



## FOR IMMEDIATE RELEASE

## "The Development of the Railway Vehicle Vertical Vibration Reduction System" Receives Japan Society of Mechanical Engineers' Medal for New Technology

**Tokyo, April 19, 2018** ---Hitachi Automotive Systems Ltd., along with the Railway Technical Research Institute, has been awarded the 2017 Japan Society of Mechanical Engineers' Medal for New Technology by the Japan Society of Mechanical Engineers in recognition of the Railway Vehicle Vertical Vibration Reduction System which it jointly developed with the Railway Technical Research Institute.

The Japan Society of Mechanical Engineers' Awards and Medals were established in 1958 by the Japan Society of Mechanical Engineers with the goal of encouraging Japan's mechanical engineering and manufacturing industries, and each year the awards are given for outstanding papers and new technology.

In the 2017 medal winning Railway Vehicle Vertical Vibration Reduction System, variable vertical hydraulic dampers able to control damping force are mounted on bogies in parallel to the secondary suspensions. These dampers control damping force and cancel out car body vibrations based on signals from accelerometers, reducing vertical vibrations and improving passenger comfort. This medal was awarded in acknowledgement of originality and innovation, damping control capability, and practicality and implementation record, as well as the economic and societal contributions of this system's technology.

This Railway Vehicle Vertical Vibration Reduction System is equipped on luxury "cruise trains" in Japan, beginning with Kyushu Railway Company's "Seven Stars in Kyushu" luxury train (operating from October 15, 2013)," and continuing to East Japan Railway Company's "Train Suite Shiki-Shima" (operating from May 1, 2017) and West Japan Railway Company's "Twilight Express Mizu-Kaze" (operating from June 17, 2017), where it is contributing to improved ride comfort.

By continuing to provide this Railway Vehicle Vertical Vibration Reduction System that contributes to smoother ride quality, Hitachi Automotive Systems Ltd. is proactively working toward improving passenger comfort.



"Train Suite Shiki-Shima" (provided by East Japan Railway Company)



Vertical Vibration Reduction System on "Train Suite Shiki-Shima"



"Twilight Express Mizu-Kaze" (provided by West Japan Railway Company)



Vertical Vibration Reduction System on "Twilight Express Mizu-Kaze"

\* Photos taken from the Railway Technical Research Institute's news release (June 15, 2017)

## About Hitachi Automotive Systems, Ltd.

Hitachi Automotive Systems, Ltd. is a wholly owned subsidiary of Hitachi, Ltd.,

headquartered in Tokyo, Japan. The company is engaged in the development, manufacture, sales and services of automotive components, transportation related components, industrial machines and systems, and offers a wide range of automotive systems including engine powertrain systems, electric powertrain systems and integrated vehicle control systems.

For more information, please visit the company's website at <a href="http://www.hitachi-automotive.co.jp/en/">http://www.hitachi-automotive.co.jp/en/</a>.

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