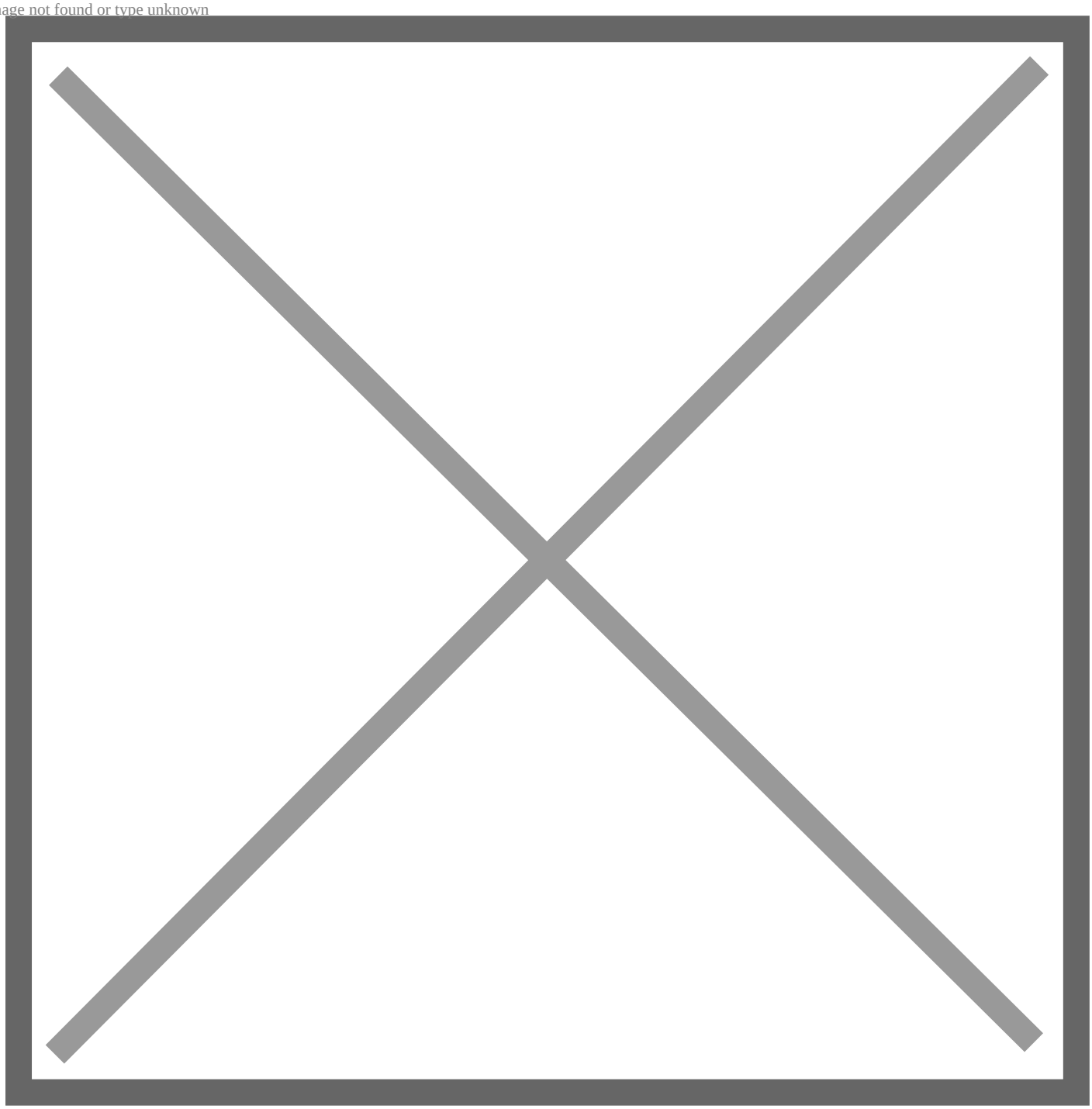
Toyota Leans Into Its Rich Motorsports Heritage with the GR86 Rally Legacy Concept at the 2024 SEMA Show

November 04, 2024

Image not found or type unknown



LAS VEGAS (Nov. 5, 2024) – Toyota revealed its GR86 Rally Legacy Concept at the 2024 SEMA Show, an innovative homage to the brand's storied rally heritage. This dynamic concept vehicle, based on the 2024 GR86 with Performance Package, showcases Toyota's commitment to performance, nostalgia, and the future of rally racing.

Grumblings of the return of the World Rally Championship (WRC) to the United States prompted a look back and celebration of Toyota's storied motorsports history. Drawing inspiration from the iconic ST185 and ST205 Celica GT-Four rally vehicles of yester-year, the GR86 gets a complete powertrain swap by way of the 3-cylinder turbocharged, GR-FOUR AWD drivetrain from the GR Corolla.

"The aim is to evoke memories of the legendary rally car that enthusiasts have admired on rally stages and in popular racing video games," said Paul Doleshal, general manager of Motorsports and Assets at Toyota Motor North America. "That idea led to a formative conversation about how cool it would be to create a modern interpretation of such an iconic car."

The project started with two distinct sports cars from the GR family that were merged into a vision of how a contemporary version of the legendary Celica GT-Four might appear. The most formidable fabrication challenges involved modifying the GR86's chassis to accommodate the GR Corolla's taller, transverse-mounted G16E-GTS engine and the GR-FOUR AWD drivetrain.

While the G16 engine could fit within the GR86 engine bay and transmission tunnel, some modification of the front of the chassis was required, along with a custom subframe and engine mounts to gain the clearance required for the driveline and suspension. Converting the GR86 to all-wheel drive also required significant modification of the front suspension to incorporate GR Corolla hubs, spindles and axles to get power to the front wheels. Custom coil-over dampers were bolted onto each corner, and custom control arms were fabricated to complement the subframe modifications. Additional adjustments were made to the GR86 steering rack to ensure proper feel and clearances.

At the back, the team replaced the stock GR86 rear end with the GR Corolla differential and housing to maintain factory gear ratios, electronics functionality, and power distribution. The GR Corolla rear axles also required modification to fit properly.

The G16 engine benefitted from a host of upgrades, including a performance intercooler to chill the intake charge, and an oil cooler to reduce engine oil temps. Engine management duties were delegated to a race ECU to ensure spot-on fuel delivery, spark timing, boost control and sensor monitoring throughout. While the GR86 Rally Legacy Concept will retain the GR Corolla's original specs of 300hp and 273 lb.-ft, there is the potential to increase these numbers with further tuning.

The GR86 Rally Legacy concept features a striking Halo White exterior with heritage-inspired red and green color palette, integrated with modern Toyota and Toyota Gazoo Racing logos. Notable exterior features include large red rally mudflaps, a custom exhaust, and a Celica GT-Four-inspired spoiler, complete the vintage rally look.

Inside the cockpit, this concept vehicle has a full cage, painted in bright white. The driver is held in place by racing seats with red, 6-point racing harnesses, aligning with Toyota Gazoo Racing's color scheme.

"The GR86 Rally Legacy Concept is a testament to Toyota's enduring passion for rally racing, said Mike Tripp, group vice president, Toyota Marketing. "We did this build for our GR and Toyota Rally fans—it's a fantasy car come to life, our way of celebrating our past achievements and the possibility of the World Rally Championship making a return to the United States."

The GR86 Rally Legacy concept exemplifies Toyota's strategic approach to blending heritage with innovation. And it's on display—along with Toyota's other featured vehicles, build concepts and a variety of production cars, SUVs, and trucks—at the 2024 SEMA Show from November 5-8 at the Las Vegas Convention Center in the Toyota booth (Central Hall, Booth 22200). Attendees are invited to join Toyota as it continues the company's mission to provide thrilling performance whether on track or trail.

Vehicle referenced is a special project prototype vehicle, modified with parts and/or accessories not available from Toyota that may void the vehicle's warranty, may negatively impact vehicle performance and safety, and may not be street legal.