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## Nidec's Traction Motor System, E-Axle 100kW Model, Drives GAC Aion's New EV

Nidec Corporation (TSE: 6594; OTC US: NJDCY) (the "Company" or "Nidec") today announced that the Company's 100kW E-Axle model, Ni100Ex, has made its way into an electric vehicle, *Aion Y*<sup>\*1</sup>, a new model released by GAC Aion New Energy Automobile Co., Ltd. ("GAC Aion") in March 2021.



**GAC Aion's *Aion Y***



**Nidec's Ni100Ex E-Axle model**

GAC Aion is a brand established in 2017 that manufactures electric vehicles under the umbrella of Guangzhou Automobile Group Co., Ltd. ("GAC Group"), a company specialized in EVs. Since building a new EV factory with an annual production capacity of 200,000 vehicles in December 2018, GAC Aion has been active in investment in its business (The company changed its name to the current one in November 2020).

The newly launched *Aion Y*—the fourth model in the Aion series released in March 2021—is based on GAC Aion's aluminum EV platform. The car incorporates a number of new technologies such as 5G connectivity, automatic parking, and ADiGO 2.0, an autonomous driving system based on high-accuracy maps.

Nidec's Ni100 Ex E-Axle (maximum power output: 100kW, maximum system torque output: 2,400Nm) has become the second model in the Company's E-Axle series to be adopted by electric vehicles, and has been mass-produced since November 2020. By leveraging know-how—built up with small precision motors in the IT field—related to magnetic circuit design and by using permanent magnets and a proprietary oil-cooling-based design, Nidec has developed a compact motor that, combined with the second generation of our inverter, contributes significantly to the excellent vehicle performance, low power-consumption, low noise and vibration and light weight of the car. The Ni100 Ex E-Axle model is being produced at Guangzhou Nidec Auto Drive System Co., Ltd., a joint venture company established by GAC Component Co., Ltd. (a Guangzhou Automobile Group company) and Nidec in November 2019.

**GAC Aion series (All models are equipped with Nidec E-Axle units.)**



*Aion S*  
Launched in May 2019



*Aion LX*  
Launched in October 2019



*Aion V*  
Launched in June 2020



*Aion Y*  
Launched in March 2021

**Nidec's traction motor system lineup\*2**



**Ni200Ex**  
(200kW/4200 Nm)  
Mass-production planned for 2023



**Ni150Ex**  
(150kW/3900Nm)  
Mass-production launched in April 2019



**Ni100Ex**  
(100kW/2400Nm)  
Mass-production launched in November 2020



**Ni70Ex**  
(70 kW/1600 Nm)  
Mass-production planned for 2021



**Ni50Ex**  
(50 kW/1600 Nm)  
Mass-production planned for 2022

\*Specifications may vary as Nidec's E-Axles are customized and optimized for each car model.

Nidec's E-Axles are characterized by being compact and light-weight as a result of their fully integrated designs that combine motors, inverters and gears. **In addition to the Ni150Ex 150 kW model that became the first fully integrated traction motor system of its kind in the world designed by a supplier to enter mass-production in April 2019, and the Ni100Ex 100kW model whose mass-production was launched in November 2020,** Nidec has also developed three other models: Ni200Ex (200 kW), Ni70Ex (70 kW), and Ni50Ex (50 kW). Armed with this world-class comprehensive lineup, we are capable of meeting the wide variety of the needs for its E-Axles to be installed in the vehicles of Segments A - E. The Company has set a target of achieving 40 - 45% global market share in the EV traction motor market by 2030, and the E-Axles will certainly spearhead this effort (Nidec has manufactured **at least 120,000 E-Axles by the end of February 2021**).

The world's leading comprehensive motor manufacturer, Nidec continues to be committed to developing products with its technologies to make light, thin, short, and compact products, and also with efficiency improvement and control technologies, and providing extremely fast innovative solutions that contribute to the evolution of automobiles.

\*1. Nidec's E-Axles are adopted in *Aion-Y Pio*, *Aion-Y*'s commercial model.

\*2. E-Axle-equipped vehicles and their models as of April 01, 2021 (in the order of release)

- (1) GAC Aion New Energy Automobile: *Aion S* (Ni150Ex, but vehicles of some other grades are equipped with Ni100Ex.)
- (2) GAC Toyota Motor: *ia5* (Ni150Ex)
- (3) GAC Aion New Energy Automobile: *Aion LX* (Ni150Ex)
- (4) GAC NIO New Energy Automobile Technology: *HYCAN 007* (Ni150Ex)
- (5) Geely Automobile: *Geometry C* (Ni150Ex)
- (6) GAC Aion New Energy Automobile: *Aion V* (Ni150Ex)
- (7) Guangqi Honda Automobile: *EA6* (Ni150Ex)
- (8) GAC Aion New Energy Automobile: *Aion Y* (Ni100Ex)

For inquiries on the above products, please contact:  
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Nidec was founded in Kyoto, Japan in 1973 by four engineers and has since grown into a world-leading comprehensive motor manufacturer encompassing more than 300 subsidiaries employing over 120 000 people throughout the world.

After becoming the first company in the world to successfully commercialize a direct drive spindle motor for HDDs using brushless DC motor technology, the company branched off into the automotive motor market which now constitutes its fastest growing business segment. Nidec's electric power steering motors, in particular, have captured the largest global market share and helped cement the company's position in the industry.