



**GS Yuasa Lead-acid Battery for Idle-stop Vehicles  
Chosen for Honda N BOX**

GS Yuasa Corporation (Tokyo Stock Exchange: 6674) announced today that its lead-acid automotive battery for idle-stop vehicles was chosen by Honda Motor Co., Ltd. (Tokyo Stock Exchange: 7267) for its N BOX, the first model in the automaker's new lineup of N series minivans launched in December 2011.

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. Idle-stop vehicles are touted as a way to both raise fuel efficiency and reduce CO<sub>2</sub> emissions.

The M-42 lead-acid battery chosen for the N BOX boasts three advantages compared with batteries for conventional drive systems: high output, high input (charge acceptance), and high durability. These features are the product of an optimal balance between GS Yuasa's thin-plate manufacturing technology<sup>\*1</sup>, carbon technology<sup>\*2</sup>, and long-life technology<sup>\*3</sup>.

Idle-stop technology shuts the engine down when stopped at lights or during traffic congestion, while the battery supplies power to the vehicle's electronics (car navigation system, audio system, air conditioner, etc.). When prompted by the driver, the battery provides a large current to restart the engine, and is recharged by regenerative braking. The M-42 was chosen for its ability to cope with frequent charging. The battery greatly improves the fuel efficiency of the N BOX, which boasts one of the highest fuel-efficiency ratings for its class (22.2 km/L) \*4.

GS Yuasa already manufactures and sells lead-acid batteries for idle-stop vehicles, and the selection by Honda Motor for the N BOX is representative of the growing adoption of our batteries. 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: Technology to improve the input-output performance of batteries by using a multitude of thin plates and reducing internal resistance.

\*2: Technology to improve charge acceptance by optimizing the amount of carbon added to the negative plate.

\*3: Technology to achieve longer life by using a highly durable grid and high-density active materials for the positive plate.

\*4: JC08 drive-mode fuel economy rating (verified by Ministry of Land, Infrastructure, Transport and Tourism) for N BOX, N BOX custom FF models (excluding turbo-charged models).

**Explanation of Battery Specifications:**

M-42: 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 B20 batteries.

M-42 lead-acid battery specifications:

Outer dimensions (mm)	Total height	227
	Case height	203
	Width	129
	Length	197
Weight (kg)		approx. 10.6
Nominal voltage (V)		12
5hr capacity rate (Ah)		32

(Image)  
Honda Motor's N BOX

