

April 26th, 2012



GS Yuasa Corporation

**GS Yuasa Lead-acid Battery for Idle-stop Vehicles  
Chosen for Mazda CX-5**

GS Yuasa Corporation (Tokyo Stock Exchange: 6674) announced today that its lead-acid automotive battery for idle-stop vehicles has been chosen by Mazda Motor Corporation (Tokyo Stock Exchange: 7261) for its Mazda CX-5 (SKYACTIV-D2.2 model), a new crossover SUV launched in Japan in February 2012.

Automakers are accelerating the development of fuel-efficient vehicles to meet regulatory requirements, including more stringent CO<sub>2</sub> emissions regulations to be phased in Europe between 2012 and 2015, and new fuel efficiency standards to take effect in Japan from 2015. Mazda Motor is using its next-generation SKYACTIV technology as well as idle-stop systems to raise the fuel efficiency of its vehicles and reduce their carbon emissions. GS Yuasa has supplied lead-acid batteries for idle-stop compact cars, including minivans, but demand is growing for batteries designed for midsize and larger vehicles. The T-110 model battery was chosen for the Mazda CX-5's 2.2L vehicle, which has an idle-stop system and clean diesel engine, because it can accommodate the vehicle's need for frequent charging and discharging. The battery greatly improves the fuel efficiency of the Mazda CX-5, which boasts the highest fuel-efficiency rating\*<sup>1</sup> among all SUVs in Japan (18.6 km/L) \*<sup>2</sup>.

GS Yuasa has been manufacturing and selling lead-acid automotive batteries for idle-stop vehicles, and the batteries are being used in a wide range of vehicles, such as the Mazda CX-5. GS Yuasa plans to expand its lineup of lead-acid automotive batteries for idle-stop vehicles and widen manufacturing to overseas sites to help drive global uptake of these vehicles and help lower their environmental impact.

\*1: Rated against all SUVs sold in Japan (including hybrids, minivans, and imported vehicles). Mazda Motor research as of January 2012.

\*2: JC08 drive-mode fuel economy rating (verified by Ministry of Land, Infrastructure, Transport and Tourism) for 2WD models with SKYACTIV-D.

**Features of GS Yuasa Lead-acid Automotive Battery for Idle-stop Vehicles**

1. High input-output performance using thin-plate manufacturing technology  
Technology to improve the input-output performance of batteries by using a multitude of thin plates and reducing internal resistance.
2. High charge acceptance using carbon technology  
Technology to improve charge acceptance by optimizing the amount of carbon added to the negative plate.
3. High durability using long-life technology  
Technology to achieve longer life by using a highly durable grid and high-density active materials for the positive plate.

**Explanation of Battery Specifications**

T-110: Specifications for lead-acid automotive battery for idle-stop systems according to Battery Association of Japan standard SBA S 0101:2006. The outer dimensions and electrode specifications conform to the Japanese Industrial Standard for D31 batteries.

**T-110 lead-acid battery specifications:**

Outer dimensions (mm)	Total height	225
	Case height	202
	Width	173
	Length	305
Weight (kg)		approx. 22
Nominal voltage (V)		12
5hr capacity rate (Ah)		69

**(Image)**

Mazda CX-5

