

# Fastest Corvette ever is all-wheel-drive gas-electric hybrid

January 17 2023, by Tom Krisher

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The 2024 Corvette E Ray is test driven, Thursday, Jan. 12, 2023, in Milford Mich. The fastest corvette ever made comes out next year, and it's not powered solely by the traditional howling V8. The E Ray is a gas electric hybrid, the first all wheel drive version of the storied sports car with the front wheels running on a battery. Aimed at affluent buyers who want new technology in the top-line Chevrolet sports car, the \$104,000 E Ray jerks your head back as it goes from zero to 60 mph in 2.5 seconds. Credit: AP Photo/Carlos Osorio

The fastest Corvette ever made comes out later this year, and it's not powered solely by a howling V8.

The E-Ray is a gas electric hybrid, the first all-wheel-drive version of Chevrolet's storied sports car with the front wheels running on an electric motor the traditional 6.2-liter V8 powering the back.

Aimed at affluent buyers who want new technology in the top-line Chevrolet sports car, the \$104,000 E-Ray jerks your head back as it goes from zero to 60 mph (97 kilometers per hour) in 2.5 seconds. General Motors says it can cover a quarter mile in 10.5 seconds.

Although those figures are slightly faster than its race track-ready brothers, the Z06 and Z07, it's civil enough for the daily commute even though its rear tires are almost wide enough to compete in the Indianapolis 500.

Tadge Juechter, the Corvette's executive chief engineer, said people would ask for the best version of the car, only to wind up a "track monster" that they're trying to drive every day. "For the same money you can get all-wheel-drive, and comfort, security, and the livability that comes with a car like this," he said. "We've really divided the family into pure track and to everyday utility."



The 2024 Corvette E Ray is displayed, Thursday, Jan. 12, 2023, in Milford Mich. The fastest corvette ever made comes out next year, and it's not powered solely by the traditional howling V8. The E Ray is a gas electric hybrid, the first all wheel drive version of the storied sports car with the front wheels running on a battery. Aimed at affluent buyers who want new technology in the top-line Chevrolet sports car, the \$104,000 E Ray jerks your head back as it goes from zero to 60 mph in 2.5 seconds. Credit: AP Photo/Carlos Osorio

The E-Ray, which is being unveiled exactly 70 years after the first Corvette was introduced in New York back in 1953, is a step toward an all-electric version of the car that will come out at an unspecified date.

Although GM may be over-selling the practicality, the E-Ray does come with all-season tires so it can be driven year-round, and the all-wheel-

drive system is configured so it's confident in the snow, up to just 4 inches due to its low ground clearance.

"This is going to propel the Corvette to a new set of markets," said Mark Wakefield, global co-leader of automotive for the consulting firm AlixPartners.

As performance cars go, the Corvette always has been more practical than most, with storage space in the hatch and the front trunk, said Sam Abuelsamid, e-Mobility analyst for Guidehouse Research. "It is actually surprisingly liveable," he said, conceding that someone buying a sports car costing over \$100,000 probably has another vehicle in their garage for the daily drive.

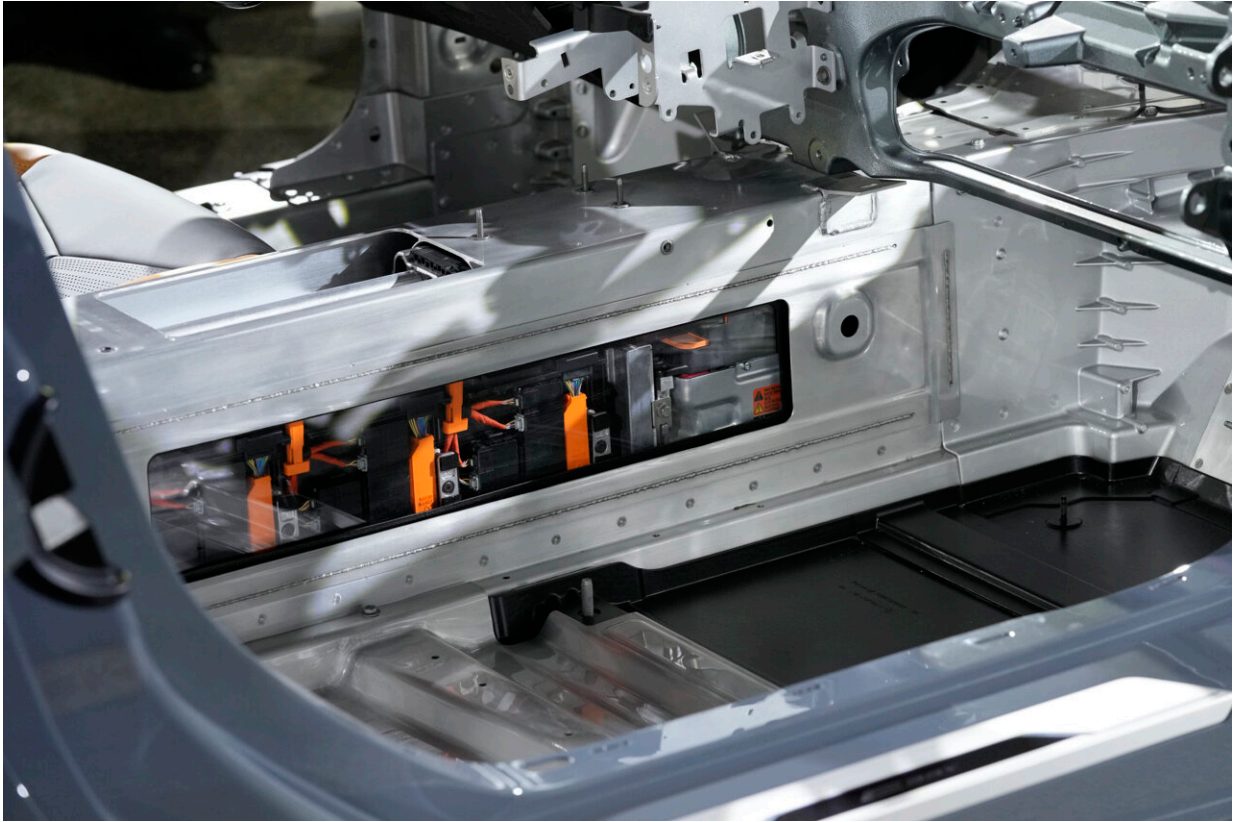


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Unlike most hybrids, it's not really made for efficiency, although will get a little better city mileage than a standard Stingray at 16 mpg. But because of higher mass and air drag, it will do worse than the standard Corvette's 24 mpg on the highway. The electric motor adds 160 horsepower to the 495 generated by the V8, for a total of 655. Both systems come on at once for maximum acceleration.

Engineers say its technology sets the stage for the all-electric Corvette. When the latest generation of 'Vette came out four years ago with the engine in the middle, engineers designed it so there could be hybrid and electric versions in the future.

This version of the Corvette, code named "C9," may be the last one to have a gasoline engine, in light of GM's plans to sell only electric passenger vehicles by 2035, Abuelsamid said. But he sees this version evolving at least through the end of the decade.



The 2024 Corvette E Ray auxiliary power module and battery is displayed, Thursday, Jan. 12, 2023, in Milford Mich. The fastest corvette ever made comes out next year, and it's not powered solely by the traditional howling V8. The E Ray is a gas electric hybrid, the first all wheel drive version of the storied sports car with the front wheels running on a battery. Aimed at affluent buyers who want new technology in the top-line Chevrolet sports car, the \$104,000 E Ray jerks your head back as it goes from zero to 60 mph in 2.5 seconds. Credit: AP Photo/Carlos Osorio

The E-Ray's computers are configured to keep it stable by applying power to individual wheels when it's slippery. GM engineers say most electronic stability controls rely on braking individual wheels. It's a lot of engineering work for a niche product, but GM says knowledge from developing the car will show up in other vehicles. GM sold only 34,510

Corvettes last year.

"I think the blending of the motor control and brake control is something that they'll be able to apply to the EVs," Abuelsamid said.

The 1.9 kilowatt-hour battery is small compared with a full electric vehicle. It's positioned under the console. You can't plug it in to recharge it, but it gets energy restored from regenerative braking and from the V8 motor. It can be driven in "stealth mode" up to 45 mph for about two miles to quietly leave a neighborhood, GM says.



The 2024 Corvette E Ray control buttons are seen on a model car, Thursday, Jan. 12, 2023, in Milford Mich. The fastest corvette ever made comes out next year, and it's not powered solely by the traditional howling V8. The E Ray is a gas electric hybrid, the first all wheel drive version of the storied sports car with the

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The 2024 Corvette E Ray front logo is displayed, Thursday, Jan. 12, 2023, in Milford Mich. The fastest corvette ever made comes out next year, and it's not powered solely by the traditional howling V8. The E Ray is a gas electric hybrid, the first all wheel drive version of the storied sports car with the front wheels running on a battery. Aimed at affluent buyers who want new technology in the top-line Chevrolet sports car, the \$104,000 E Ray jerks your head back as it goes from zero to 60 mph in 2.5 seconds. Credit: AP Photo/Carlos Osorio





Tadge Juechter, the chief engineer-Cadillac XLR & Chevrolet Corvette is seen, Thursday, Jan. 12, 2023, in Milford Mich. The fastest corvette ever made comes out next year, and it's not powered solely by the traditional howling V8. The E Ray is a gas electric hybrid, the first all wheel drive version of the storied sports car with the front wheels running on a battery. Aimed at affluent buyers who want new technology in the top-line Chevrolet sports car, the \$104,000 E Ray jerks your head back as it goes from zero to 60 mph in 2.5 seconds. Credit: AP Photo/Carlos Osorio



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"As fast as you can discharge it, we recharge it, and we always keep it at a pretty optimum state of charge," said Mike Kutcher, lead development engineer for the E-Ray.

The E-Ray will hit showrooms sometime during the second half of this year as a 2024 model, GM said.

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Citation: Fastest Corvette ever is all-wheel-drive gas-electric hybrid (2023, January 17) retrieved 26 April 2024 from

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