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NEWS

FOR IMMEDIATE RELEASE

Kia introduces its first front-wheel drive eight-speed automatic transmission

- **Advanced transmission developed in-house for front-wheel drive models**
- **Intelligent packaging ensures lighter weight and similar dimensions as a conventional six-speed automatic transmission**
- **143 new patents filed throughout development of advanced transmission**
- **Eight-speed FWD automatic transmission to debut in 2017 Kia Cadenza**

(SEOUL) September 6, 2016 – Kia Motors has revealed details of its advanced new eight-speed automatic transmission (8AT), engineered for use in front-wheel drive vehicles.

Kia's new front-wheel drive 8AT (FWD 8AT) has been developed in-house by the Korean manufacturer, engineered to offer a high level of mechanical efficiency and smooth gearshifts. Crucially, the new FWD 8AT occupies the same space as a conventional six-speed automatic transmission, and weighs 3.5 kg less.

Kia's engineers already have experience of developing eight-speed transmissions for rear-wheel drive vehicles, mounting the transmission longitudinally and sending power to the rear axle. However, incorporating the same number of gears into a front-wheel drive car is incredibly challenging, due to packaging constraints and the need to mount the transmission transversely, competing with the engine, suspension and auxiliary components for space under the bonnet.

Intelligent packaging and 143 new patented technologies

Under development since 2012, the development program for the breakthrough transmission led Kia to patent 143 new technologies to ensure a high level of performance and efficiency in a compact structure. This new transmission enables smooth acceleration from standstill, as well as greater fuel efficiency, improved NVH characteristics, and more decisive acceleration at high speeds than an automatic transmission with fewer gears.

To improve the 8AT's fuel economy, Kia engineers significantly reduced the size of the oil pump (the main source of power loss in an automatic transmission) and simplified the structure of the valve body. Boasting the smallest oil pump of any production transmission in

its class, the 8AT is able to use hydraulic oil more efficiently, distributing it evenly throughout the unit at all times.

Kia's development teams also incorporated a direct control valve body to allow solenoid control of the clutch directly, rather than via several control valves. This enabled Kia to reduce the number of control valves from 20 to 12, resulting in quicker gear shifts, a more direct mechanical link to the engine and improved packaging.

Incorporating an additional clutch and gear over Kia's existing 6AT, the ratio between the top gear and the lowest gear in the new transmission has been increased by 34% over the 6AT, resulting in greater fuel economy and improved NVH in higher gears and faster acceleration and climbing performance in low gears.

Transmission to debut in all-new 2017 Kia Cadenza

Kia's new front-wheel drive 8AT is making its global debut in the 2017 Kia Cadenza – on sale across selected global markets this year – and is featured as standard on Cadenza models powered by the 3.3-liter V6 GDI engine.

Going forward, Kia's new eight-speed automatic transmission will be applied to a number of mid-sized and larger front-wheel drive models, and will serve as a stepping stone to the development of future advanced Kia transmissions.

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About Kia Motors Corporation

Kia Motors Corporation (www.kia.com) – a maker of quality vehicles for the young-at-heart – was founded in 1944 and is Korea's oldest manufacturer of motor vehicles. Over 3 million Kia vehicles a year are produced in 11 manufacturing and assembly operations in five countries which are then sold and serviced through a network of distributors and dealers covering around 180 countries. Kia today has around 49,000 employees worldwide and annual revenues of nearly US\$45 billion. It is the major sponsor of the Australian Open and an official automotive partner of FIFA – the governing body of the FIFA World Cup™. Kia Motors Corporation's brand slogan – "The Power to Surprise" – represents the company's global commitment to surprise the world by providing exciting and inspiring experiences that go beyond expectations.

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