CAN Newsletter Online

SAE BOOK

Diagnostic communication with road and non-road mobile machinery

SAE published a comprehensible book for beginners which is all about standardized diagnostic communication between external test equipment and control units embedded in road-vehicles and non-road mobile machinery.



The book can be purchased on <u>Amazon</u> and <u>SAE</u> as hardcover and Kindle edition (Source: SAE International)

The 300-page hardcover book "Diagnostic Communication with Road-Vehicles and Non-Road Mobile Machinery" is authored by Mr. Peter Subke and includes more than 200 figures, 150 tables, and 170 educational questions and answers. This reference book is not only a completely revised and updated version of "<u>Road vehicles – Diagnostic Communication</u>" but contains several new clauses. Examples include but are not limited to SAE J1939, ODX 2.2.0, OTX, Diagnostics 4.0, and cybersecurity.

According to the author, the book is not written for experts but for the technical-oriented manager who needs a bird's-eye view and an answer to the question: Communication with automotive E/E systems, what are we talking about? It is also intended to serve as an introduction to the technically demanding and complex world of communication with automotive E/E systems for students and those who need to get an overview before they dig deeper in a specific topic to become an expert.

The reader finds a description of vehicle diagnostic communication technologies and other functions which are necessary to support diagnostic communication between external test equipment and automotive electronic control units embedded in road-vehicles and non-read mobile machinery. Also, explained in this book are the basics of CAN and other in-vehicle communication protocols.

The book starts with the history of automotive electronics and the description of the technology for in-vehicle communication, especially Classical CAN, CAN FD, and Ethernet. An up and running in-vehicle network is necessary for diagnostic communication that is specified in ISO standard and SAE recommended practices. Examples of standardized diagnostic communication protocol stacks include ISO 15031 (ISO OBD), ISO 14229 (UDS on CAN and UDS on IP), ISO 27145 (WWH OBD), SAE J1979 (SAE OBD), and SAE J1939. The final chapter deals with the future of the automotive industry, in particular with connectivity.

The book has the product code R-474 and is published under ISBN 978-0-7680-9367-4.

© CAN Newsletter Online - 2022-01-17 - www.can-newsletter.org