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| Record Nr. | UNINA9910815914003321 |
| Titolo | Integrated vehicle health management : essential readings / / edited by Ian K. Jennions |
| Pubbl/distr/stampa | Warrendale, Pa. (400 Commonwealth Dr., Warrendale PA USA) : , : Society of Automotive Engineers, , [2013] |
| ISBN | 0-7680-8074-6
 0-7680-8712-0 |
| Descrizione fisica | 1 online resource (1 PDF (vi, 231 pages)) : illustrations (black and white, and colour) |
| Collana | Society of Automotive Engineers. Electronic publications |
| Disciplina | 629.04 |
| Soggetti | Automobiles - Technological innovations
 Automobiles - Maintenance and repair
 Integrated logistic support
 Systems engineering
 Electronics in transportation
 Detectors - Industrial applications
 TRANSPORTATION / Automotive / Repair & Maintenance
 TECHNOLOGY & ENGINEERING / Automotive
 COMPUTERS / Software Development & Engineering / General
 Vehicle maintenance and manuals
 Automotive (motor mechanic) skills
 Automotive technology and trades
 Computer programming / software engineering |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | SAE order no. PT-162. |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Embedded Diagnostics and Prognostics for Future Vehicles (870397)/ Furno, V. E., and Resnick, H. L. -- Integrated Vehicle Health Management for Aerospace Systems - A Need for Robust and Smart Fluid Components (942167) / Gormley, T. J., Vesperman, C., and Engle, J. -- Engines. Monitoring the Progression of Micro-Pitting in Spur Geared Transmission Systems Using Online Health Monitoring Techniques (2011-01-2700) / Onsy, A., Shaw, B. A., and Zhang, J. -- |

Very High Frequency Monitoring System for Engine Gearbox and Generator Health Management (2007-01-3878) / Watson, M. J., Byington, C. S., and Behbahani, A. -- Refinements to Mechanical Health Monitoring Algorithms (2012-01-2096) / Hickenbottom, C., Kim, K., and Uluyol, O. -- Certification of Engine Health Management Systems: Guidelines for Selecting Software Assurance Levels (2011-01-2704) / Rajamani, R., and Waters, N. -- Airframes. Structural Health Management: Systems Design Approach (2009-01-3230) / Ihn, J-B, Davis, C., and Haugse, E. -- A Validation Methodology for Structural Health Monitoring (2011-01-2608) / Azzam, H., and McFeat, J. -- Ground Based Vehicle Health Monitoring for Lifecycle Cost Reduction (2003-01-2981) / Schaefer, L. -- Smart Monitoring System for Aircraft Structures (2011-01-2714) / Rouet, V., and Foucher, B. -- Electrical Power Systems. A Framework for Developing an EPS Health Management System (2010-01-1725) / Hernandez, L., Mullins, M., Morris, C., and Keller, K. -- Aircraft Electrical Power Systems Prognostics and Health Management (AEPHM) (2004-01-3162) / Keller, K., Amo, A. D., and Jordan, B. -- Integrating Electrical Prognostics and Monitoring into an Electronic Power Distribution System (2009-01-3190) / Ballas, M., and Potter, F. -- A Model-Based Development Approach for a Diagnostic System for a Multifunctional Fuel Cell System (2011-01-2702) / Modest, C., Schories, K., Ludders, H. P., and Thielecke, F. -- Supporting Systems. Battery Diagnostic and Prognostics for Aviation Batteries Via a Passive Diagnostic Device (2012-01-2239) / James, J. E. -- Electrochemical Testing at SAFT to Support Health Prognostication Management for Aviation (2009-01-3191) / Rickman, S., Guseynov, T., Nechev, K., Kumbar, N., and Hurley, M. -- An Overview of Electrically Powered Control Actuation Health Management (2010-01-1746) / Schroeder, J. B., and Chen, R. -- Health Assessment of Liquid Cooling System in Aircrafts: Data Visualization, Reduction, Clustering and Classification (2012-01-2106) / Najjar, N., Sankavaram, C., Hare, J., Gupta, S., Pattipati, K., Walthall, R., and D'Orlando, P. -- Architecture. Sensory Prognostics and Management System (SPMS) (2012-01-2095) / Keller, K. J., Maggiore, J., Safa-Bakhsh, R., Rhoden, W., and Walz, M. -- Creating a System Architecture for a Vehicle Condition-based Maintenance System (2012-01-2097) / Shao, G., Goldstein, D., Kim, K., Nwadiogbu, E., Proenza, R., Tran, M., and Williams, D. -- A Hierarchical Reasoning Structure to Support Aerospace IVHM (2011-01-2665) / Roemer, M.

| Sommario/riassunto | Integrated Vehicle Health Management (IVHM) is a relatively new subject, with its roots back in the space sector of the early 1990s. Although many of the papers written around that time did not refer to it as IVHM, the fundamental principles of considering an integrated end-to-end system to monitor the overall health of the asset were clearly visible. As the subject of Integrated Vehicle Health Management (IVHM) and its associated technologies have grown up, businesses are making the transformation from selling a product to selling a service. This can be viewed as a positive disruption, as a relatively small technology breakthrough is being brought to market for a large business benefit. The sequence - sense - acquire - transfer - analyze - act - feeds the information (processed data) on the asset's health into the Operations or Management control center. Here, decisions can be made on maintenance actions with knowledge of the supply chain status, MRO loading, etc., provided by Maintenance and Logistics systems. |