

DID YOU KNOW???

SYSTEM NAMES, INSTRUMENT CLUSTER PLAY IMPORTANT ROLE

Last week's article addressed the fact that drivers are not often up to speed on the capabilities and limitations of some of the automation features on today's cars. Some of the confusion derives from how the manufacturer names the system. In the Insurance Institute for Highway Safety (IIHS) study participants answered questions about two of the systems chosen at random. They were asked whether particular behaviors were safe while using that technology.

When asked whether it would be safe to take one's hands off the wheel while using the technology, 48 percent of people when asked about Autopilot said they thought it would be, compared with 33 percent or fewer for the other systems. Autopilot also had substantially greater proportions of people who thought it would be safe to look at scenery, read a book, talk on a cellphone or text. Six percent thought it would be OK to take a nap while using Autopilot, compared with 3 percent for the other systems.

At least a few Tesla owners have been misusing Autopilot in this way, with fatal results in some cases, according to the results of the study. Tesla's user manual says clearly that the Autopilot's steering function is a 'hands-on feature,' but that message clearly hasn't reached everybody, according to the IIHS study. "Manufacturers should consider what message the names of their systems send to people", says IIHS President David Harkey.

Instrument cluster information

If a system name is one of the first ways a driver learns about a feature, another source of information is the instrument cluster. Displays are important because they tell a driver how a system is responding to situations or when a system is temporarily inactive. For example, a lead vehicle may disappear from the display when that vehicle is cresting a hill and no longer detected by the system's radar. Similarly, lane lines may disappear from the display when the lane markings on the road are no longer visible to the system's cameras. This is a common occurrence in the North Country in winter.

Understanding these displays is important because automated systems can behave unexpectedly, and changing circumstances may require the driver to intervene. While almost everyone was able to understand when adaptive cruise control had adjusted the vehicle speed or detected another vehicle ahead, most participants struggled to understand what was happening when the system didn't detect a vehicle ahead because it was initially beyond the range of detection.

Many also struggled to identify when lane centering was inactive. "If your Level 2 system fails to detect a vehicle ahead because of a hill or curve, you need to be ready to brake. Likewise, when lane centering does not work because of a lack of lane lines, you need to steer," says Harkey. "If people don't understand when those lapses occur, manufacturers should find a better way of alerting them."

Although systems ideally should be intuitive, providing an orientation at the dealership could also help. The study showed that interface-specific training helped drivers notice changes in lane-centering activity and use the correct icons to determine system status. Reading the owner's manual is also a great idea. Many don't.