. As noted from our 2022 drive, "not overly extreme and not overly expensive, Honda Passport TrailSport delivers good clean fun." ■

SPECIFICATIONS

ASSEMBLY	Lincoln, Alabama
CONTENT	75% US/Canada
ENGINE/TRANSMISSION	US / US
ENGINE	3.5L i-VTEC dir inj V6 24v SOHC w variable cylinder management
HP/TORQUE	280 hp / 262 lb-ft
COMPRESSION RATIO	11.5:1
TRANSMISSION	9-spd auto shift-by-wire, paddles
DRIVETRAIN	i-VTM4 all-wheel-drive
INTELL TRACTION MGMT	snow-sand-mud
SUSPENSION	(TrailSport: off-road tuned): F: MacPherson strut, 25.0 mm stblzr bar (solid); R: multi-link, 26.5x4.5mm stblzr bar (tubular)
STEERING	elec pwr-asst rack & pinion
BRAKES	F: 12.6 vented, R: 13.0 solid
WHEELS	18-in pewter gray alloys
TIRES	245/60 R18 105T all-terrain; compact spare
LENGTH / WHEELBASE	189.1 / 110.91 in
GROUND CLEARANCE	8.1 in
APPROACH / DEPARTURE	21.2 / 24.3°
TURNING CIRCLE	39.3 ft
HEADROOM (F/R)	39.5 / 40.0 in
LEGROOM (F/R)	40.9 / 39.6 in
CARGO CAPACITY	41.2-50.5 / 77.7-100.8 cu.ft
WEIGHT	4229 lb
WEIGHT DISTRIBUTION (F/R)	58.5 / 41.5%
TOW CAPACITY	5000 lb
FUEL / CAPACITY	reg unl / 19.5 gal
MPG	19/24/21 (city/hwy/comb)
BASE PRICE	\$44,500
PAINT: Radiant Red M II	455
DESTINATION CHARGE	1375
TOTAL	\$46,330



To thine own self be true

Purity of concept endures BY JOE SAGE

Mazda Miata has been around for quite awhile—since 1989, some 35 years, but it feels like longer—during which they’ve toyed with the basic concept very little. In its original and purest form, it’s a little two-seat soft-top ragtop (with a manual transmission available), a formula proven by European classics of prior decades. Not intended to be

a supercar competitor nor powerhouse performer, Miata is affordable top-down fun.

There was a brief time when they tried to go pure alphanumeric, simply “MX-5,” but everybody still called it Miata, and Mazda quickly relented. They’ve added a retractable hardtops and fastbacks to the lineup (appealing to some for security, durability and so on), but the ragtop endures—and in fact dominates.

You can’t go wrong. If you want to call it a Miata, MX-5 or both, you can. If you want a soft top, you can, or if you want a retractable hardtop (currently the RF retractable fast-back), you can. If you want to shift for yourself, you can. If you want an automatic, you can. Whichever way you go, you still get to open up that top, hit the open road and enjoy

—at prices starting in the \$20s.

There are three trim levels (Sport, Club, Grand Touring), all as soft tops and two also as retractable hardtops (Club, Grand Touring), all with manual transmissions, or with automatic optional on Grand Touring, all with the same 181-hp SKYACTIV-G 2.0L four-cylinder.

Our sample arrived at a great time, as temperatures were just dropping below 100 degrees, which in our upside-down climate signals the approach of convertible season. This is the top-trim Grand Touring, but still thousands less than if it had an automatic or hardtop—a win-win-win for the purist.

We drove it all we could, heading right out to some of our favorite desert and mountain two-lanes as soon as it arrived, and top down

even with the temperature still 99 degrees.

Though definitely a small car, Miata feels secure even in big traffic. You’re settled in, it’s smooth and steady, holds its line with spot-on accuracy and handles superbly. This does not imply limo-like luxury—you’ll have hands actively on the wheel and shifter, as Miata is lively, engaging and all yours to control.

Did we say small? Out on the open road, it feels as big as you want it to be. You might quickly decide you could drive all day and all night, for hundreds, or thousands, of miles. Nobody would really want to take this back to the garage. And while great even when enjoying just the sound of the engine and the wind, Miata also has surprisingly good audio for an open car. Fun, fun, fun.

We don’t hypermile—far from it—but had a readout of over 27 mpg for a combination of metro grid and aggressive open road. Not bad.

Legroom is statistically generous, just over 43 inches. As with most two-seaters, a tall person may feel maxed out at first, yet soon comfortable for the duration. Along with height may come big feet, requiring extra precision with placement—pedals are smallish and tight together. Again, you get acclimated. Driving shoes could be good.

Cabin storage is minimal, or at least very efficient, but you quickly get creative. Soft top operation is manual—nothing faster than that (and windows are one-touch down, although not up). Mazda points out the tight pedals as a great motivation to master heel-and-toe.

We can parse such details as much as you want, but ultimately none of that matters. It’s best just to fire it up, drop the top, shut up and drive. And enjoy. They say MIATA stands for “Miata Is Always The Answer.” And this six-speed manual-shift ragtop backs that up. ■

One colleague, whose opinion we value, suggests Miata may be overdue for a restyling, with this generation pushing 10 years. We hadn’t thought about it until then, generally happy that they don’t often mess with a good thing. But we’ve realized we do favor its rear styling over its front. Mazda has refreshed or replaced most of their lineup in the past couple of years. They’re likely working on this, too.



SPECIFICATIONS

ASSEMBLY	Hiroshima, Japan
BODY TYPE	monocoque unibody w backbone frame, front/rear suspension
ENGINE/TRANS BUILD	Japan / Japan
PARTS CONTENT	Japan 85% / US/Can 0%
ENGINE	SKYACTIV-G 2.0L w chain-driven DOHC 16v w variable intake valve timing, electronic fuel injection, alum/alum
HP/TORQUE	181 hp / 151 lb-ft
COMPRESSION RATIO	13:1
TRANSMISSION	6-spd manual
DRIVETRAIN	RWD; asymmetric torque-sensing limited-slip diff (6MT)
SUSPENSION	F: dbl wishbone; R: multi-link; monotube Bilstein shocks (6MT)
STEERING	dbl pinion elec pwr assist rack & pinion
BRAKES	F: 11-in vented w single piston; R: 11-in solid w single-piston alum calipers
WHEELS	17x7 aluminum
TIRES	Bridgestone P205/45 R17 hi-po sumr
LENGTH / WHEELBASE	154.1 / 90.9 in
HEADROOM	(soft top) 37.4 in
LEGROOM	43.1 in
GROUND CLEARANCE	(17-in wheels) 5.32 in
TURNING CIRCLE	(curb/wall) 30.8 / 32.9 ft
CARGO CAPACITY	(soft top) 4.59 cu.ft
WEIGHT	(6MT soft top) 2368 lb
WEIGHT DISTRIBUTION	(6MT soft top) 52:48
FUEL / CAPACITY	min 87 rec 91 / 11.89 gal
MPG	(6MT) 26/34/29 (city/hwy/comb)
BASE PRICE (2024)	\$34,285
PAINT: Snowflake White Pearl	450
INTERIOR: Tan Nappa Leather	300
DESTINATION CHARGE	1165
TOTAL	\$36,200

2024 MAZDA MX-5 MIATA LINEUP

.....	SOFT TOP	.....RF
Sport 6MT	\$28,985	---
Club 6MT	32,485	---
CLUB: BREMBO-BBS-RECARO	37,285	\$40,210
Grand Touring 6MT	34,285	37,010
Grand Touring 6AT	35,205	37,980





Photos courtesy Barrett-Jackson Auction Company

Barrett-Jackson: Arizona fall event

Barrett-Jackson Inaugural Scottsdale Fall Auction
Thursday-Sunday, October 10-13, 2024

WestWorld of Scottsdale (AZ Loop 101 & FLWright Blvd), 16601 N Pima Road 85260

BARRETT-JACKSON achieved over \$56.6 million in total sales during their first-ever 2024 Scottsdale Fall Auction, presented by Gila River Resorts & Casinos, October 10-13 at WestWorld of Scottsdale. The event featured 794 collectible vehicles, with a 99.9 percent sell-through rate. Top seller was Rock & Roll Hall of Fame megastar Sammy Hagar's highly anticipated 2015 Ferrari LaFerrari, achieving \$4.675 million with Hagar on the block, a new world auction record.

The event kicked off with an Opening Night Celebration of entertainment and dancing under the stars with the band, The Party Crashers. Throughout the four-day event, guests experienced numerous exhibitor displays and hundreds of interactive sponsors in more than 750,000 feet

of air-conditioned space, including the Southwest Chef Showdown culinary competition, Thrill Rides in the latest Dodge and Toyota vehicles, the Gila River "You Do You" Patio, and live music performances.

The top 10 vehicles sold include:

1. Sammy Hagar's 2015 Ferrari LaFerrari(Lot #760)\$4,675,000
 2. 2019 Ford GT(Lot #769)880,000
 3. 2022 Ferrari SF90 Stradale Assetto Fiorano(Lot #762)599,500
 4. 1962 Chevrolet Corvette Custom Roadster.....(Lot #778)550,000
 5. 2023 Ferrari SF90 Stradale Assetto Fiorano(Lot #750)528,000
 6. 1971 Ferrari 365 GTB/4 Daytona Coupe(Lot #751)506,000
 7. 1969 Ford Mustang Boss 429(Lot #749)462,000
 8. 1968 Ford Mustang Eleanor Tribute Edition.....(Lot #687)451,000
 9. 2006 Ford GT(Lot #758)423,500
 10. 2023 Rolls-Royce Cullinan Mansory Edition....(Lot #773)396,000
- Celebrities in attendance included actor William Shatner, who enter-

tained guests and helped auction his 2016 Jaguar F-Type R convertible (Lot #348); former pro golfer Paige Spiranac; and former professional race car driver Dale Jarrett.

Two vehicles sold for charity brought a combined \$1.25 million. General Motors donated the first retail production Cadillac Escalade IQ VIN 001 (Lot #3001), which sold for \$550,000, with 100 percent of the hammer price benefiting Detroit Children's Fund.

And Mike and Tracy Patterson donated a 2024 Ford Mustang Dark Horse (Lot #3000), purchased by Michelle Mauzy for \$350,000, who then donated the vehicle back to be sold again, this time to Joe Riley for an additional \$250,000. The Pattersons added a donation of a further \$100,000, bringing the total \$700,000. These funds will directly benefit Samaritan's Purse, to aid in hurricane relief efforts back East. Barrett-Jackson has raised over \$156 million for charity in total to date.

The Automobilia Auction saw 429 items selling for a total of over \$1.6 million.

"As evidenced by our top 10 sales, supercars, professionally built resto-mods and well-preserved survivor vehicles were in high demand," said Barrett-Jackson chairman and CEO Craig Jackson.

"We also hosted the Future Collector Car Show," notes Jackson, "along with interactive exhibits and activities that are reaching younger enthusiasts, which is fueling excitement and securing the future of our hobby."

Next up for Barrett-Jackson is their flagship 2025 Scottsdale Auction, to be held over nine days, from January 18-26, at WestWorld of Scottsdale.

▼ www.barrett-jackson.com ■



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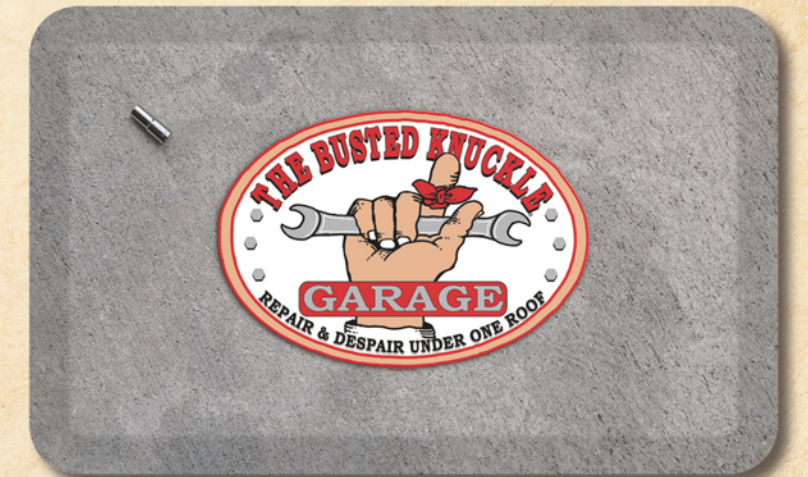
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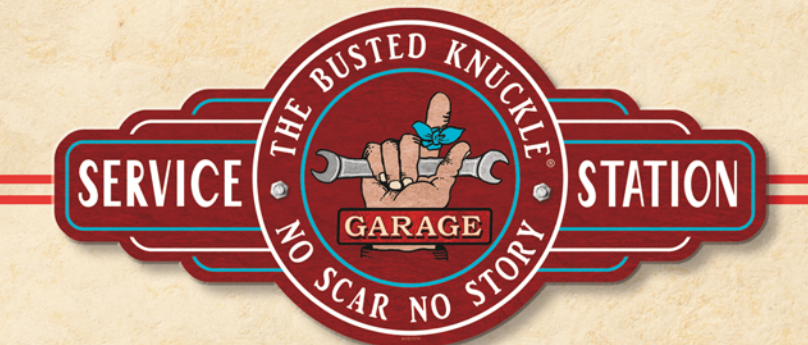
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Power and precision

Top of the F-150 food chain

BY JOE SAGE

In 2009, the already famously capable and endlessly variable Ford F-150 gained a new crown, with the 2010 F-150 SVT Raptor, from the Ford Special Vehicle Team—custom build territory, straight from the factory. Hailed as a dune-runner, it sounded highly specialized, but that could be taken more as a spotlight on its new combination of extreme off-road prowess and high-speed performance. As top dogs will do, the Raptor quickly became numerous on our streets and freeways—where it turns out to perform normal daily duty just fine.

The first Raptor was powered by a 320-hp 5.4L

V8 or an optional 411-hp 6.2L V8 (from Super Duty), followed by just the 6.2L V8 from 2011.

The truck took two years off before returning for its second generation, dropping its SVT name as well as its V8—now powered by a 3.5L EcoBoost High Output twin-turbo V6 upped to 450 hp. But, predictably, enthusiasts clamored for a V8.

The only place to go was up. To keep the customer satisfied, while not backtracking from the EcoBoost V6, gen three added a supercharged, intercooled 5.2L V8 generating 700 hp (now 720). Production started in late 2022 for model year 2023

(see our May-June 2023 issue). The twist was that the V6 Raptor would also continue, with the V8 becoming the first Raptor R. Derived from the Mustang Shelby GT500, the Raptor R V8 is recalibrated and optimized for off-road performance, with increased low-end and mid-range torque; exhaust manifolds upgraded to cast stainless steel; model-specific oil cooler, filter and deeper oil pan; and air intake volume increased 66 percent via a wider intake and higher-flow filter.

There's more to it than the engine. Raptor R has advanced off-road performance suspension with variable-damp FOX Racing Shox, 5-link coils and more, everything tuned for the truck's power, and 37-inch tires are standard. Style points include a

power dome hood, clearance lights, R-specific graphics and a luxurious, purpose-built interior.

At 6.7 inches wider than a base F-150, the Raptor R fills a lane in town or on the freeway, yet always tracks true. Its 10-speed automatic shifts rapidly and transparently, optimizing fuel mileage. Its burly suspension is very pavement-friendly, gliding smoothly over any rough patches. Surprisingly maneuverable, the truck's stated 50-foot turning circle easily handles tight spots in town.

Off-highway, we switched into 4H for a wide range of trails. (There are also a variety of specialty modes, as well as 4L0.) Dune-running implies wide open spaces, but the Raptor R is very precise. On hard, heavily-swaled surfaces, you will be soon reminded to run slower than on the dunes, while its accuracy and control remain impressive.

As a great many target customers are the same

as they have been with the non-R Raptor—adventurous off-roaders aiming for desert and dune adventures, but who spend plenty of drive time in town—the bottom line is the same. You expect any of the Raptors to be on the wild side, because, well, they are. But their engineering, though extreme, is also precisely tamed.

When you occupy the throne—as Ford F-Series has for decades—you're bound to keep upping your game. One thing for certain—Ford has been responsive to its buyers' hopes and dreams.

For some, the V8 Raptor R will be the ultimate Raptor. For others, it may bring new appreciation for the more fuel-efficient V6 Raptor. We are confident the Raptor R will sell well, also being used for normal duties as well as extreme. That's why Ford has given us choices. Rejoice. ■

2024 F-150 GASOLINE LINEUP

	RWD	4X4
XL	\$36,965	\$41,980
STX	44,000	49,800
XLT	47,730	51,530
Lariat		65,395
King Ranch		73,845
Platinum		73,845
Tremor		\$ 64,350
Raptor		78,440
Raptor R		▼ 110,365



SPECIFICATIONS RAPTOR R

ASSEMBLY...Dearborn Truck Plant, Michigan
ENGINE BUILD.....Dearborn, Michigan
CAB/BED/WB.....SuperCrew / nominal 5.5/145
BUILD.....high-strength steel frame, aluminum cab and bed
ENGINE.....high-output 5.2L (315 cu.in.) supercharged, intercooled 90° OHC V8, cast alum block & head w plasma transfer wire arc cyl liners, DOHC 32v, twin indep var camshaft timing, forged alum pistons
BORE X STROKE.....3.70 in x 3.66 in
ALTERNATOR.....standard single 240A
IGNITION SYS.....distributorless coil-on-plug
OIL CAPACITY.....11.5 qt
COOLANT.....12.0L engine + 1.3L supercharger
HP/TORQUE.....720 hp / 640 lb-ft
COMPRESSION RATIO.....9.5:1
TRANSMISSION.....10-spd SelectShift automatic, auto transmission cooler and warm-up unit w thermostatic fin cooler
DRIVETRAIN.....4x4
TRANSFER CASE.....hi-lock, two-spd auto 4WD w neutral tow capability, 4.10 axles
SUSPENSION.....F: Indep dbl-wishbone w coil-over shock & cast alum lower control arm, high-output gas-press, electr contr contin variable compression damping FOX Racing Shox, 3.1-in damper, 1.0-in rod dia on Raptor R; R: five-link coil w Panhard rod, high-output gas-press, electr contr contin var compression damping FOX Racing Shox, 3.1-in damper, 0.875-in rod dia;
SUSP TRAV...w 37-in tires: F: 13.0-in; R: 14.1-in
STEERING.....elec pwr-asst
BRAKES.....power antilock vented disc, elect control brake boost, Nitro Tough iron: F: 350x34mm, 2x 51mm sliding caliper; R: 336x20mm, 1x 54mm sliding eiPB
WHEELS.....17x8.5-in forged alum beadlock-capable
TIRES...37x12.5R17LT BFGoodrich All-Terrain T/A K02 (full-size matching spare)
LENGTH / WHEELBASE.....232.6 / 145.4 in
WIDTH.....(w / w/o mirrors) 96.0 / 87.0 in
GROUND CLEARANCE.....13.1 in
OPEN TAILGATE TO GROUND.....37.8 in
APPRCH / DEPART / BRKVER.....33.1 / 24.9 / 24.4°
TURNING CIRCLE.....w 37-in tires: 50.0 ft
HEADROOM (F/R).....40.8 / 40.4 in
LEGROOM (F/R).....43.9 / 43.6 in
BED LENGTH AT FLOOR.....67.1 in
PAYLOAD.....1400 lb
TOW CAPACITY.....8700 lb
FUEL / CAPACITY.....91 prem unl / 36 gal
MPG.....10/15/12 (city/hwy/comb)
BASE PRICE (Raptor V6).....\$77,980
EQUIPMENT GROUP 803A RAPTOR SERIES:
 5.2L Supercharged V8, 17-in forged aluminum beadlock-capable wheels, Raptor R grille, hood vent, exterior and interior badging, exterior graphics, black accents, tow hooks, black alcantara suede and leather Recaro seats, carbon fiber interior appliques, interior stitching.....\$31,575
TIRES: 37 X 12.5R17 BSW All-Terrain.....incl
REAR AXLE: 4.10 electronic lock.....incl
7500-LB GVWR PKG.....incl
TWIN PANEL MOONROOF.....1495
BEDLINER: ToughBed spray-in accy.....595
DESTINATION CHARGE.....1995

TOTAL.....\$113,640

Prices have increased; see chart at upper left.

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FRENCH DESIGN AT ARIZONA CONCOURS 2025

The theme for the annual Arizona Concours d'Elegance, on January 19, 2025, is *The Art of Automotive Engineering*. More than 100 collector cars and classic motorcycles will be on display and competing for awards during this upscale lifestyle event that fills the lawns of the Scottsdale Civic Center outside the Scottsdale Center for the Performing Arts with rare examples of automotive engineering, design and sheer beauty.

CLASSES AND FEATURED CLASS: Sixteen professionally curated and judged classes range from horseless carriages at the dawn of motoring, through the classic and Art Deco eras, post-war sports and competition cars, to the high-performance exotic sports cars of recent years, and—for the first time since the event was established in 2014—a class for important and historic motorcycles, titled *Engineering on Two Wheels*.

Awards are presented in each class, along with special awards and the two coveted Best of Show trophies, one for pre-World War II and one for post-war. One of the special awards is presented for best period costume.

This year's *Featured Designer* class honors *Carrossier* (coachbuilder) Jacques Saoutchik—a Russian-born French designer and engineer who had emigrated to Paris to create bespoke luxury vehicles for wealthy clientele. His innovative and extravagant style had a powerful influence on the automotive landscape before and after World War II.

From the Roaring '20s into the 1950s, Saoutchik competed with French design royalty, Figoni and Falaschi, as well as Franay, producing lavish, sometimes outlandish forms that characterized French custom coachwork. Postwar work included wildly flowing and stretched forms on the chassis of such exclusive marques as Delahaye and Talbot Lago, as well as forging a close relationship with the Spanish sports car company Pegaso.

Another class with a French accent is the *Featured Marque*, entitled *The Iconic Engineering of Ettore and Jean Bugatti*. The event has announced the entry of a most-glamorous Bugatti, a 1939 Type 57C Atalante by Gangloff. This exotic pre-war beauty is a factory-supercharged coupe that was



Above (top): 1951 Delahaye 175-S Saoutchik Roadster; (bottom) 1939 Bugatti Type 57C Atalante by Gangloff.

among Bugatti's final examples of the exclusive Atalante model. With a body enhanced by French coachbuilder Gangloff, this Bugatti is believed to be the only Atalante that combines the late-model "long-tail" design, retractable "bureau" roof and additional bright trim.

SEMINAR SERIES: The Arizona Concours seminar series on January 18 will feature Peter Larson and Ben Erickson, authors of an extensive three-volume homage to the extraordinary life and art of Jacques Saoutchik.

SPONSOR-BENEFICIARY-PARTNER: Scottsdale-headquartered Discount Tire, the world's largest independent tire-and-wheel retailer, has signed on as a top Automotive Sponsor for the 2025 Arizona Concours d'Elegance.

The sponsorship is driven by Discount's support of the event's longtime beneficiary, Make-A-Wish® Arizona, the founding chapter of the national organization that grants wishes for children facing life-threatening medical conditions.

Discount Tire acquired Tire Rack, a major purveyor of tires for vintage vehicles, in December 2021, and the Concours sponsorship helps build

this connection with the collector car community.

The Arizona Concours d'Elegance is presented in partnership with Scottsdale Arts, responsible for an array of artistic services in the city. Proceeds from the event benefit local artists and art programs, as well as the Concours' longtime beneficiary, Make-A-Wish Arizona.

TICKETS are available at ArizonaConcours.org or at the Scottsdale Center for the Arts box office. Prices are discounted if purchased in advance—pricing tiers are explained on the Concours website: arizonaconcours.org



There are some 450 to 500 different vehicles in the US market—not trim levels, completely different vehicles—from over 40 brands. As for brand lineups, Mercedes-Benz has some of the greatest variety and complexity.

It used to be simple to follow—C, E and S sedans (compact, executive and full-size). Then came a subcompact A. Then SUVs were renamed to follow suit—GLA (or GLB), GLC, GLE and GLS. Joining the parade along the way have been a variety of two-door and four-door (two-letter and three-letter) coupes, plus GT models, AMG variants and the EQ lineup of full EVs. Complexity has grown.

We drove the CLA four-door coupe in our previous issue. Finding it on the small side, at least if you're tall, led us to revisiting the alternatives, and—although we are fairly immersed in the full line-

up and its evolutions—we were somewhat surprised to realize a larger alternative did not exist. The CLS had been discontinued just the prior year, and there never was a CLE four-door coupe.

Three-letter (CLx) naming, though, is expanding from four-door coupes to two-door coupe-cabriolet pairings. This is the case with the new CLE, a two-door combining aspects of the C-Class and E-Class coupe and cabriolet into one new model series.

The Mercedes-Benz CLE 300 4MATIC Coupe we are driving here is the base of four versions—or five counting AMG, or seven adding two Cabriolet versions (see chart in sidebar).

The first thing we wanted to experience was its size—is it noticeably larger than the A-sized CLA? Is it more like a C-size or E-size? Our chart at upper right tells the tale via a range of key dimensions

(along with CLE's variance from all three others).

The CLE is clearly longer than the CLA, although both its trunk and overall height are less. CLE is closer to the past E-Class Coupe than the C-Class (reinforcing its naming as a CLE and not a CLC), although all three are relatively close (reinforcing their approach of continuing with just one instead of two). Although the CLE rides lower than CLA, its front headroom is almost two inches more, exactly what we had wanted as a tall person trying out that CLA. Despite the notable increase in length, legroom increases just a hair (and rear legroom is less than in the old E-Class Coupe). More surprisingly, the CLE has less cargo volume than the CLA, again presumably due to its low-slung stature.

At first, the CLE's steering and suspension felt very light and detached, but as we accelerated in-

Packaging and positioning: there's far more to creating a particular model than saying, "just make it an inch or two bigger." Each element affects the others, and some dimensions can become smaller even as a vehicle becomes larger. The new CLE is promoted as the largest coupe in its segment, significantly larger than the outgoing C-Class Coupe, though both lower and longer than the outgoing E-Class Coupe. While Mercedes focuses on comparing the new CLE with the outgoing coupes, we are interested in the current options, CLE vs CLA—especially having just had them back-to-back—although one is a four-door, the other a two.

	CLE Coupe (2-dr)	C-Class Coupe (2-dr)	E-Class Coupe (2-dr)	CLA Coupe (4-dr)
		(CLE=)	(CLE=)	(CLE=)
Length	191.0	184.5...(+6.5)	190.4...(+0.6)	184.6...(+6.4)
Wheelbase	112.8	111.8...(+1.0)	113.1...(-0.3)	107.4...(+5.4)
Width (w/o mirrors)	73.3	71.2...(+2.1)	73.2...(+0.1)	72.0...(+1.3)
Height	56.0	55.3...(+0.7)	56.1...(-0.1)	56.7...(-0.7)
Legroom (F/R)	42.1/34.2	41.3/32.0...(+/+)	41.8/35.9...(+/-)	41.8/33.9...(+/+)
Headroom (F/R)	40.3/36.0	40.26/35.6...(+/+)	40.9/36.4...(-/-)	38.5/35.7...(+/+)
Cargo capacity	11.2	10.5...(+0.7)	10.0...(+1.2)	11.6...(-0.4)

to our first corner, it felt accurate and sure-footed, and that was our ongoing impression.

We played with drive modes (sport-individual-comfort-eco) a bit, largely seeking quicker downshifts and powershifts from its automatic, settling into sport, where general "go" responsiveness is good, and freeway handling and toe-tapping lane-changing maneuvers are exact. There's a nice sub-

tle, healthy growl (all in sport mode), and routine shifts are prompt. While the pricier six-cylinder CLE 450 hits 60 mph in just 4.2 seconds, 6.2 seconds in this was not remotely disappointing and more than you'd ever need around town.

The 48-volt mild hybrid system provides about 21 miles of pure EV range, always fun to play with, although it seemed to greatly reduce our AC flow.

All in all, the CLE is a great drive, and we appreciated the increased cabin size, although a big apples-and-oranges factor remains—the CLE is a two-door and CLA a four. It's an easy tradeoff for those who travel largely solo, as we were. For others, perhaps a four-door CLE equivalent will follow. ■

Wish fulfillment

Coupe classes combined and compared in new context
BY JOE SAGE



SPECIFICATIONS

ASSEMBLY	Bremen, Germany
ENGINE/TRANS BUILD	Poland / Germany
PARTS CONTENT	Germany 40% / US/Can 0%
ENGINE	2.0L inline-4 turbo w mild hybrid system, diecast alloy block/head
HP/TORQUE	255 hp / 295 lb-ft + up to 23 hp / 151 lb-ft from Mild Hybrid
COMPRESSION RATIO	10.5:1
TRANSMISSION	9G-TRONIC 9-spd auto
DRIVETRAIN	4MATIC AWD
0-TO-60 / TOP SPEED	6.2 sec / 130 mph
SUSPENSION	4-wheel indep w comfort tuning; F: 4-link; R: 5-arm multilink
STEERING	rack & pinion w electromechanical power asst
BRAKES	[no information]
WHEELS	8.0x18 twin-5-spoke black
TIRES	245/45 R18 extended mobility
LENGTH / WHEELBASE	191.0 / 112.8 in
HEADROOM (F/R)	40.3 / 36.0 in
LEGROOM (F/R)	42.1 / 34.2 in
GROUND CLEARANCE	na
TURNING CIRCLE	tba
CARGO CAPACITY	11.2 cu.ft
WEIGHT	4057 lb
FUEL / CAPACITY	prem unl / 17.4 gal
MPG	24/34/28 (city/hwy/comb)

BASE PRICE	\$56,500
DRIVER ASSISTANCE STANDARD	blind spot assist, adaptive highbeam assist, active brake assist, attention assist and more...incl
DRIVER ASSISTANCE PKG	active lane change assist, Distronic Plus w steering assist and stop & go assist, route-based speed adaptation
AMG LINE PKG	modified front bumper, air intakes & chrome trim element, larger front brake discs, two-tailpipe exhaust system w trim elements integrated into rear bumper, and more
SURROUND VIEW SYSTEM	600
HEATED STEERING WHEEL	250
HEADS-UP DISPLAY	1100
REAR SIDE AIRBAGS	700
ENERGIZING AIR CONTROL	150
DASHCAM	200
ADDITIONAL USB PORTS	300
GUARD 360 VEHICLE PROTECTION PLUS	50
DESTINATION CHARGE	1150
TOTAL	\$67,090

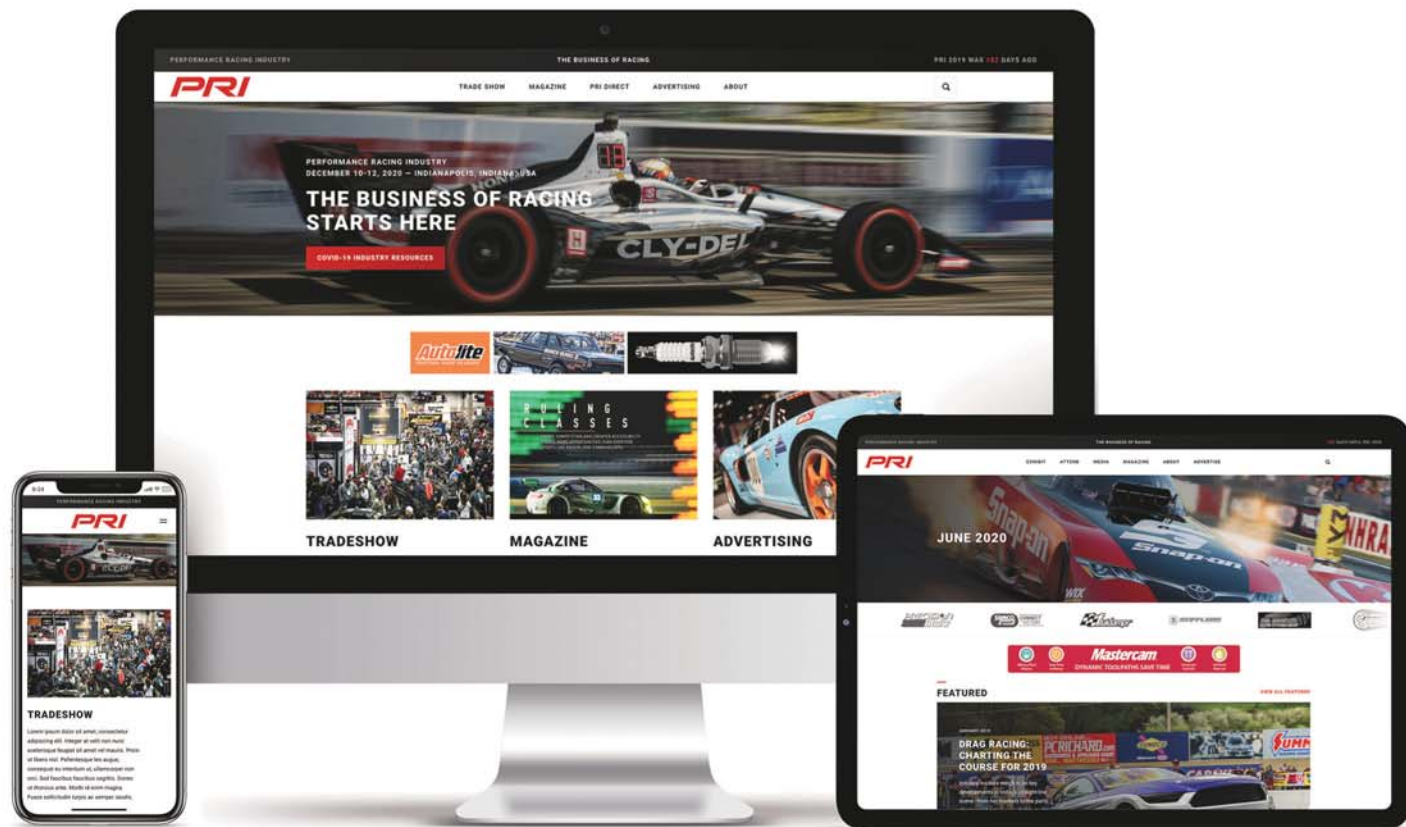
2024 MERCEDES CLE LINEUP

MERCEDES-BENZ COUPE	
CLE 300 4MATIC Coupe (255 hp) ...	\$56,500
Pinnacle trim	59,100
CLE 450 4MATIC Coupe (375 hp) ...	65,650
Pinnacle trim	68,250
MERCEDES-AMG COUPE	
AMG CLE 53 Coupe (443 hp) ...	72,800
MERCEDES-BENZ CABRIOLET	
CLE 300 4MATIC Cabriolet (255 hp) ...	64,350
CLE 450 4MATIC Cabriolet (375 hp) ...	73,850



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NASCAR CHAMPIONSHIP WEEKEND NOVEMBER 8-10, 2024

Phoenix Raceway has hosted NASCAR Championship Weekend since 2020 and has sold out six consecutive Cup Series races. NASCAR Championship Weekend returns this November, with four major races over three days. The weekend begins on Friday, November 8, with the ARCA Menards Series West and NASCAR Craftsman Truck Series championship races. On Saturday, the NASCAR Xfinity Series Championship Race caps a day that also includes NASCAR Cup Series qualifying. And then on Sunday, the NASCAR Cup Series Championship Race will once again conclude one of the most exciting NASCAR seasons on record, as drivers battle side-by-side for the coveted Bill France Cup in the fifth-consecutive NASCAR Cup Series Championship Race here.

TICKETS & INFORMATION:

Only a limited number of tickets remain for the 2024 NASCAR Championship Weekend. Given the overwhelming demand, fans are urged to secure their seats and experiences immediately. For tickets, as well as for information on additional experiences and entertainment—including camping, parking, scanners, Infield Experience, Busch Light Lounge, Ally Curve hospitality club and more—call the Phoenix Raceway ticket office at 866-408-RACE (7223) or visit phoenixraceway.com.

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

Friday, November 8
ARCA Menards Series Championship.....11:30 am
NASCAR Craftsman Truck Series Qualifying2:05 pm
NASCAR Xfinity Series Practice3:05 pm
NASCAR Cup Series Practice4:05 pm
NASCAR Craftsman Truck Series Championship.....6:00 pm

Saturday, November 9
NASCAR Xfinity Series Qualifying2:00 pm
NASCAR Cup Series Qualifying3:05 pm
NASCAR Xfinity Series Championship.....5:30 pm

Sunday, November 10
NASCAR Cup Series Championship.....1:00 pm

Schedule and details subject to change

NASCAR WEEKENDS 2025

Phoenix Raceway has announced NASCAR Spring Weekend, March 7-9, and NASCAR Championship Weekend, October 31 to November 2, 2025.



Hey, Hey, Santa Fe

BY JOE SAGE

Hyundai Santa Fe is all new for 2024, and very much so—bearing no resemblance to the one that came before. Family identity is strong, however, as you will discover the wide usage of “H”-as-in-Hyundai identity points throughout, both outside and inside (see a few at upper right).

The new Santa Fe is notably boxier, with benefits from interior volume to a wider liftgate area. A midsize SUV (Palisade is larger; Venue, Kona and Tucson are smaller), Santa Fe has three rows standard and seating for seven (or six in top Calligraphy trim). There are five

trim levels. A standard 277-hp 2.5-liter engine and 8-speed dual clutch transmission powertrain are available in all five, and all but one of these are available as front- or AWD, for a total of nine versions. Then three trims are alternately available as 231-hp 1.6-liter turbo-hybrids (rated up to 36 mpg combined), all either FWD or AWD, for six hybrids. That’s 15 basic builds total, from \$33,950-48,800.

Our midrange XRT (\$40,600 base) has greater ground clearance (8.3 inches vs 7.0 for others) and accordingly greater approach-departure-breakover angles, especially breakover. XRT sits atop 18-inch wheels (as do lower trims, while contrasting with

higher trims bearing 20- or 21-inchers), and XRT has an all-terrain tire fitment—size and tires together providing tougher tread and more sidewall for rougher duty. XRT also tows the most, when equipped with trailer brakes—4,500 pounds vs 3,500 for others with trailer brakes. (Without trailer brakes, any tow 1,650 pounds.) A tradeoff for all of this is that XRT has lower fuel mileage.

Trim details, silver or gloss black on other versions, are finished in dark chrome or matte black on XRT. Our sample came with Earthy Brass Matte paint—handsome, but requiring extra care, paradoxically at odds with its off-roading potential. Accordingly, we kept this one on pavement.

Horsepower is ample in town and on freeways.

Ramp acceleration is healthy and strong, if not the fastest ever (at 277 horsepower and nearly 5,000 pounds), feeling better than its numbers thanks to a well-tuned powertrain growl under load. Anyone commanding this beast is likely to be very satisfied with the experience.

Sometimes we get into drive modes and sometimes we don’t, but we quickly went to them here, as we were interested in conquering a hesitancy from the line. The controller is in an unusual spot, one in a row of otherwise unrelated switches below climate (auto hold, 4WD lock, hill descent and parking distance), but raised a bit, easy to home in on once oriented. Modes include normal, sport and snow, plus MyDrive (combining your favorite elements). We used sport regularly, though the overall experience was not significantly different. We also tried paddles, but as any lag is between dead

stop and first shift, they really aren’t a factor.

The hybrid versions have lower horsepower, but notably higher fuel mileage—35-36 vs 20 mpg for city, 34-35 vs 28-29 combined, depending upon FWD-AWD. Hybrids also have a completely different transmission (6-speed automatic versus our 8-speed dual-clutch), and we’re curious to compare their performance. Hybrid prices are very similar, and electrification often provides pep beyond pure horsepower, so any buyer might give them a look. But there is no hybrid XRT.

The new Santa Fe is handsome, spacious and value-priced across the full lineup. Even with fifteen versions, it is easy to narrow down the one that’s best for you. In fact, people seem to be doing exactly that, at quite a pace—we already see a number of them on the road every day, easy to spot with those unmistakable “H” headlights. ■



SPECIFICATIONS

ASSEMBLY	.....	Montgomery, Alabama
ENGINE/TRANS BUILD	.....	USA / S Korea
PARTS CONTENT	.....	S Korea 30% / US/Can 50%
ENGINE	.....	2.5L Smartstream turbo GDI + MPI DOHC 16v inline-4
HP/TORQUE	.....	277 hp / 311 lb-ft
COMPRESSION RATIO	.....	11.0:1
TRANSMISSION	.....	8-spd dual clutch (wet type), Shiftronic manual shift paddles
DRIVETRAIN	.....	HTRAC on-demand AWD
SUSPENSION	.....	F: MacPherson strut w coils, gas shocks w advanced valving, stblzr bar; R: multi-link indep, sep spring & shocks, gas shocks w adv valving, stblzr bar
STEERING	.....	motor driven rack & pinion, column-mounted
BRAKES	.....	F: 12.8 vented; R: 12.0 solid
WHEELS	.....	18x7.5J alloys
TIRES	.....	245/60 R18 Continental AT
LENGTH / WHEELBASE	.....	190.2 / 110.8 in
HEADROOM (F/2/3)	.....	(snrf) 40.2 / 39.6 / 37.7 in
LEGROOM (F/2/3)	.....	44.4 / 42.3 / 30.0 in
GROUND CLEARANCE	.....	(XRT) 8.3 in
APPR / DEP / BRKOVER	.....	19.3 / 21.8 / 19.1°
TURNING CIRCLE	.....	37.9 ft
CARGO CAPACITY	.....	14.6 / 40.5 / 79.6 cu.ft
ROOF RAILS CAPACITY	.....	220 lb
TOW CAPACITY	.....	(w/o brakes) 1650 lb (XRT w brakes) 4500 lb
WEIGHT	.....	4486 lb
FUEL / CAPACITY	.....	reg unl / 17.7 gal
MPG	.....	19/26/22 (city/hwy/comb)
BASE PRICE	.....	\$40,600
PAINT: Earthy Brass Matte	.....	1000
CARPETED FLOOR MATS	.....	210
DESTINATION CHARGE	.....	1395
TOTAL	.....	\$43,205

2024 HYUNDAI SANTA FE LINEUP

2.5L turbo	.....	FWD	.....	AWD
SE	.....	\$33,950	.....	\$35,750
SEL	.....	36,450	.....	38,250
XRT	.....	40,600	.....	40,600
Limited	.....	43,350	.....	45,150
Calligraphy	.....	46,500	.....	48,300
1.6L turbo hybrid	.....	FWD	.....	AWD
SEL Hybrid	.....	\$36,950	.....	\$38,750
Limited Hybrid	.....	43,850	.....	45,650
Calligraphy Hybrid	.....	47,000	.....	48,800

About the only thing that doesn't have a bold, rigidly geometric "H" shape on the new Santa Fe may be the familiar flowing Hyundai "H" hood badge itself.



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SPECIAL EVENTS: JANUARY AUCTIONS

	18 SAT	19 SUN	20 MON	21 TUE	22 WED	23 THU	24 FRI	25 SAT	26 SUN
PREVIEWS									
AUCTIONS									
Barrett-Jackson									
Bonhams						TBA			
MAG Auctions									
RM Sotheby's						TBA			

Arizona Auction Week 2025

Auction Week hit a high of eight events in 2020, just as pandemic restrictions entered the realm. Affected years saw various live, remote, restricted, canceled or rescheduled events.

And there has been attrition along the way. Leake, which seemed very well run, was one-and-done in 2020. Russo exited after 2021. Gooding exited after 2022. Worldwide skipped 2023, returned for 2024, but is skipping 2025.

This brings Auction Week down to four events this coming January.

Things can always change, as they have before, and some details are not yet known. We'll have updated information and the final outline in our next issue.

Check individual auctions online, as well, for any updated details.



Barrett-Jackson
54th Annual Scottsdale Auction

Nine days: Sat Jan 18 - Sun Jan 26, 2025
WestWorld of Scottsdale (AZ Loop 101 & FLWright Blvd)
16601 N Pima Road, Scottsdale AZ 85260
www.barrett-jackson.com

Bonhams
14th Annual Scottsdale Auction

Friday, January 24, 2025 (starts at 12 noon)
(viewing dates-times: t.b.a.)
Westin Kierland Resort & Spa
6902 E Greenway Pkwy, Scottsdale AZ 85254
www.bonhams.com

MAG Auctions
January 2025 Collector Car Auction

Fri-Sun, Jan 24-26, 2025 (8am bidders, 9am gen.)
(check-in Tues-Thurs, Jan 21-23, 9am-5pm)
New location: Cubs Stadium at Sloan Park
2330 W Rio Salado Pkwy, Mesa AZ 85201

RM Sotheby's
27th Annual Automobiles of Arizona

Friday, January 24, 2025 (starting time t.b.a.)
(preview dates-times: t.b.a.)
Arizona Biltmore Resort and Spa
2400 E Missouri Ave, Phoenix AZ 85016
www.rmsothebys.com



HOTTEST HOT WHEELS

HOT WHEELS LEGENDS TOUR ARIZONA WINNER HEADS TO FINALS

The Hot Wheels Legends Tour presented by Mobil 1—the world’s largest traveling car show, this year hitting 13 countries—arrived at the Walmart Supercenter on South Market Street in Gilbert on September 28, the tenth US stop of 2024. Celebrating its seventh year, the free live event series launched in Miami on May 11.

Over 195 vehicles were entered at the Gilbert event, and over 7,500 fans attended. Each US-based regional event stop includes activities for fans of all ages, including the Hot Wheels Garage of Legends life-size cars, play spaces where kids can interact with the latest Hot Wheels toys, and Hot Wheels die-cast displays featuring coveted premium and collector cars.

This comprehensive global contest not only offers custom car builders a great day with like-minded bulders, family, friends and an eager audience. It also comes with a special opportunity—to

have their passion projects turned into the next Hot Wheels 1:64 die-cast collectible. While everyone enjoys the sights and sounds of the day, a team of local automotive enthusiasts and members of the Hot Wheels design team were hard at work, voting for a vehicle that would compete in the global semifinals later this year.

Built, not bought, is the spirit of the Tour, with custom creations of all makes, models, shapes and sizes encouraged to enter. Judges examine each vehicle based on three key criteria—authenticity, creativity and garage spirit—looking for extreme, on-trend, relevant vehicles. Extra points are awarded when it’s evident the owner put in early mornings, late nights, and extra grit and determination. Judges here included Muffy Bennett, Alex Roy, Matt Hay, Tyler Patterson, Nick Raymond Scherr and Bryan Benedict.

GILBERT WINNER: Arizona native Robert Zoller

emerged victorious at the Gilbert Hot Wheels Legends Tour stop with his 1960 Chevy Apache.

His home-built hot rod is adorned with a unique paint mix called “Odd Grey,” inspired by his nickname, “Odd Robb.” The truck has a custom hood and is significantly shortened front and rear—the front by 10.5 inches and the rear by 26 inches.

This classic collectible C10 pickup is not only easy on the eyes but also a great cruiser, with a 6-liter LS 4L60 and modified air-ride suspension.

The build’s garage spirit caught the judges’ attention and landed Zoller the top of the podium.

FINALS: Phoenix was the next-to-final stop on the tour, followed by one more live event on October 5 at Hot Wheels headquarters in El Segundo, California. New this year, Hot Wheels and Walmart are partnering to then select an online submission to compete in the Global Semi-Final. The Tour culminates with a virtual Global Grand Finale in November, where the next Hot Wheels die-cast is crowned and one owner’s passion project is inducted into the Hot Wheels Garage of Legends™ and adapted to 1:64 scale. ■



TRAVEL SITES TO BE SEEN



sedona.net
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prescott.com
thecanyon.com
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oakcreekcabins.com

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Grand Canyon National Airport runway rehabilitation project



WHAT TO EXPECT

Asphalt projects in this region must be completed during warmer weather. Despite the inconvenience, the project team is diligently working to minimize the disruption. Full closure will be in effect 24 hours a day, seven days a week in summer 2025. The project is currently under design and details are subject to change.

- ▼ **DESIGN & PLANNING:** in process
- ▼ **PROJECT BID PROCESS:** fall-winter 2024/25
- ▼ **PRE-CONSTRUCTION PREPARATIONS:** winter-spring 2025
- ▼ **CONSTRUCTION AND RUNWAY CLOSURE:** approximately 35 days, anticipated start July 14, 2025, through August 2025
- ▼ **TENTATIVE COMPLETION:** September 2025

PROJECT COST

The estimated construction cost is approximately \$15 million, to be funded by a Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grant, along with state matching funds.

If bids come in lower than expected, the project scope includes two alternates which can be added if budget allows:

- ▼ **ADD ALTERNATE ONE:** Apply a seal coat to the remaining 37.5-foot section on both sides of the runway centerline.
- ▼ **ADD ALTERNATE TWO:** Perform a three-inch mill and overlay on the remaining 37.5-foot section on both sides of the runway centerline. ■

The Grand Canyon National Park Airport, located at Tusayan, seven miles from the South Rim and two miles from the Park entrance, serves the number one tourist site in the state and is Arizona's only state-owned airport.

The current airport is built on the site of the first Grand Canyon Airport, which was built in 1925. The current airport opened in October 1965, and the airport terminal was completed and dedicated on October 20, 1967.

Grand Canyon National Park Airport completed a new Aircraft Rescue and Fire Fighting Facility (ARFF) Maintenance Building in 2010. This newer building, designed by LEA Architects LLC, has received an Advanced Level Plus Sustainable Building Award from the Coconino County Sustainable Building Program.

The airport has one runway, 3/21, 9,000 feet by 150 feet and capable of supporting aircraft with a weight-bearing capacity of a single-wheel 88.0, double-wheel 108.0 and double-tandem 160.0.

The airport has aircraft crash and rescue services available during control tower operating hours: 0600 to 2000 June 1 through September 30, and 0700 to 1900 October 1 through May 31. These services are also available at other times when prior arrangements are made.

RUNWAY REHABILITATION PROJECT

The Grand Canyon National Airport is gearing up for a significant runway rehabilitation project, designed to improve safety and operational efficiency for all users. Current runway surfaces have deteriorated over time due to regular use and exposure to environmental conditions. This project will rehabilitate the runway's infrastructure, extending its lifespan. Scheduled for summer 2025, this project will require closure of the runway to aircraft operations (excluding helicopters operating from the ramp) for about 35 days. This closure tentatively spans from July 14 through August 2025.

The airport's sole runway, designated as 3/21, will receive a 3-inch mill and overlay of 75 feet of the runway center section—the portion that is used the majority of the time by the airport's most critical aircraft. While addressing the distressed and aged pavement, the project will also include two other elements:

1. Reconstruction and rehabilitation of taxiway intersections P, A, and B to address a Federal Aviation Administration (FAA) identified hotspot.
2. Updating of taxiway nomenclature (signage) for the entire airfield to current FAA standards.

This project will not alter the current runway length or width.

Middle heavyweight

Light on its feet, tough as nails BY JOE SAGE

It's complicated. And it's simple. The Land Cruiser name is familiar on our shores for two types of vehicle—a burly utility-type vehicle and a large premium SUV. Both have evolved globally under a range of names and have been among Toyota's best selling and most widely adapted vehicles for decades.

Variations of both have been sold in the US over the years, with the bigger Land Cruiser

SUV bearing the badge for the past couple of decades. That one, however, was dropped from our market after 2021 (although Lexus has kept its cousin, the LX). The Land Cruiser name and market niche have now transferred to a new fifth generation of the more utilitarian Land Cruiser (Prado in much of the world).

The timing seems right (so much so that it has also been applied to the Lexus GX). The

off-pavement niche is hot, boxier styling ditto. (Note that Toyota engineers are longstanding champions at creating crisp geometry that is nonetheless highly aerodynamic.)

The lineup is minimal. One core model, as driven here, is simply called Land Cruiser. And there's a special version, the Land Cruiser 1958, a nod to the lineup's first year. Unlike most special editions, this is \$6,000 less expensive—nicely equipped, but with fabric seats and other simplifications. The 1958 is immediately recognizable by its heritage-evoking round headlights. And for 2024, if still available, there has been an upfitted trim, the First Edition (stretching the lineup's pricing

from the \$50s into the \$70s).

Our sample here is a 2024, though everything is basically the same for 2025, though even simpler, as that First Edition goes by the wayside, with our nameless trim now top dog in the \$60s. (Prices for 2025 rise only \$500.)

What's not to love? On style alone, this is one very Land Cruiserly Land Cruiser.

Power is ample, while i-FORCE MAX hybrid integration provides prodigious torque—465 lb-ft—making the Land Cruiser feel not only more powerful than its horses, but more nimble and precise than its 5,445 pounds suggest. It's not just power-to-weight that makes this handle so well—it's its front/rear distribution, or so it feels, in the absence of a specification for that at this time. But part of that weight is placed down low with the 288-volt hybrid bat-

tery, contributing to excellent balance.

The new Land Cruiser's spacious interior and bold shape give it a presence that belies its trim actual dimensions and maneuverability, while it still boasts strong ground clearance and off-roading specifications.

We thought we might have to go easy on our Land Cruiser off-highway, as ours had 20-inch wheels and tires, rather than the standard 18s. Even these, however, have plenty of sidewall, and the vehicle was a top performer on aggressive dirt trails. We had also just driven multiple Land Cruisers at the TAWA Texas Truck Rodeo a few weeks prior (also in this issue), on dirt trails and an assortment of engineered obstacles. Those winners are, for debatable reasons, not revealed until later. But we do know we voted it extremely high. ■

One of the coolest features in the Land Cruiser is its Cool Box, an optional refrigerated bin in the console, which does reduce the bin's volume, but is GREAT to have in Arizona. The Toyota Land Cruiser is a two-row—surely for reasons of heritage, but also because, while its interior is spacious, its hybrid battery pack does impact volume. For this reason, some shoppers may check out its cousin, the Lexus GX, which is available with either two or three rows.



SPECIFICATIONS

Specs not yet fully available; info from multiple sources; accuracy may vary accordingly.

ASSEMBLY	.....Hamura, Tokyo, Japan
ENGINE	.....i-FORCE MAX 2.4L turbo-4
HYBRID BATTERY	.....288V, 1.87 kWh NiMH
ELECTRIC MOTOR	.....48V integrated in transm
HP/TORQUE	.....326 hp / 465 lb-ft
TRANSMISSION	.....8-spd electronically controlled automatic w intelligence (ECT-i); sequential shift mode and uphill/downhill shift logic
DRIVETRAIN	.....full-time 4WD system w Active Traction Control (A-TRAC), Torsen limited-slip center differential w locking feature, electronically controlled locking rear and center differentials, drive mode select w sport, eco, normal, snow modes
SUSPENSION	.....front stabilizer bar disconnect mechanism, crawl control, downhill assist control, Multi-Terrain Select (functional in both 4H and 4L) w auto, dirt, sand, mud, rock and deep snow
	F: indep dbl wishbone, coils, stblzr bar; R: 4-link w coils, stblzr bar & semi-floating axle
STEERING	.....veh speed sensing, var ratio power-assist rack & pinion
BRAKES	..... power-assist front/rear vented disc w hydraulic brake booster, Star Safety System
WHEELS / TIRES	.....opt 20-in alloy / 265/60R20
LENGTH / WHEELBASE	.....193.7 / 112.2 in
GROUND CLEARANCE	.....8.7 in
APPRCH / DEPART / BRKVER	.....31.0 / 22.0 / 25.0°
TURNING CIRCLE	.....40.0 ft
HEADROOM (F/R)	.....39.3 / 38.5 in
LEGROOM (F/R)	.....33.0 / 26.7 in
CARGO CAPACITY	.....37.5 / tbd cu.ft
WEIGHT	.....5445 lb
TOW CAPACITY	.....6000 lb
FUEL / CAPACITY	.....91 oct prem unl / 17.9 gal
MPG	.....22/25/23 (city/hwy/comb)
BASE PRICE	.....\$61,950
20-INCH ALLOY WHEELS	.....1240
LAND CRUISER PREMIUM PKG:	14-spkr JBL Premium audio, illum entry, digital key capability, pwr moonroof w pwr sunshade, center console cool box, digital RV mirror, Qi-compatible wireless charge, leather-trimmed memory/pwr driver's seat, heads-up display, driver assist/alert (4G req'd); lane change, front cross-traffic, traffic jam) .....4800
ROOF RACK	.....1440
TWO-TONE ROOF	.....350
BALL MOUNT	.....80
CARPET CARGO MAT	.....130
CARPET FLOOR MATS	.....179
DESTINATION CHARGE	.....1395

TOTAL\$71,364
 Prices increase by \$500 for 2025; see below.

2024 LAND CRUISER LINEUP

Land Cruiser 1958	.....\$55,950
Land Cruiser	.....\$61,950
Land Cruiser First Edition	.....74,950

2025 LAND CRUISER LINEUP

Land Cruiser 1958	.....\$56,450
Land Cruiser	.....62,450

IT'S A DIRTY JOB, BUT SOMEBODY'S GOTTA DO IT.



By Joe Sage

Vehicle and people photos:
Kevin McCauley of Capturing the Machine

Lead trail photo: Joe Sage

The Texas Auto Writers' Association (TAWA) Texas Truck Rodeo has long been one of our don't-miss-it comparo events. After all, "Texas means trucks." As does Arizona. We have much commonality in terms of market and popular hardware.

The event has evolved over the years, much of it in line with how the vehicle market itself has developed new patterns.

Held in the fall, most vehicles used to be brand new next-year samples. But model year releases have become more scattered, for a variety of reasons—the past few years' lockdowns and supply chain disruptions among them. This may also be at least one reason some familiar brands have not shown up for a few years, while others have expanded or moved in anew.

Categories have also evolved, as at similar events, now broadly divided into SUVs (including crossovers) and pickups. These two sets are then divvied up by sizes, or by luxury, off-road and EV categories. In many cases, but not all, vehicles appear in more than one category (e.g. full-size and off-road), which could seem equal parts opportunity or conflict, but helpful with a bit of cross-referencing. Categories and entries appear on the following pages.

The venues have changed, too. Originally held on big Texas Hill Country ranches full of natural features (rocks, rivers, steep off-road trails), the event moved to a small engineered course on a small property for a few years, which used to be the site of a second-evening awards dinner. Now, it is held at a site that combines elements of the two—a big North Texas acreage, home to Eagles

Canyon Raceway outside Decatur, with open dirt roads and trails, as well as specially prepared vehicle-challenging features (steep climbs, rock fields for articulation, water hazards and such).

We had a total of 29 vehicles and 41 drivers. With the event now compressed into one day, that's about seven hours for everyone to try them all—roughly four vehicles per hour, each. With time to check your charts against what's in the lot at any moment, often get a bit of a presentation and/or see if someone is riding along, drive out to the course from the staging area (and back) and repark, along with the time spent on the route and obstacles themselves, is this mathematically possible? A handful of vehicles are for pavement-only driving, which may or may not be a little quicker. Category overlap can help in some cases.

As you parse the (11) categories on the following pages, you'll find it all distills down to (14) SUVs and (8) pickups by brand and model (there are multiple variants of several). We work with more detailed information while driving and judging, but to get a reasonably healthy feel for things, here we are including the vehicle models and trims, horsepower, fuel mileage (or equivalent) and the price of our particular sample as optioned and driven.

There will be winners in each category, and the event culminates in two grand trophies via a separate, completely subjective vote—the SUV of Texas and the Truck of Texas.

But you will notice that information is not included here.

Voting used to be done, results tabulated and awards presented during dinner at the close of driving. Being crowned Truck of Texas used to keep automakers' ad agencies on the edge of their seats, ready to brag on billboards coast-to-coast to push year-end shopping, and in pricey Super Bowl ads for January—all proud of the power of the prestigious top trophies. In an atypical move, this information is now not revealed (even to ourselves) until later than the event and thus later than those traditional promotional cycles.

The reasoning seems to favor a more local or regional reach—saving the buzz for presentation during another Texas event. This year, even that will come in two waves. Category winners will be revealed at the San Antonio Auto Show in November, and the ultimate Truck of Texas and SUV of Texas trophies will not be known until the Houston Auto Show in January. (Such public presentations were often done in prior years, too, but did not preclude winners having already been announced promptly and widely, prior.)

We suspect this affects manufacturer participation.

Between our weekly vehicles, new model launches and other comparo events, we drive hundreds of vehicles each year. From now until these awards are announced will be the big LA and Detroit auto shows, as well as a new calendar year, all likely to bring new model year replacements for many. And next year's comparo drives will already be underway. You may likely develop your own new needs and new vehicles of interest along the way.

We tell you all this not to criticize the event, a complex and well-run affair. But we know you're wondering who the winners are—and otherwise may be thinking we forgot to tell you.

With all that in mind, hang on to the following vehicle and category information, which includes some brief insights for now. And we'll let you know, at those later points in time, which vehicles had prevailed in group voting, back before this point in time. Final results are always full of both affirmations and new insights. We generally never reveal our own votes, but do keep track, so we'll look forward to comparing them with groupthink.





At left (top to bottom): INEOS Grenadier, Kia Sorento, Nissan Kicks, Lexus GX, Toyota Crown Signia, Honda Prologue, Jeep Wrangler Rubicon 392.



SUVS

Subcompact SUV

2025 Nissan Kicks SR141/14028/35/31\$30,705

• **NOTES:** This hot-selling category had only one entry—so they will win it.

Midsize SUV

2025 Genesis GV80 Coupe 3.5T e-SC409/40518/22/20\$87,780
 2025 Honda Pilot TrailSport285/26218/23/2051,250
 2024 Honda Prologue Elite288/333MPGe 9259,295
 2024 Hyundai Santa Fe XRT 2.5T277/31119/26/2242,675
 2024 INEOS Grenadier Trialmaster282/33214/14/1483,855
 2024 Kia EV9 GT-Line379/516MPGe 8078,430
 2024 Kia Sorento X-PRO SXP 2.5T281/31120/27/2349,400
 2024 Lexus GX 550 Overtrail349/47915/21/17est 71,620
 Lexus GX 550 Luxury+349/47915/21/1784,665
 2024 Lexus TX 550h F SPORT366/31727/28/2778,660
 2025 Toyota Crown Signia Limited Hybrid240/46639/37/3851,730
 2024 Toyota Land Cruiser i-FORCE MAX326/46522/25/2371,809
 Toyota Land Cruiser First Ed i-F MAX326/46522/25/2376,825

• **NOTES:** Several brands appear to be competing against themselves here—two Hondas, multiple Toyotas and Lexuses, multiple Kias as well as cousins Hyundai and Genesis. But one Honda and one Kia are EVs and also entered in the separate Electric SUV category. Toyota-Lexus, having almost half the vehicles in this category, may appear to dominate it, but actually are splitting their votes—Land Cruiser goes against close cousin Lexus GX, while two GX trims are voted as one model, but go up against their TX.

Luxury SUV

2025 Genesis GV80 3.5T Prestige SUV375/39116/22/19\$82,150
 2024 INEOS Grenadier Trialmaster282/33214/14/1483,855
 2024 Lexus GX 500 GX 550 Luxury+349/47915/21/1784,665
 2024 Lexus TX 550h F SPORT366/31727/28/2778,660

• **NOTES:** Three out of four in this category are also entered in the Midsize SUV category, and the fourth (Genesis) has its Coupe sibling in that group, making this whole category basically a subset, but its winner will still be meaningful.

Off-Road SUV

2025 Honda Pilot TrailSport285/26218/23/20\$51,250
 2024 Hyundai Santa Fe XRT 2.5T277/31119/26/2242,675
 2024 INEOS Grenadier Trialmaster282/33214/14/1483,855
 2024 Jeep Wrangler Rubicon 392 Final Ed470/47013/16/14108,475
 2024 Kia Sorento X-PRO SXP 2.5T281/31120/27/2349,400
 2024 Lexus GX 550 Overtrail349/47915/21/17est 71,620
 2024 Toyota Land Cruiser i-FORCE MAX326/46522/25/2371,809
 Toyota Land Cruiser First Ed i-F MAX326/46522/25/2376,825

• **NOTES:** Jeep is the only one in this category that is not also in one of the size-based categories. Raw capability gets attention on the course, in this group, although cross-referencing prices may or may not also influence votes. As in the Midsize SUV category, Toyota and Lexus are likely to be splitting their votes here between close cousins Land Cruiser and GX.

Electric SUV

2024 Honda Prologue Elite288/333MPGe 92\$59,295
 2024 Kia EV9 GT-Line379/516MPGe 8078,430

• **NOTES:** Both of these are also entered in the Midsize SUV category, but as EVs, this is their more focused presence (other than for any shoppers who may be freely comparing EV and gasoline alternatives). These two have notably different sizes, personalities and prices. The Kia EV9 has been around for a couple of years now and is an established multiple trophy winner, but the new Honda Prologue (which we also drove at NWAPA Drive Revolution, along with its Acura cousin) brings an appealing and economical new formula to the table.

At right (top to bottom): Toyota Tacoma, Honda Ridgeline, Hyundai Santa Cruz, Ram 1500 Rebel, INEOS Grenadier Quartermaster, Toyota Tundra, Nissan Frontier.

PICKUPS

Compact Pickup

2025 Hyundai Santa Cruz XRT 2.5T281/31118/26/21\$41,605

• **NOTES:** Santa Cruz has some commonality with the midsize Honda Ridgeline, in that they are both unibody pickups. But by size, this is a category of one.

Midsize Pickup

2024 Honda Ridgeline TrailSport280/26218/23/20\$46,830
 2024 INEOS Grenadier Quartermaster Fieldmaster282/33215/15/1572,409
 2025 Nissan Frontier PRO-4X Crew Cab310/28116/20/1850,245
 2024 Toyota Tacoma TRD Pro326/46522/24/2367,974
 Tacoma Limited iForce MAX326/46523/24/2456,225

• **NOTES:** The midsize pickup category, long a second fiddle to full-size, has expanded mightily in recent years. Though not all possible pickups participated, there is considerable variety here—one completely new truck, one unibody, two conventional veterans. We'll be watching this one with great interest.

Full-Size Pickup

2025 Ram 1500 Limited540/521tba\$86,290
 Ram 1500 Rebel420/469tba82,130
 Ram 1500 Tungsten540/521tba91,085
 2024 Toyota Tundra TRD Pro437/58318/20/1974,270

• **NOTES:** As with the midsize pickup category, there are notable brands that did not participate. The three Rams are entered as one contender against Toyota.

Heavy Duty Pickup

2024 Ram 2500 Rebel (6.7L Cummins TD) ...370/850na (HD)\$92,900

• **NOTES:** Another category of one, its winner a foregone conclusion—but a worthy contender it is, especially with how well the 1500 Rebel has always done.

Luxury Pickup

2024 INEOS Grenadier Quartermaster Fieldmaster282/33215/15/15\$72,409
 2025 Ram 1500 Tungsten540/521tba91,085
 2024 Toyota Tacoma Limited i-Force MAX326/46523/24/2456,225

• **NOTES:** As in SUVs, these three are also entries in other categories. They vary considerably in style, personality, power and price—a wild card trophy group.

Off-Road Pickup

2024 Honda Ridgeline TrailSport280/26218/23/20\$46,830
 2024 INEOS Grenadier Quartermaster Fieldmaster282/33215/15/1572,409
 2025 Nissan Frontier PRO-4X Crew Cab310/28116/20/1850,245
 2025 Ram 1500 Rebel420/469tba82,130
 2024 Toyota Tacoma TRD Pro326/46522/24/2367,974
 2024 Toyota Tundra TRD Pro437/58318/20/1974,270

• **NOTES:** If any one category represents the traditional heart of the TAWA Texas Truck Rodeo, it is this one. All of these also appear in their size categories, but this feels less like a subset—we are talking prime purpose here. And there is not a bad one in the bunch. Some represent different points in the evolution of the category itself. We'll be curious to learn the group's consensus.

SELF-NOMINATED FEATURE AWARDS

Best Towing Technology: Toyota showcased their Wireless Trailer Camera System, available on Sequoia, Tundra and Tacoma.

Best Powertrain: The only one with competition: Ram's 3.0L Hurricane High Output Straight-Six Turbo versus Toyota's i-FORCE MAX Hybrid.

Best Driver Assist or Safety Feature: Toyota Safety Sense 3.0 (TSS 3.0) suite of features from pre-collision and lane departure to dynamic cruise. ■



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OUR TEXAS WHEELS : 2024 HYUNDAI ELANTRA N / DCT

When we secured the Hyundai Elantra N at our wheels to, from and between the airport, hotel and event site during the TAWA Texas Truck Rodeo, we already had experience with it.

We had driven the Elantra N at its launch, on track at Atlanta Motorsports Park in north Georgia two years ago, along with Kona N and Veloster N (see our May-June 2022 issue).

And we had just driven the Elantra N briefly at the NWAPA Drive Revolution comparo two weeks prior, elsewhere in this issue. While it didn't win there (bigger sedans and SUVs prevailed), we had noted it as perhaps our favorite among a handful of otherwise similar two-door sport coupes—despite, or very possibly because, although it had less power than the others, it had performance aplenty for that face-off, its fuel mileage numbers are commendable and its price was lowest by far.

That makes one track session and one public road session as points of reference. The irony in Texas was that we'd be taking it straight to a club track—although just to park it while partaking in an off-road event. (We asked permission to run the Elantra N around the track once, at normal speeds, since the opportunity seemed obvious. Permission was granted—and who knows, maybe they would have allowed track speeds, too, had we not limited that, ourselves, right up front. But as it turns out, there was no time for such a thing, anyway. Truck Rodeo, like all comparos, is a nonstop-busy event.)

The Elantra lineup is complex, with four powertrains (see chart). Compared to base, the N delivers about 88 percent more power for a 63 percent

HYUNDAI ELANTRA LINEUP		2024	2025
147 hp standard	SE	\$21,625	\$21,875
	SEL	23,575	--
	SEL Sport	--	23,000
	SEL Convenience	--	25,575
	Limited	27,065	26,525
139 hp hybrid	HEV Blue	26,250	25,100
	HEV SEL Sport	--	27,075
	HEV Limited	29,450	29,450
201 hp N Line	N Line	28,465	28,725
276 hp N	N: 6-SPD MT	33,700	33,950
	N: 8-SPD DCT	35,200	35,450

higher price—a solid formula of bang for the buck. It's a lot of performance car for just mid-\$30s.

A drive session such as this is fairly brief, yet fairly comprehensive—fly in one day, out the next evening, but in between tackling the gnarliest of greater Dallas-Fort Worth's freeway systems, then wide-open Interstates heading out of the most developed region, and on to refreshing two-lanes through the hills. We don't always use nav, but we did here, to great effect (especially with various sudden instructions to grab express lanes).

The Elantra N is a front-driver, for reasons of weight, complexity and price. Transmission is a choice of six-speed manual or a sophisticated eight-speed wet dual-clutch unit (DCT) with rev-matching for quick response. We had already learned, in in both track and road conditions, that the front-drive layout works fine. And while we prefer manual transmissions (or at least like having the choice), we had also already learned, on autocross and race-track in Georgia, that the dual-clutch is an incredible piece of machinery, strong and precise, and we

SPECIFICATIONS	
ASSEMBLY	Ulsan, S Korea
CONTENT	80% S Korea / 0% US/Canada
ENGINE	2.0L "Flat Power" 4-cyl turbo, dir inj, 16-valve swing arm M LA, TIS+VIA intake, large bore exhaust
HP/TORQUE	276 hp (286 w/NGS) / 289 lb-ft
COMPRESSION RATIO	9.5:1
TRANSMISSION	(opt) N 8-spd wet dual-clutch (standard: 6-speed manual)
DRIVETRAIN	FWD
	N Corner Carving Diff (limited slip w electronic control)
SUSPENSION	ECS (electronic controlled susp):
	F: MacPherson strut, 23mm stblzr bar;
	R: multi-link indep, 24mm stblzr bar
STEERING	rack-mtd motor-driven rack & pinion
BRAKES	F: 14.2 x 1.2 vented, 13.6-in rotors;
	R: 12.4 x 0.8 vented, 12.4-in rotors;
	11-inch single brake booster (8:1)
WHEELS/TIRES	19x8.0 alloy / 245/35R19 Michelin Pilot Sport 4 S summer
LENGTH / WHEELBASE	185.4 / 107.1 in
GROUND CLEARANCE	5.5 in
TURNING CIRCLE	38.4 ft
HEADROOM (F/R)	40.6 / 37.3 in
LEGROOM (F/R)	42.3 / 38.0 in
CARGO CAPACITY	14.2 cu.ft
WEIGHT	3069 lb
FUEL / CAPACITY	premium / 12.4 gal
MPG	20/27/23 (city/hwy/comb)
BASE PRICE	\$35,200
DESTINATION CHARGE	1150
TOTAL	\$36,350

had in fact had actively chosen it there.

The N model goes light on options—ours had none (other than the moonroof that comes hand-in-hand with its DCT transmission). Weight is prioritized, along with its competitive price ceiling.

Hyundai Elantra is solid proof that the sedan is still with us, and whether for general daily use or weekend track mania, the N is enticing. ■

N-ticing
BY JOE SAGE



Pure EV

EV9 sells a lot of people on the concept by Joe Sage

The Kia EV9 largely speaks for itself—it's a large three-row SUV and a full battery electric vehicle (EV). Pretty much every model in Kia's internal combustion lineup now has a partner in the EV lineup, an alternative or transitional set, depending where the crystal ball takes things from here. While some are quite different in style and form, you can easily tell Kia EV9 is fundamentally related to Kia Telluride, but fully electrified. We immediately found we had a great drive on our hands. If this is the first EV you ever drive, you might likely say, well, I'm sold on EVs. It does everything we command, it's smooth and quiet, and it's inherently spacious, all while delivering a pure

EV experience. Handling is a standout. Visually, and based on experience, you may expect a high center of gravity, with the usual rocking and minor corner squirreliness of many a big three-row SUV. But the EV9's format, with its heavy battery at platform level and its wheels accordingly pushed toward the corners, provides a low center of gravity for a highly stable, flat ride, noticeable at speed and also when parking, without the pitching and rolling of many tall vehicles. Steering is also far more precise than many other steer-by-wire systems. We didn't have its full six or seven possible occupants or luggage with us, any of which will raise the center of gravity—but then, that's always the case, and it compares well with others, even solo. Regenerative braking is common, if not universal, in electrified powertrains—grabbing the energy expended in braking to top up the battery. In many cases an optional setting, in the EV9 you can

feel it even by default, comfortably powerful and sure. Even apart from this, the brakes are notably potent, another big reassuring plus. Everything is well implemented. The format, with its large seating and cargo capacities, suggests two user groups. For soccer kid duty, within a local mileage and recharging pattern, this is a fine contender. Or if you're a long distance road trip traveler with the whole family and a lot of gear, 270 miles of stated range should be enough to get between major points on the map. For other uses, you'll want to do your own math (as with any EV, or really with any vehicle). But don't take our word for it—Kia EV9 has received an unusually high number of awards right from its inception (see partial list at right). Kia going full EV with their biggest three-row has not just adapted a popular format. In so many ways, it largely optimizes it. ■



AWARDS SAMPLING

- 2024 Wards 10 Best Engines & Propulsion Systems
- NACTOY 2024 North American Utility Vehicle of the Year
- International Design Excellence Awards (IDEA 2024) presented by the International Designers Society of America (IDSA): Gold Trophy
- 2024 Red Dot "Best of the Best" Award: Product Design Global Design Competition: Cars and Motorcycles
- 2024 iF Design Awards: Gold Award
- 2024 World Car Awards double win:
 - 2024 World Car of the Year
 - 2024 World Electric Vehicle
- 2024 Women's Worldwide Car of the Year (WWWCOTY): World's Best Car
- Golden Steering Wheel Awards: Family Cars winner
- 2023 Newsweek Autos Awards: Best Premium SUV
- Midwest Automotive Media Association (MAMA): Favorite Plug-In Vehicle Award
- Texas AutoWriters Association (TAWA):
 - Performance SUV: Best in Class;
 - Midsize CUV: Best in Class;
 - Electric Vehicle: Best in Class;
 - Overall winner: 2024 Electric Vehicle of Texas
- Northwest Automotive Press Association (NWAPA) Mudfest (Outdoor Activity Vehicle of the Year Awards):
 - Best Outdoor Utility Vehicle;
 - Best Three-Row Family SUV

TREASURE HUNT: one oddity is the start-stop button, at the base of the already unusual shift control stalk on the right side of the steering wheel—an awkward spot, hard to see even if you know about it, often blocked by the wheel itself. Perhaps inspired by keeping power and go functions in proximity, it may stop some users from even starting.



SPECIFICATIONS

ASSEMBLY	.....Gwangmyeong, S Korea
ENGINE/TRANS BUILD	.....S Korea / S Korea
PARTS CONTENT	.....S Korea 95% / US/Can 1%
MOTOR	.....perm magnetic synchronous
BATTERY	.....Li-ion, 552V 99.8 kWh, 318 kW, 60 Ah (weight 1248.9 lb)
HP/TORQUE (GT-LINE):	
FRONT	.....189.5 hp / 258.0 lb-ft
REAR	.....189.5 hp / 258.2 lb-ft
TOTAL	.....379 hp / 516 lb-ft
TRANSMISSION	.....na
DRIVETRAIN	.....dual-motor e-AWD
0-TO-60 / TOP SPEED	.....5.0 sec / 124 mph
SUSPENSION	.....F: MacPherson strut + dual lower arm type; strut type shock, smart frequency damper valve, hydraulic rebound stop
	R: 5-link multi-link; self-levelizer shocks
STEERING	.....rack & pinion, rack mounted motor-driven power
BRAKES	.....F: 14.2 vented; R: 13.6 vented
	BRAKING 62-0 MPH .....128 ft
WHEELS	.....21-in alloys, black & dark silver
TIRES	.....285/45R21 113V Hankook Ion Evo AS SUV Sound Absorber
LENGTH / WHEELBASE	.....197.4 / 122.0 in
OVERHANG (F/R)	.....34.5 / 40.9 in
GROUND CLEARANCE	.....7.8 in
APPROACH / DEPART	.....20.0 / 22.8°
TURNING CIRCLE	.....40.6 ft
HEADROOM (F/2/3): (with dual sunroof):	.....39.6 / 38.8 / 39.5 in
LEGROOM (F/2/3): (with 2nd row relaxation chair	.....41.4 / 42.8 / 29.9 in
CARGO CAPACITY	.....20.2 / 43.5 / 81.7 cu.ft
FRUNK CAPACITY	.....1.8 cu.ft / 44 lb
WEIGHT	.....5800-5886 lb
TOW CAPACITY	.....with brakes 3500-5000 lb
CHARGING TIME:	
AC 120V 12A	.....84 hours 20 min
AC 240V 48A	.....8 hours 45 min
DC FAST CHG 50KW	.....83 min
DC FAST CHG 350KW	.....24 min
RANGE	.....270 miles
MPGe	.....88/72/80 (city/hwy/comb)
BASE PRICE	.....\$73,900
UPGRADES ON GT-LINE AWD: 21-in alloy wheels, heads-up display, GT-Line exterior & interior styling, increased tow capacity, self-leveling rear suspension, front passenger comfort tilt seat w leg support, fwd & side parking collision avoidance assist, remote smart parking assist 2.....incl	
PAINT: Ocean Blue	.....695
GT-LINE 2ND ROW RELAXATION PKG: 2nd row power seats w leg support	.....2000
FLOOR MATS: carpeted, 6-passenger	.....225
CARGO MAT: carpeted, seatback protect	.....115
DESTINATION CHARGE	.....1495
TOTAL	.....\$78,430

2024 KIA EV9 LINEUP

	215/201 hp RWD	379 hp AWD
Light	.....\$54,900	
Light Long Range	.....\$59,200	
Wind		.....63,900
Land		.....69,900
GT-Line		.....▼ 73,900

NEW TECHNOLOGIES FOR BOTH INTERIOR COMFORT AND THERMAL EFFICIENCY

Hyundai Motor Company and Kia Corporation have unveiled new technologies designed to closely regulate vehicle interior temperature, during a "Heat Tech Day" held in Seoul, South Korea, showcasing research and development achievements in temperature control, a crucial aspect of passenger comfort, while also allowing efficient management of vehicle energy in the era of electrification. The three technologies are:

- **NANO COOLING FILM** lowers interior temperatures by over 12°C (more than 21.6°F) in hot weather when applied to vehicle glass, to significantly improve in-vehicle conditions and reduce cabin cooling needs;

Nano Cooling Film comprises three layers—two that reflect solar energy and one that emits mid-infrared wavelength. It not only blocks infra-red radiation from outside the vehicle, like traditional tinting films, but also allows heat to escape from inside the vehicle. Bonus: it can be used with existing tinting films without further impacting light transmission.

During testing, Hyundai and Kia each prepared multiple vehicles, applying Nano Cooling Film to one and leaving the other in its original state. Vehicles

with regular glass and not equipped with Nano Cooling Film recorded an interior temperature of 48.5°C (119.3°F), compared with 36.0°C (96.8°F) for the vehicles fitted with Nano Cooling Film, demonstrating a maximum temperature reduction of 12.5°C (22.5°F) with the advanced technology applied.

- **RADIANT HEATING SYSTEM** quickly and efficiently raises the perceived temperature around passengers in cold weather, enhancing comfort while extending vehicle driving range; and

The underfloor Radiant Heating System uses a heating element that emits radiant heat towards passengers' legs, quickly warming them during cold weather. The system comprises a high-temperature film-type heating element and a burn prevention system. The heating element, which can reach 110°C (230°F), is wrapped in a fabric material that emits infra-red rays and adjusts the heat to a comfortable level. A burn prevention system detects body contact and immediately lowers the temperature, improving safety by eliminating burn risks.

On Kia's Radiant Heating System-equipped EV9, nine heating panels are installed, including on the steering column base, driver's door and center console, as well as the passenger door and glove box base. Alongside the vehicle's existing heating system, the Radiant Heating System could conserve up to 17 percent more energy to reach a desired comfort, also saving time to reach this condition—the system delivers warmth to the lower body within three minutes. Adding the Radiant Heating System is expected to significantly

extend driving range of electric vehicles (EVs) in winter by reducing energy used for climate control.

- **METAL-COATED HEATED GLASS** uses a world-first 48V system to quickly transmit heat from an electrically powered metal coating on the glass, removing frost and moisture, for fast and energy-efficient window defrosting, improved visibility and therefore increased safety compared with regular tungsten wire heating elements.

Metal-Coated Heated Glass is invisible, providing a clear, undistorted view for occupants.

The 48V system can completely defrost a glass surface within five minutes at -18°C (0.4°F), up to four times faster, and consuming around 10 percent less energy, than conventional HVAC systems.

Additionally, on hot days, the metal coating can passively block at least 60 percent of solar energy, reducing cabin cooling requirement to significantly improve energy efficiency.

All three technologies are at the level of technological maturity suitable for mass production. Hyundai Motor and Kia have applied for patents in major domestic and foreign markets, with plans to implement the technologies in future vehicles. ■



ARIZONA DRIVER

THE ENTHUSIAST'S GUIDE TO LIFE BEHIND THE WHEEL

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Commanding concept

BY JOE SAGE

Infiniti QX80 (originally the QX56, before lineup-wide QX renaming) has this year entered just its third generation, after about 20 years of existence (although with a couple of facelifts along the way).

What remains the same is that this is a big—notably big—three-row SUV. Despite a proliferation of three-row SUVs and crossovers, only a few are the full body-on-frame construction of their big pickup relatives (in this case, Nissan Titan, though that is sadly being discontinued after this year).

What's new is a great deal—some subtle, some dramatic, most a bit of both. We're happy to see

Infiniti's particular flavor of distinctive grille evolving—less contrived, more mature. It is yet to be seen just how unified or variable it will be as other applications of it are developed across the brand.

The new vehicle was shown as the Monograph Concept during the weeklong festivities at Pebble Beach in August 2023. The production version was teased and then revealed last winter and spring—all with the concept virtually completely intact.

Our Autograph 4WD sample—a preproduction unit—is the \$110,595 flagship of a four-trim lineup starting at just over \$80,000. All have the same

450-horsepower twin-turbo V6 engine and 4WD, while the two lower trims also offer rear drive. All tow 8,500 pounds. Ground clearance is close to or right at 10 inches, and approach-departure angles are in the mid-20s, making this executive club vehicle capable of just about anything. One way to spot the Autograph is by its 22-inch wheels (others are 20 or 21), which on such a massive vehicle do not seem enormous, just well proportioned.

One thing you get in this true full-size layout is a second row that's both spacious and surprisingly thoroughly outfitted—legroom is a just about 40 inches, and passengers here have their own climate and audio control, power heated-vented seat panels and systems (all of which can also various-

ly be isolated via front controls), and generous console storage and cupholders, arguably better than even the front row. Intriguing (though perhaps disturbing to privacy advocates) is a Journey Diary feature that can archive photos and video from the vehicle's front view and in-car cameras.

As a preproduction build—a prototype of sorts, built before the full assembly line is up to speed and potentially before all engineering and materials are complete—we can be sure of the size and almost surely of the hard-button and interior features. Elements of the drive experience, however, may not fully be as they will ultimately be.

Most often, a preproduction unit is quite transparent, but we reminded ourselves of it regularly in this. We can only look forward to driving a full production version later and comparing notes.

The Infiniti QX80 is refined, luxurious and fea-

Features are innovative, some for the better, some perhaps not. Klipsch audio system speakers integrated into the headrests are visually stunning as well as effective. Faux-haptic control panels include frustrations, not the least of which are the PRND shift buttons at the base of the lower center stack, largely obscured (and reach blocked) by the padded console cover, as well as odd mixes dictated by layout, such as drive modes being accessed via a button in the climate control system.

ture-laden, while also substantial, spacious and powerful. This is a commanding vehicle. Its updated styling is strong, bold and distinctive. And its ride height can make you feel unexpectedly high and mighty in traffic. While fuel mileage information had not yet been released, our readout at the end of a week (spent largely on local suburban streets and freeways) was just under 22 mpg, admirable given its size, power and weight. ■



SPECIFICATIONS

BUILD	.....body on frame (conventional SUV)
SEATING CAPACITY	.....7 (8 optional)
ENGINE	.....3.5L V6 twin turbo, DOHC 24v, direct injection, alum/alum
HP/TORQUE	.....450 hp / 516 lb-ft
COMPRESSION RATIO	.....10.6:1
TRANSMISSION	.....9-spd auto / paddles
DRIVETRAIN	.....Infiniti All-Mode® 4WD
DRIVE MODES	.....standard, eco, sport, snow, tow, personal
SUSPENSION	.....electronic air suspension, dynamic digital suspension dampers F: indep, dbl wishbone, coil spring (or air) with shock; R: indep, dbl wishbone, coil spring (or air) and shock separated from coil
STEERING	.....elec power steering
BRAKES	.....F: 13.78 x1.18, twin-piston swing-caliper; R: 13.78 x0.79, single-piston swing-caliper
WHEELS	.....22x8 cast aluminum alloy
TIRES	.....P275/50R22 all-season
LENGTH / WHEELBASE	.....211.2 / 121.0 in
HEADROOM (F/2/3)	.....39.1 / 37.8 / na in
LEGROOM (F/2/3)	.....43.8 / 39.2 / 32.9 in
CARGO CAPACITY	.....22.0 / 59.0 / 101.9 cu.ft
GROUND CLEARANCE	... (var by susp) 9.6-10 in
APPROACH / DEPARTURE:	(varies by spec) 22.1-25.1 / 21.8-25.6°
TURNING CIRCLE	.....tbd
TOW CAPACITY	.....8500 lb
WEIGHT	.....tbd
FUEL / CAPACITY	.....prem unl / 23.6 gal
MPG	.....tbd

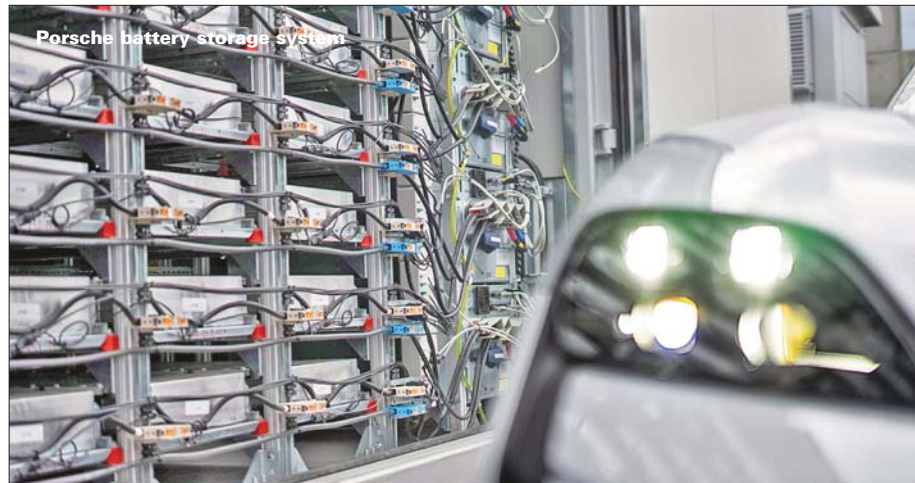
BASE PRICE \$109,900
PREMIUM PAINT: Dynamic Metal695
DESTINATION CHARGE1995

TOTAL \$112,590
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Prices have increased; see below.

2025 INFINITI QX80 LINEUP

.....RWD4WD
Pure\$82,450 \$85,550
Luxe	.....89,550 92,650
Sensory	.....100,645
Autograph	.....110,595



▼ Used **Porsche** Taycan batteries have become a new “Second Life” battery storage system to supply their Leipzig plant with power. The stationary system is the size of almost two basketball courts, it consists of 4,400 battery modules, taken from pre-series and works vehicles and now being put to use as an energy storage system at the end of their service life. With this concept, Porsche is demonstrating how used high-voltage batteries from electric vehicles can be put to good use and conserve resources in a second use phase. The idea originated in the Environmental and Energy Management unit of the Stuttgart-based manufacturer. The project, based on a feasibility study in collaboration with the University of Applied Sciences Zwickau, also facilitates the expansion of an adaptable power grid. They hope to gain insights from the project in order to be able to equip other Porsche locations with similar systems and capabilities in the future. At the same time, they can utilize batteries from test cars that are no longer suitable for demanding use in the vehicle for a second deployment before their final recycling. The “power cubes” stationary battery storage system has a total capacity of 5 megawatts with an energy content of 10 megawatt-hours. The system—made up of 4,400 individual battery modules, divided into four battery containers—can be operated at up to 20 per cent overload for short periods. Battery modules used in the gruelling everyday work of test vehicles

were installed in the energy storage system without any technical changes. Four battery strings are each connected to an inverter and a transformer in a medium-voltage system. The entire system, including the battery blocks, is designed for a useful life of more than ten years; battery modules can be replaced individually if necessary. The electricity for the storage system is partly generated by the plant’s own solar systems, with a peak output of



9.4 megawatts. When peak loads occur, the storage system helps to reduce them. This “peak shaving” can ideally reduce the need for expanded upstream grids. The stationary battery storage system will be integrated into the balancing energy market in every marketable form by the end of the year, in addition to peak shaving, as a grid stabilizer for upstream distribution grids. Since 2017, Porsche has been using

only electricity from renewable energy sources. The production sites in Stuttgart-Zuffenhausen and Leipzig receive their energy from green electricity and bi-methane. The Leipzig site also obtains district heating from biomass.

▼ **Nexteer** Automotive serves more than 60 customers in the electric power steering (EPS) market around the world, in 2023 surpassing 100 million EPS systems produced globally. They have now developed a Modular Pinion-Assist Electric Power Steering (mPEPS) system, expanding their cost-effective, modular EPS offerings to now include Single-Pinion and Dual-Pinion systems. Leveraging their existing industry-leading EPS building blocks, mPEPS provides scalability, which in turn offers OEMs cost and time efficiencies, including shorter development cycles and higher rate of component reuse on vehicle platforms, while still promising advanced safety and performance for drivers such as low noise, vibration and harshness (NVH) levels. Nexteer’s mPEPS building block approach also enables flexibility to meet OEMs’

wide-ranging requirements for advanced gear-based steering systems and supports all vehicle propulsion types (EV, ICE, etc.), as well as the needs across various global markets. Nexteer’s mPEPS is the company’s third modular steering design after Modular Column-Assist EPS (mCEPS), announced in October 2021, and Modular Rack-Assist EPS (mREPS), announced in April 2023. In addition to Modular EPS

systems, Nexteer offers a complete portfolio of EPS systems that can steer vehicles of all sizes—from small cars to heavy-duty trucks and light commercial vehicles. Other EPS solutions from Nexteer include



Steer-by-Wire, Rack-Assist EPS (REPS), Dual Pinion-Assist EPS (DPEPS), Single Pinion-Assist EPS (SPEPS) and Column-Assist EPS (CEPS). Nexteer also offers High Output and High Availability options for all EPS systems. High Output EPS increases steering capabilities to allow heavier vehicles, like EVs and heavy-duty trucks, to take advantage of EPS’s advanced safety, comfort and fuel economy benefits. EPS ensures the steering safety net is always on, through intelligently optimized software designed for simultaneous, multi-path processing and hardware redundancies.

▼ **New Way Trucks**, a privately held industry-leading refuse truck body manufacturer, and **Hyzon**, a US-based high-performance hydrogen fuel cell system manufacturer and technology developer, are gaining momentum in showcasing the value of hydrogen fuel cell-powered electric refuse collection. New Way and Hyzon debuted North America’s first hydrogen fuel cell-powered electric refuse vehicle (FCEV) at Waste Expo in Las Vegas earlier this year, following an earlier initial announcement on a Joint Development Agreement between the two companies. New Way’s expertise and leadership in refuse collection and Hyzon’s focus on providing zero-emission power to decarbonize the most demanding industries

combine to make hydrogen fuel cell electric refuse collection a reality for the North American waste and recycling industry. Interest in hydrogen-powered collection and customer demonstrations of this first-

of-its-kind refuse truck has grown significantly since New Way and Hyzon announced its FCEV were being put to the test on routes in the San Francisco Bay Area this fall. Additional demonstrations with customers throughout California will continue through the end of the year. The



truck will head to the Los Angeles area before making its way to northern California and then with customers across western Canada into early 2025. The trials with New Way customers across California and Canada build on the success of Hyzon’s fuel cell electric refuse collection vehicle trials in Australia, demonstrating that hydrogen fuel cell technology is a viable replacement for traditional heavy

duty diesel engines and overcoming some of the inherent challenges identified with other zero-emission technologies—such as range issues, fluctuations in operating temperatures and payload limitations. To further demonstrate hydrogen as a more sustainable option in the refuse industry, Hyzon also launched its Class 8 200kW FCEV tractor-trailer trial program this year with major North American fleet customers which includes waste haulers. Hyzon’s high-performance hydrogen fuel cell systems are tough enough to provide consistent power over an expected range of at least 125 miles, including at least 1,200 cart lifts along with trips to the transfer station. Combine that with the strength and durability of New Way’s most-requested automated side loader, the Sidewinder XTR—with smooth arm operation, up to a 12-foot reach and large 6-cubic-yard hopper—for an unstoppable, sustainable refuse collection powerhouse.

▼ **Polestar** has started production of its Polestar 3 luxury SUV in South Carolina, making this the first Polestar to be produced on two continents. The factory in South Carolina produces cars for customers in the US and Europe, complementing existing production in Chengdu, China. Polestar is also taking additional steps

to diversify its manufacturing footprint, with production of Polestar 4 set to start in South Korea from the middle of 2025. Polestar’s asset-light approach to development and manufacturing enables it to benefit from the competence, flexibility and scalability of its partners and major shareholders. Polestar 3 is a performance



SUV for the EV age, combining Scandinavian design, cutting edge technology and top driving dynamics. Its latest high-tech components include centralized core computing powered by NVIDIA and a



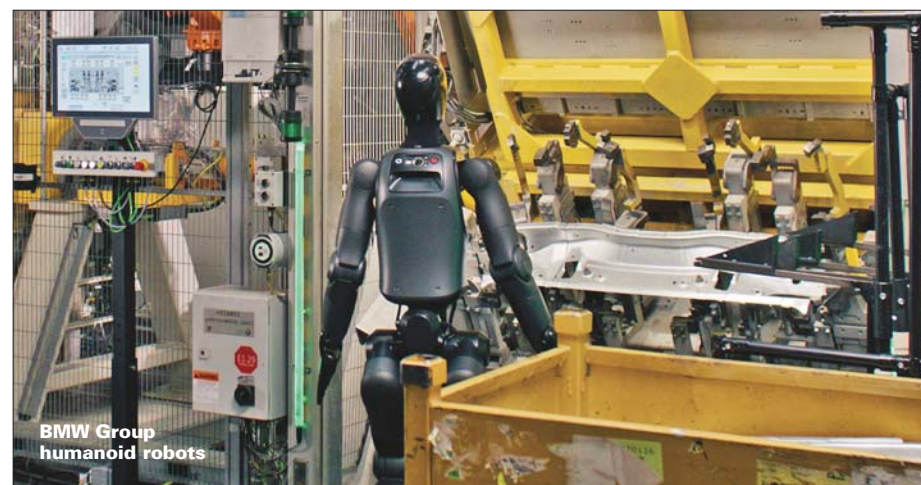
long list of advanced safety systems.

▼ **Honda** North Carolina Manufacturing (NCM) celebrated 40 years of production in the Tar Heel State with a ribbon cutting for new weld and paint operations for all-terrain vehicles (ATVs), part of a \$21.5 million investment that will complete the establishment of NCM as the exclusive manufacturing facility for Honda ATVs in North America. (Honda products are made using domestic and globally sourced parts.) NCM will also become the first Honda production facility in the North American region to manufacture future electrified Honda powersports and power equipment products. This now completes the transfer of ATV production from Honda South Carolina Manufacturing (SCM) in Timmons-ville SC to NCM. SCM will focus exclusively on production of Honda side-by-side vehicles. Last year, SCM expanded production of Honda side-by-side models and celebrated 25 years of production in Timmons-ville. Over the past four decades, NCM has continually evolved its production capabilities to build a variety of Honda products, starting with lawnmowers in 1984, followed by snow blowers, string trimmers, mini-tillers, water pumps, generators and general-purpose engines. In 2023, NCM added ATVs to its production lineup, effectively launching a new powersports era at the longtime power equipment facility. Current NCM ATV production includes the popular Honda FourTrax series and TRX sport models. NCM, a nearly 650,000-

square-foot facility, represents a current capital investment of \$416.5 million. Over these 40 years, NCM has built more than 50 million products. As part of NCM's on-going community support, Honda and the

Honda USA Foundation have contributed over \$1.15 million this year to local North Carolina programs and organizations, including education and environmental programs for The Foundation for North Carolina A&T State University, as well as the Honda USA Foundation's support of Triangle Bikeworks' Youth Biking for Environment Sustainability program.

▼ The **BMW Group** is exploring the use



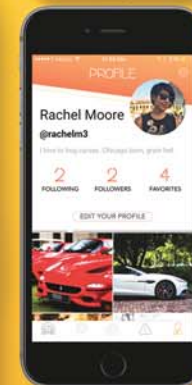
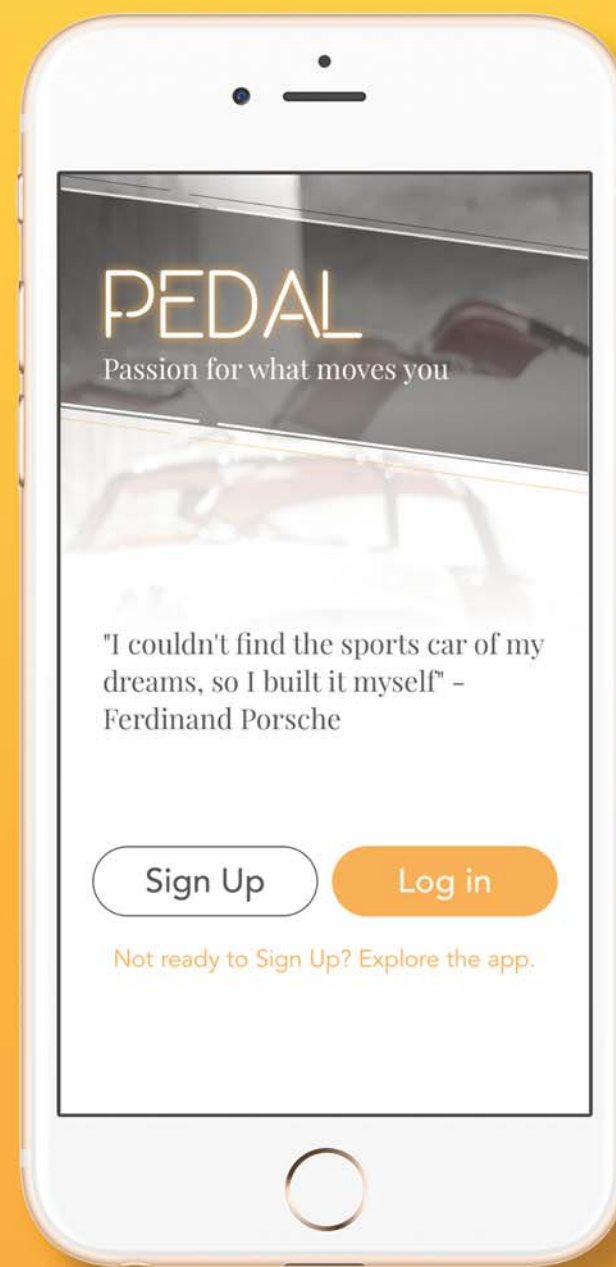
of humanoid robots in production for the first time. During a trial run lasting several weeks at BMW Group Plant Spartanburg, South Carolina, the latest humanoid robot from California company **Figure**, known as Figure 02, successfully inserted sheet metal parts into specific fixtures, which were then assembled as part of the chassis. The robot must be particularly dexterous to complete this production step, while

at the same time, using a robot can save employees from having to perform ergonomically awkward and tiring tasks. The California company says Figure 02 is the world's most advanced humanoid robot currently on the market. The combination of two-legged mobility and advanced dexterity means Figure 02 is ideally suited for use in areas with physically demanding, unsafe, or repetitive processes, thereby improving ergonomics and safety for associates. Figure 02 boasts three times the processing power of its predecessor, improved voice communication, better cameras, microphones and sensors, a high-performance battery and fourth-generation human-scale hands with 16 degrees of freedom per hand and human-equivalent strength. The robot is capable of fully autonomous execution of human-like and two-handed tasks requiring varied and dynamic manipulation, complex grasping and coordination of both hands in unison. It is able place various complex parts with accuracy measured in millimeters and can walk dynamically, leveraging efficiencies of the robot's design. Together with Figure, BMW Group is currently testing and evaluating how humanoid robots can be used safely in automobile production. With the BMW iFACTORY—a vision for production of the future—the BMW Group

is on the lookout for new technologies, with efficiency, digitalization and sustainability central to this vision. During the trial run, the BMW Group gained valuable knowledge of what requirements must be met in order to integrate so-called multi-purpose robots into an existing production system. This includes how humanoid



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robots communicate with the system under real conditions. After the first use in automobile production, the experts at the BMW Group and Figure are collaborating to prepare Figure for future applications in

from Mazda's European R&D center had completed dynamic performance tuning and validation of the Mazda EZ-6 at Chongqing Automobile Testing Grounds, the highest specification automotive test field

inside and outside of the automotive industry, it was concluded that many world-renowned brands, from fashion houses to high-end watchmakers, proudly carry the names of their founders—a tradition not only signifying a deep personal connection to the brand, but also reinforcing the legacy and trust associated with its heritage. The decision to rebrand as Hedley Studios honors Ben Hedley, founder, CEO and driving force behind the company. While the name has changed, Hedley Studios remains steadfast in its commitment to the precision, craftsmanship and quality that have always defined its products. Hedley Studios prides itself on its regular communication with clients. Whether clients have one piece, or a collection, they frequently speak with them to understand their needs and how they use their pieces. While there are many different use cases for their driveable artworks, the Hedley Studios team have noticed a large number of their clientele having pieces purely as artwork for static display. This rebrand clarifies the company's diversification and growth, emphasizing its role as a creator of timeless automotive art. Under the new brand, Hedley Studios will continue to build on and grow its acclaimed Icons series, which includes the Bugatti Baby II Series, Ferrari Testa Rossa J Series, Bentley



Chinese visit Mazda EZ-6 electric sedan in Hiroshima

production and continuing to develop the robots, based on findings. Currently, there are no Figure AI robots at BMW Group Plant Spartanburg, and there is no definite timetable established for bringing them to the plant. BMW Group will continue to work with Figure for data capturing and training capabilities for Figure 02 robots.

▼ **Mazda** recently showcased the design and development process of its first electric sedan, the Mazda EZ-6, to users from China for the first time in its headquarters in Hiroshima, Japan. The vehicle successfully rolled off the assembly line at Changan Mazda, Mazda's joint venture in China, this summer. Concurrently, Mazda and Changan Mazda signed an Agreement on Electric Vehicle Export Cooperation, designating Changan Mazda as its exclusive Chinese new energy R&D and production base facing the global market, underscoring that the Mazda EZ-6 will be Mazda's first global new energy vehicle. The Mazda EZ-6 would be officially launched this fall as a global model, first available in the Chinese and European markets. At the Beijing International Auto Show in April, Mazda president Masahiro Moro and Changan Automobile chairman Zhu Huairong jointly attended the Mazda EZ-6 global debut, demonstrating the significance both parties place on this global model. Mazda notes "the driving form has changed," from the gasoline vehicle era—a farewell to the Jinba-Ittai (car and driver as one) offered by Mazda6. Prior to reveal, experts

in China. The Mazda EZ-6 adopts the leading intelligence and electrification technology of Changan Automobile, Mazda's Chinese partner. The car will be equipped with Level 2.5 autonomous driving assistance, a 7nm Qualcomm SA8155P chip, four high-definition panoramic cameras and twelve high-performance ultrasonic radars. Various intelligent driving scenarios are expected to include autonomous parking, remote parking, remote intelligent



Little Car Company rebrands as Hedley Studios

parking, and traceback parking.

▼ **The Little Car Company** announces its rebranding as **Hedley Studios**, a strategic repositioning in its journey to create distinctive, driveable artworks, reflecting the company's dedication to redefining the concept of collectible cars, honoring them as highly coveted pieces of art. After extensive research into luxury brands, both

Blower Junior Series and the Aston Martin DB5 Junior Collection, featuring the DB5 Junior Series and the DB5 Junior "No Time to Die" Series. These driveable artworks are not toys, but meticulously handcrafted pieces designed by a team of experts, blending technical excellence with painstaking attention to detail—paying homage to the original cars, which are now themselves considered artworks. ■

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