Allison Transmission Partners with Dakar Rally Winner Team de Rooy to Develop Fully Electric Truck

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An electric truck equipped with an Allison Transmission will be built for the toughest motorsport competition on earth

INDIANAPOLIS--(BUSINESS WIRE)--Nov. 30, 2021-- Allison Transmission, a leading designer and manufacturer of conventional and electrified vehicle propulsion solutions and the largest global manufacturer of medium- and heavy-duty fully automatic transmissions for commercial and defense vehicles, is pleased to announce a three-year partnership agreement with Team de Rooy, a multiple-race winner of the world-famous Dakar Rally, to develop electric trucks for motorsport competitions.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20211130005709/en/

Allison Transmission's Sjoerd Vos meets with Gerard De Rooy and Edgar Lips from Team De Rooy with their new Allison-equipped truck for the 2022 Dakar Rally. (Photo: Business Wire)

Testing is scheduled to begin on an electric truck equipped with a conventional Allison transmission in early 2022, ahead of the vehicle's competition debut at the Dakar Rally in Saudi Arabia in January 2023. Allison's 4000 Series™ fully automatic transmissions, equipped with an integral retarder designed to extend the life of brakes and reduce maintenance requirements and costs, will be integrated into Team de Rooy's new electric truck. Designed to enable smooth and efficient operation in heavy-duty vehicles, the 4000 Series is an easily adopted propulsion solution for applications including construction vehicles, refuse trucks and fire trucks. The Allison 4000 Series transmission has already been coupled with an electric motor in the Hyundai XCIENT, the world's first hydrogen-electric heavy-duty truck, which went into production in 2020.

"Allison 4000 Series transmissions are purpose-built for durability and productivity, proven to perform in demanding conditions, and there is no motorsport competition on earth more demanding than Dakar," said Tanner Gider, Managing Director, Europe and South Africa Sales, Allison Transmission. "We see electrification as an exciting opportunity to build upon the innovation Allison has become known for since its inception more than 100 years ago. We're proud to partner with Team de Rooy to provide a robust electrified propulsion solution designed to achieve optimized fuel economy, maximized performance, and reduced emissions."

"Dakar and other rally raid events are really tough on mechanical components, especially the suspension, axles and gearbox," said Gerard de Rooy, Managing Director, De Rooy Transport. "By integrating robust, durable transmissions from Allison, our trucks can effectively operate on difficult terrain including hard surfaces and loose sand. We're thrilled to have Allison's support in our plans to adopt electric vehicles."

Another advantage of Allison fully automatic transmissions is the company's patented torque converter, which multiplies engine and motor power at launch to significantly improve startability, resulting in higher operational productivity through enhanced performance. This will enable Team de Rooy's electric rally raid truck to utilize a smaller drive motor to optimize efficiency and weight, freeing up space and weight to dedicate to batteries, and to perform better when powering up sand dunes. Additionally, the dampening effect of the fluid coupling in the torque converter will help protect the truck's drive motor from shock loading associated with torsional forces in the driveline. Self-learning algorithms in Allison Automatics continually optimize engine and motor speed and torque level, maximizing efficiency and minimizing energy use in electric motors.

In addition to being the largest global manufacturer of medium- and heavy-duty fully automatic transmissions for commercial and defense vehicles, Allison is a leading designer and manufacturer of electric hybrid and fully electric vehicle propulsion solutions. Allison recently expanded its electrification portfolio by introducing the eGen Power™ series of electric axles for the truck and bus markets. The e-Axles are fully integrated electric powertrains designed replace conventional driveline components including axles, engines and transmissions in Class 6-8 trucks. The e-Axles can fit easily into existing truck and bus chassis with minimal modifications, and the compact size allows for additional space for battery packs where extended range is required.

For more information on Allison Transmission's electric vehicle solutions, please visit https://www.allisontransmission.com/ev-solutions.

About Allison Transmission

Allison Transmission (NYSE: ALSN) is a leading designer and manufacturer of vehicle propulsion solutions for commercial and defense vehicles, the largest global manufacturer of medium- and heavy-duty fully automatic transmissions, and a leader in electrified propulsion systems that *Improve the Way the World Works*. Allison products are used in a wide variety of applications, including on-highway trucks (distribution, refuse, construction, fire and emergency), buses (school, transit and coach), motorhomes, off-highway vehicles and equipment (energy, mining and construction applications) and defense vehicles (tactical wheeled and tracked). Founded in 1915, the company is headquartered in Indianapolis, Indiana, USA. With a presence in more than 150 countries, Allison has regional headquarters in the Netherlands, China and Brazil, manufacturing facilities in the USA, Hungary and India, as well as global engineering resources, including electrification engineering centers in Indianapolis, Indiana, Auburn Hills, Michigan and London in the United Kingdom. Allison also has more than 1,400 independent distributor and dealer locations worldwide. For more information, visit allisontransmission.com.

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