



## INNOVATIONS 22.2

**CV**  
COMMERCIAL  
VEHICLE

**AGV**  
AGRICULTURAL  
EQUIPMENT

**OHW**  
OFF-HIGHWAY  
EQUIPMENT

**MHE**  
MATERIAL  
HANDLING

**marine**  
VESSELS

# SOFTWARE INNOVATIONS

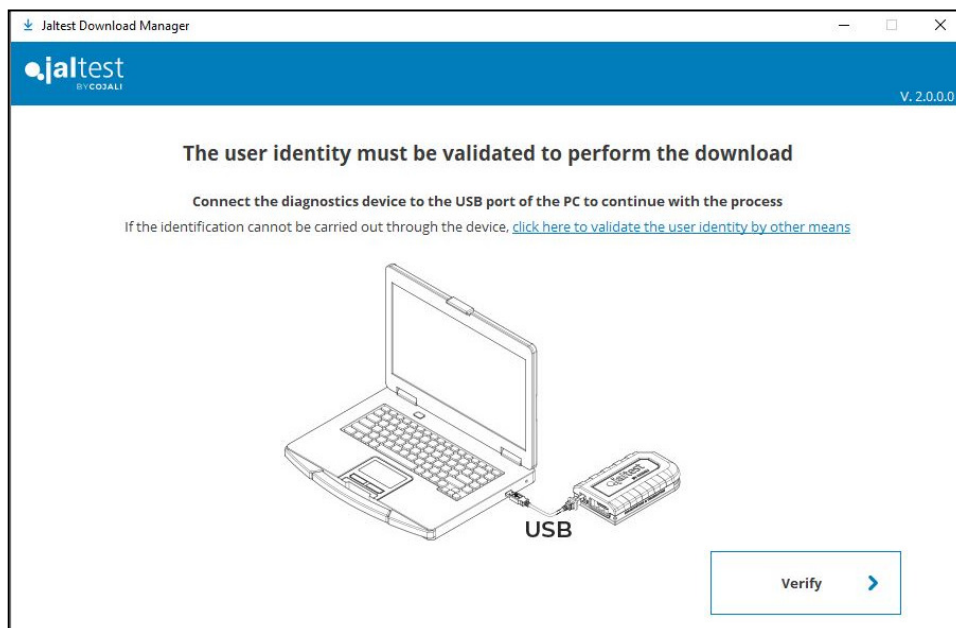
The new software version Jaltest 22.2 once again offers more improvements and innovations that consolidate this tool as a benchmark in multibrand diagnostics for commercial vehicles, agricultural equipment, OHW equipment, material handling equipment and vessels.

From this version, products with licence in force and expired licence can be combined. All clients with licence in force for several products (CV, AGV, MHE...) from 1st January 2022 may renew only some of them without losing access to the rest. The following considerations must be taken into account:

- The renewed products will expire on the same expiration date.
- This behaviour is available from 22.2 version. Please note that access to non-renewed products will be removed with older versions.
- Once using 22.2 Jaltest version or subsequent versions, the diagnostics coverage of non-renewed products will be locked in the version to which you were entitled according to their expiration date.
- The behaviour for the access to non-renewed products will be the same as for products with expired license (currently without access to technical information).

## Jaltest Download Manager

Jaltest Download Manager is publicly available to all users on the web. This programme manages the downloads of the versions that correspond to each Jaltest user. It may be useful for first installations when purchasing the device.



## Licence for vessels with gasoline engine

New licence to meet the needs of marine businesses located in river environments where most fleets are vessels with gasoline engines, either they are inboard, outboard or jet skis.

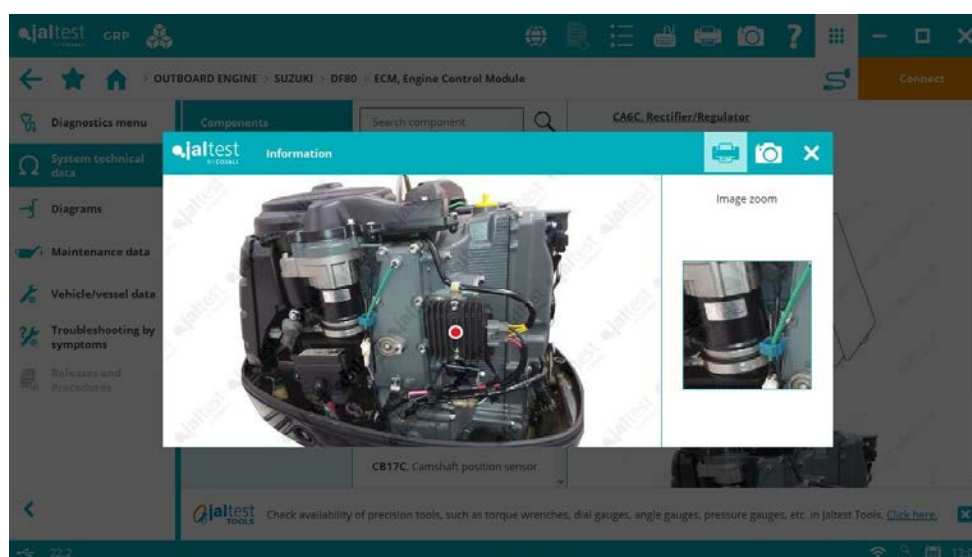
Brands such as Mercury, Volvo Penta, Indmar and OMC provide coverage for diesel or gasoline engines with separate accesses.

## Unknown variants resolution through other brand models

If the reference of a system is unknown, the user will be able to search if any system of the same type contains a variant with the same identifier. Only systems within models of the same brand will be searched.

If the user accepts, the models that contain the found system will be displayed and, after selecting any of them, the system to which the variant belongs will be preselected.

## Image zoom



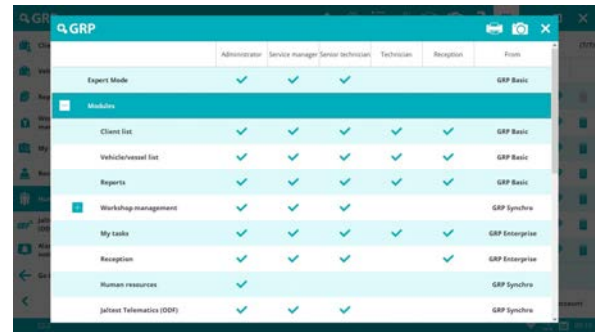
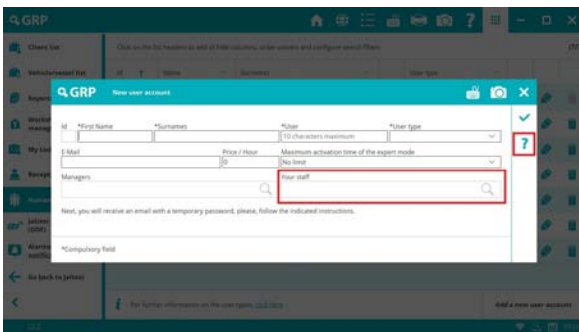
## Other functionalities

- Sending of audios through Jaltest Feedback.
- Expert mode timer. In GRP, it will be managed by the administrator for each of the users.
- Displaying of measurement indicators in steps on table.
- Displaying of interactions in SYSTEM DISPLAY visualisations in the steps of an action.
- SMART guides improvements.

# GRP

## User management improvement

The Service managers can be in charge of a customised group of users, therefore in GRP Enterprise they can manage work orders and tasks only for this group. The management is performed by the Administrator through the Human Resources menu. In addition, in this same menu, a reporting table with the permissions for the different GRP user roles is included.

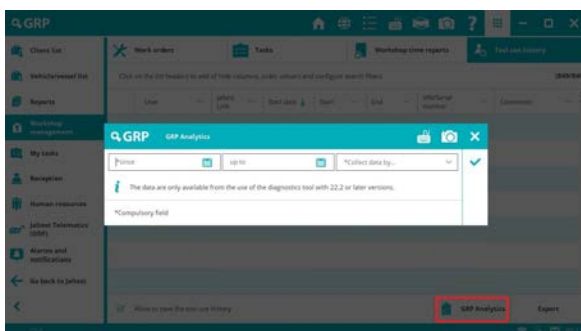


**Attention!** It is important to note that all GRP users previously created as “Service manager” change to “Senior technician” in 22.2, maintaining the same features. The “Service manager” user can now access the same menus and settings of the programme than the “Administrator” user, except for the Human Resources menu. In this way, all management will not be in the hands of the “Administrator” user.

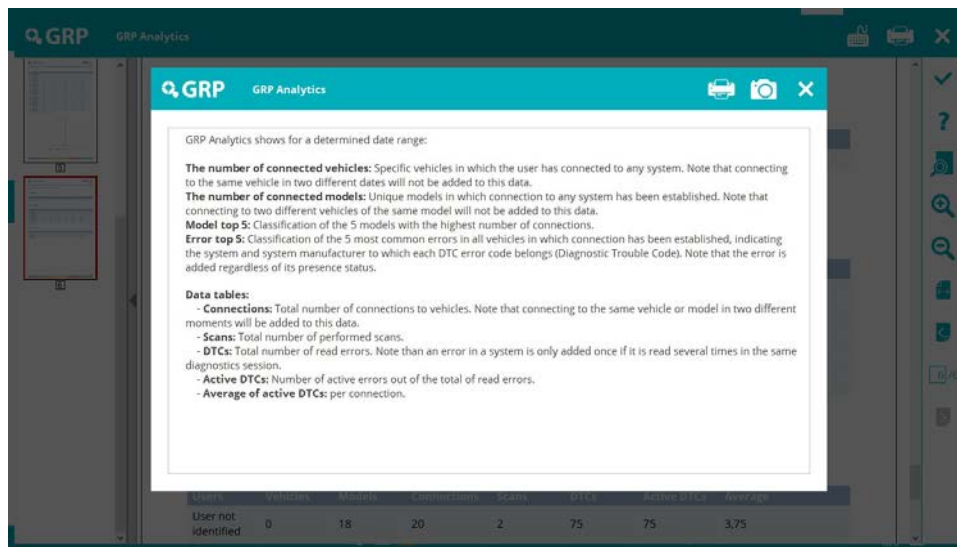
## GRP Analytics

GRP Analytics, located in Workshop management > Tool use history > GRP Analytics, is a functionality that allows the Administrator and Senior technicians to obtain statistical data on the use of Jaltest either from one device or from several devices in GRP Enterprise, as well as from each of the users.

Once the date range is selected, the date can be grouped by day, week or month.



Which data are displayed?



The screenshot shows the GRP Analytics software interface. A central window displays the following information:

GRP Analytics shows for a determined date range:

- The number of connected vehicles:** Specific vehicles in which the user has connected to any system. Note that connecting to the same vehicle in two different dates will not be added to this data.
- The number of connected models:** Unique models in which connection to any system has been established. Note that connecting to two different vehicles of the same model will not be added to this data.
- Model top 5:** Classification of the 5 most common errors in all vehicles in which connection has been established, indicating the system and system manufacturer to which each DTC error code belongs (Diagnostic Trouble Code). Note that the error is added regardless of its presence status.

**Data tables:**

- **Connections:** Total number of connections to vehicles. Note that connecting to the same vehicle or model in two different moments will be added to this data.
- **Scans:** Total number of performed scans.
- **DTCs:** Total number of read errors. Note that an error in a system is only added once if it is read several times in the same diagnostics session.
- **Active DTCs:** Number of active errors out of the total of read errors.
- **Average of active DTCs:** per connection.

At the bottom of the window, a table is partially visible with the following data:

| Category            | Value |
|---------------------|-------|
| User not identified | 0     |
|                     | 18    |
|                     | 20    |
|                     | 2     |
|                     | 75    |
|                     | 75    |
|                     | 3,75  |

# DIAGNOSTICS AND SYSTEMS

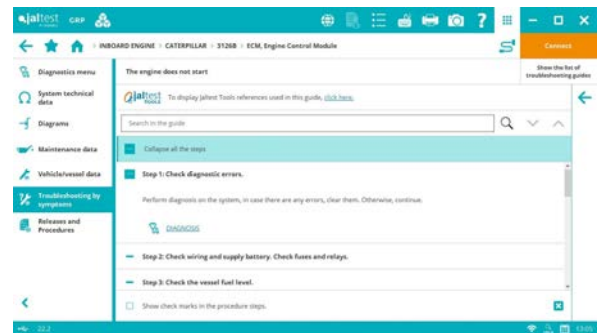
Take into account that this document is only a summary of the most relevant information of this new version. For further information, please visit Jaltest Report.

New **OMC/OMC Diesel** brand.

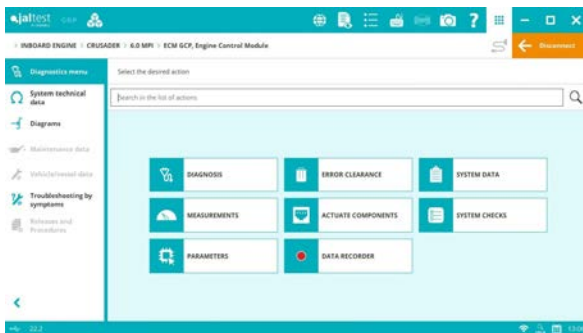
## INBOARD

### CATERPILLAR

Brand-specific troubleshooting guides by symptom depending on the injection type.



### CRUSADER

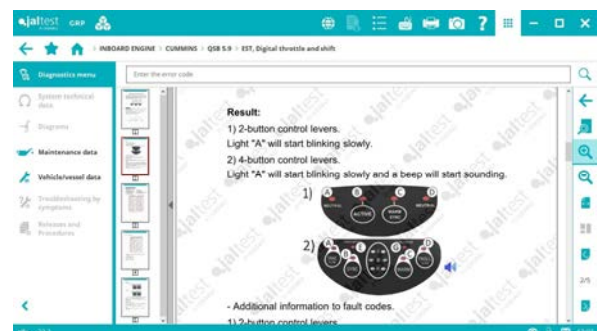


New software references in the **EMC GCP** engine control system that includes new system measurements with catalytic converter, and system checks such as the cylinder cut-out or the idle speed test.

It also has the system counter reset and the adaptation value reset.

### CUMMINS

⊕ **EST** electronic control system of the throttle lever and digital shift. It includes the manual diagnostics procedure.



## ILMOR

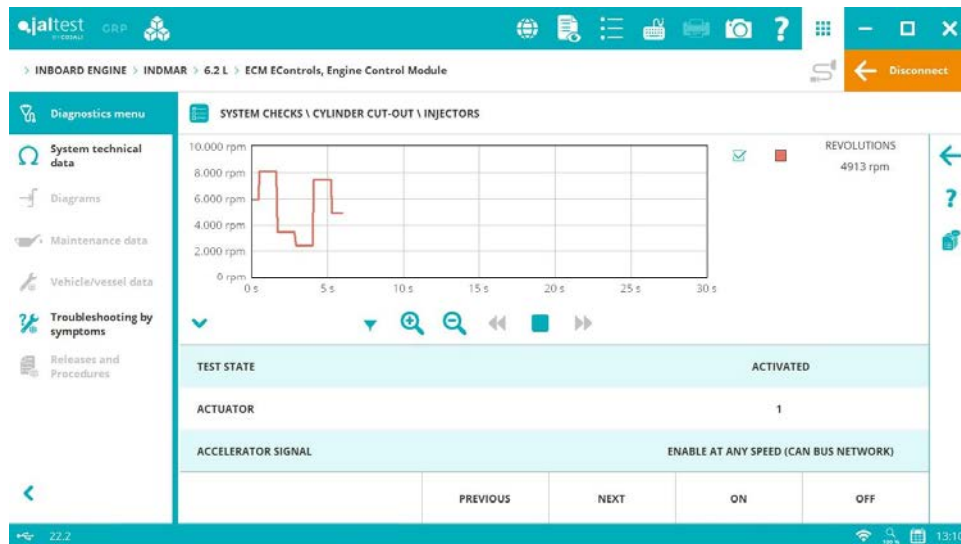
New software references in the **ECM MV8** engine control system that includes new system measurements with catalytic converter, and system checks such as the cylinder cut-out or the idle speed test.

It also has the system counter reset and the adaptation value reset.



## INDMAR

⊕ **ECM EControls** engine control system.



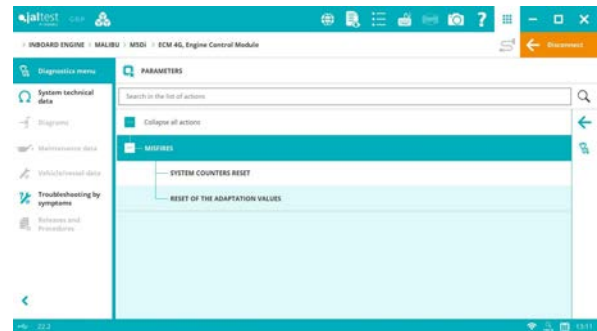
## JOHN DEERE

Dynamic System Display in the **ECU HPCR (Level 14)**, **ECU EUI (Level 15)** and **ECU Denso (Level 16)** engine control systems.

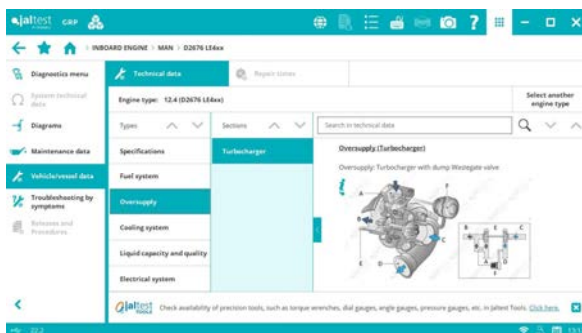
## MALIBU

New software references in the **ECM G4** engine control system that includes new system measurements with catalytic converter, and system checks such as the cylinder cut-out or the idle speed test.

It also has the system counter reset and the adaptation value reset.



## MAN



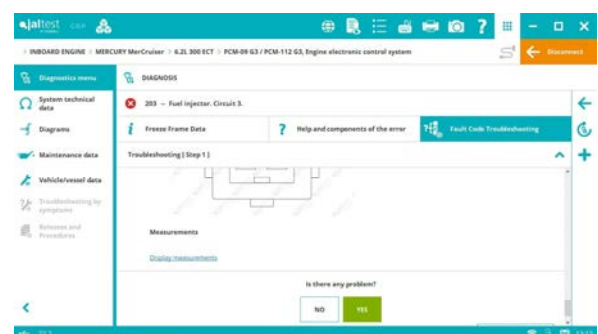
**D2676 LExx** model equipped with the **EDC 7 C32** engine control system and the **SFFR** central computer.

## MERCURY/MERCRUISER

Wiring diagram configurations, technical data and location images for the **G3** engine control systems in the following models: **4.5 L 200 ECT**, **4.5 L 250 ECT**, **6.2L 300 ECT**, **6.2L 300 ECT**, **6.2L 320**, etc. The architecture of Smart Craft communication is included.

Improved help related to errors of *Guardian strategy*.

SMART error troubleshooting guides for the **PCM-09 G3** and **PCM-112 G3** engine control systems that apply to models from 2012.





## TOYOTA MARINE

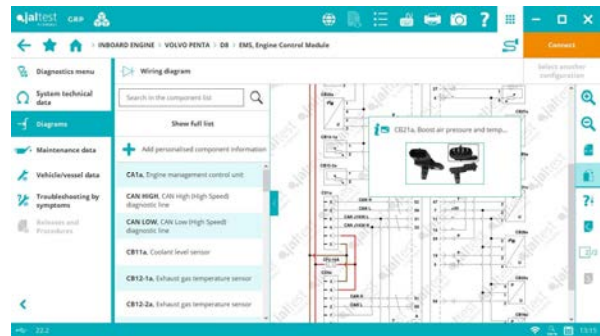
Dynamic System Display in the **M1Kd (1st Gen)** model.

## VOLVO PENTA

Wiring diagram configuration for the **EECU** and **EMS** engine control systems in several brand models.

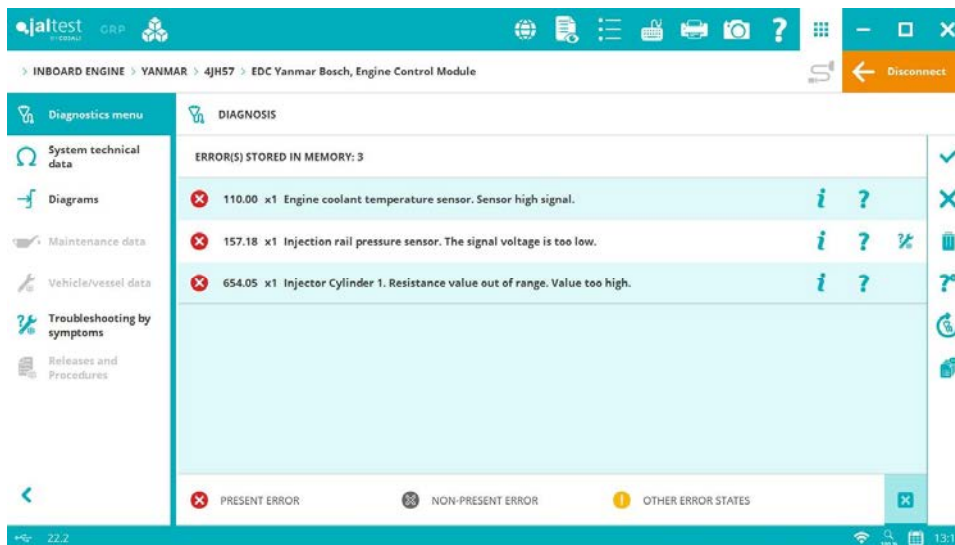
SMART error troubleshooting guides.

Vessel technical data and maintenance service for **D8** and **D8 IPS** engines.



## YANMAR

⊕ **EDC Yanmar Bosch** engine control system in the **3JH** and **4JH** family models.

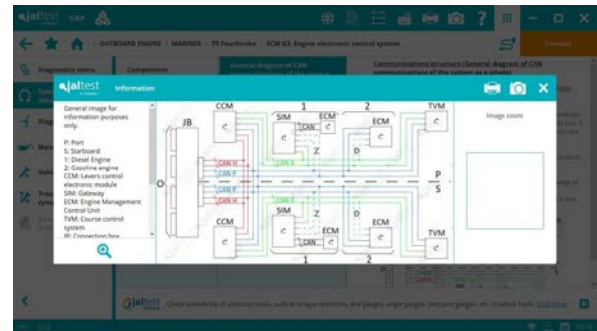


# OUTBOARD

## MARINER

Help related to errors in the **ECM G3** engine control system that applies to all **FourStroke** family engines.

Technical data in all **G3** models that include the architecture of Smart Craft communication.

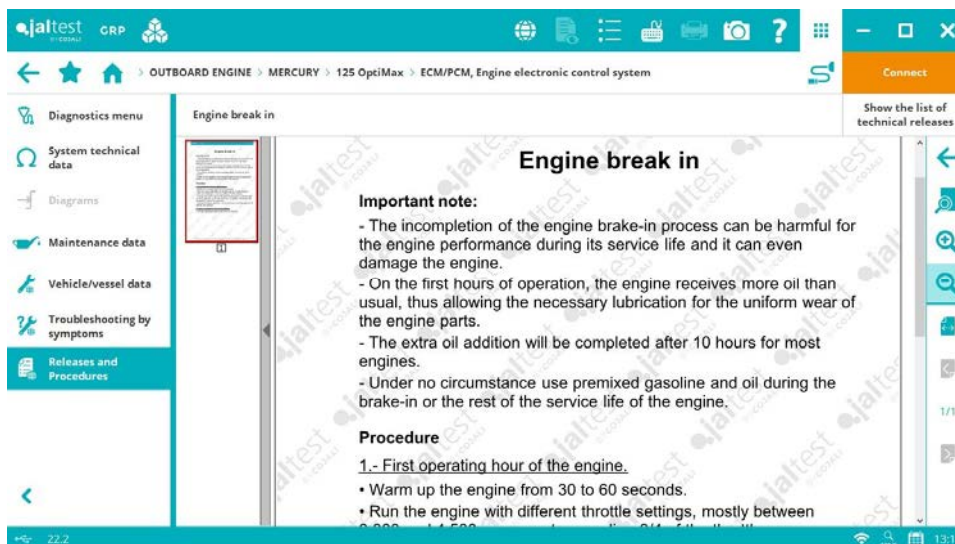


## MERCURY

“How to perform the break in process in two-stroke engines” technical release (**Two-Stroke, Optimax, Pro Max, Sport XS, Pro XS, ...**).

Improved help related to errors of *Guardian strategy*.

SMART error troubleshooting guides for the **PCM-112 G3** engine control system of **Verado V6** and **V8** models.



## SUZUKI

Animated System Display in the lever calibration of the **BCM** system.

## STATIONARY ENGINE

### CATERPILLAR

Wiring diagram configuration in the **EMCP** system for **C-3.4B** engines.

### CUMMINS

⊕ **QSF 2.8/3.8 CM2880**

⊕ **4D95 3.3 CM2350**

All systems include extensive coverage of advanced functions.

**QSB 4.5/6.7 CM2350** engine control system, parameter configuration of the engine brake and the starter motor locking.

Technical data in engine types of the **L9** model.

### DEUTZ

**EMR4 EDC 17 CV52** and **EMR5 EDC MD1** wiring diagram configurations in several brand models.

### JCB

⊕ **DieselMax 430 (Stage V)** engine control system.

### KOHLER

Technical data and wiring diagram configurations.

### PERKINS

**ECM 400 Series Tier 4/Stage IV** engine control system, activations, cylinder cut-out, injector coding and high-pressure pump calibration.

**ECM 1100D Series** engine control system, cylinder cut-out.

Technical data of the **904J** engine.

### VOLVO PENTA

**EMS V3** engine control system, preheating activations, heat preservation check and parameter modification concerning the engine heating. This version, this system also includes new wiring diagram configurations in the stationary engine paths.

### YANMAR

**EDC Denso** engine control system, Diesel Oxidation Catalyst replacement (DOC).