



jaltest OHW OFF-HIGHWAY VEHICLES

INNOVATIONS 21.1

SOFTWARE INNOVATIONS

The new software version **Jaltest 21.1** once again offers more improvements and innovations that consolidate this tool as a benchmark in **multibrand diagnosis** for commercial, agricultural and OHW (Off-Highway) vehicles.

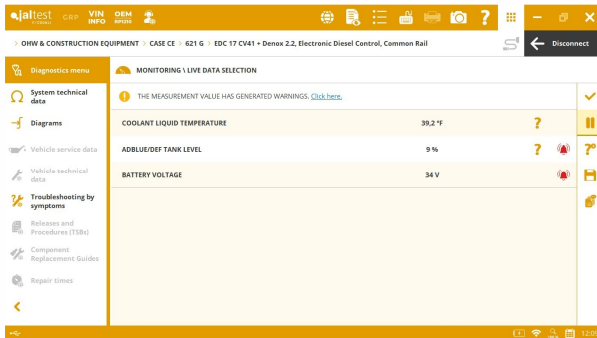
Furthermore, in this version, Jaltest includes the coverage of the **Jaltest Marine** project. Contact your distributor and acquire now the license that also allows you to diagnose vessels and jet skis with the same device and a single software.

Our **Jaltest University** division includes the entire Jaltest training offer, from courses traditionally taught on-site to online courses or webinars. Thus, we have adapted to the new needs for universal and quality training within the reach and at the disposal of any professional in the sector. First courses will be available soon.

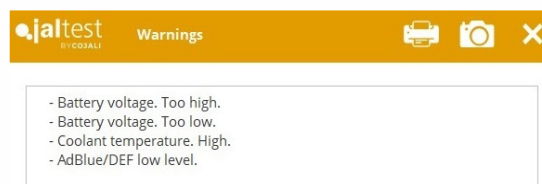


Next, the most relevant software innovations are shown.

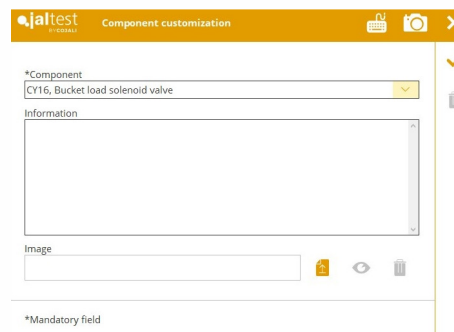
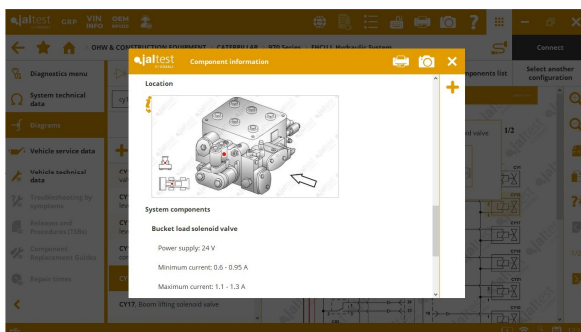
Measurement warnings



In addition to the different display methods available in Jaltest; the possibility to display measurements in graph format, define measurement triggers (also in measurement groups from this 21.1 version) and have measurement warnings during the display of them, now it is also possible to display a summary of slow-dynamic measurement warnings.



Customization of component information

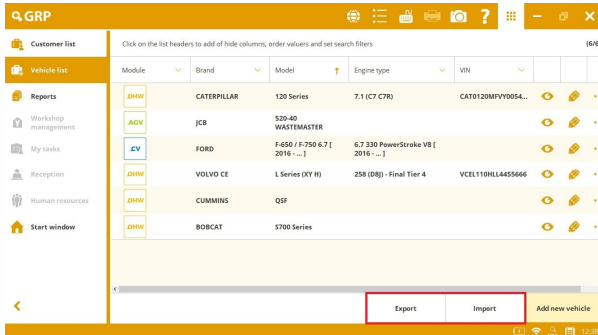


Others

- Dynamic helps depending on the measurement value in an action.
- Help in the selection of the wiring diagram setting.
- Fault list order. The present faults are shown first.

GRP

Export/Import vehicle list



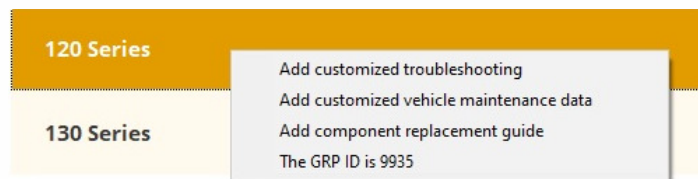
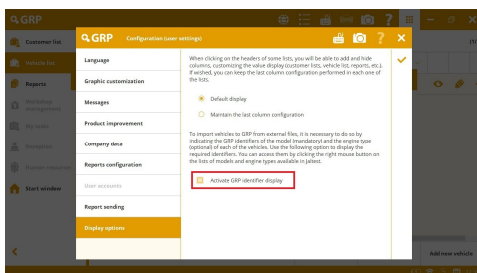
It is possible to export/import the vehicle list through Excel or CSV files quickly and easily. This allows the user to share the vehicles created in Jaltest with others from other platform or ERP of their company, and vice versa.

To import vehicles, an empty template with a defined format or with the data of the vehicles that the list has can be generated. In this way, some data could also be modified. It is important not to modify the header value or column position of the table.

| Vehicle code | Model identifier | Engine type identifier | License plate | VIN | Number or name |
|--------------|------------------|------------------------|---------------|------------------|----------------|
| 1 | 9704 | -1 | | | |
| 2 | 9935 | 7432 | | CAT0220MFV005400 | |
| 3 | 9532 | 7939 | | VCELL10HLL455666 | |
| 4 | 5443 | -1 | | | |
| 5 | 13453 | -1 | | | |
| 6 | 7474 | 6856 | | | |

The “Model identifier” and, optionally, the “Engine type identifier” must also be completed in the template. This operation is important. The model identifier will allow you to

relate the vehicle from the list with a model from Jaltest. This is the only way to enjoy all advantages of being able to create GRP vehicles such as, for example, the advantage of associating diagnostic reports. The identifier is obtained by clicking on the right button of the mouse on model/engine type in Jaltest if it has been configured previously.



Others

- Possibility of associating several vehicles to a customer at once.
- Improvement in the GRP lists including more columns and filters.
- App customization by user.

The vehicle record, vehicle types, brands, customized measurements, graphic configuration, language, measurement units, etc. will be displayed depending on the user who has registered in the application.

BRANDS AND MODELS

This version, brands such as **DRESSTA**, **HIMOINSA**, **JUNGHENNRICH**, **SKYTRAK**, **TOYOTA**, **VERMER** and **XCMG** have been included in OHW & CONSTRUCTION EQUIPMENT.

The **BOSCHUNG** brand and new models from the **MATHIEU-YNO** brand have been included in STREET SWEEPERS. For example, the **Grand Azura** model equipped with the **EDC 7 UC31** engine control system and the **Denoxtronic 2.1** exhaust gas aftertreatment system.

LINDE

New model family, electric forklifts, connection through the **JDC 552A** cable.

DIAGNOSIS AND SYSTEMS

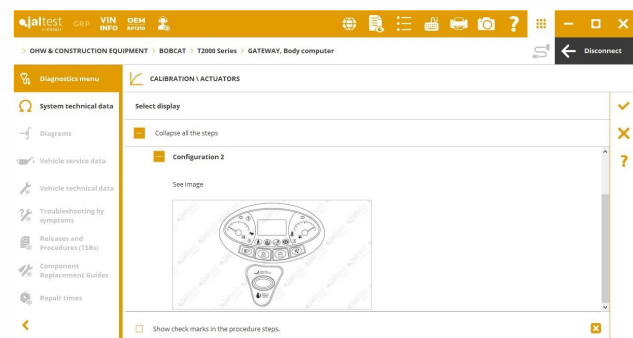
Take into account that this document is only a summary of the most relevant information of this new version. For further information, please visit Jaltest Report.

OHW & CONSTRUCTION EQUIPMENT

BOBCAT

New systems for telescopic handlers.

- ⊕ **DCU** gateway.
- ⊕ **LHP** instrument cluster.
- ⊕ **Workgroup** computer.
- ⊕ **LLM** electronic module.
- ⊕ **LLM** instrument cluster.



CATERPILLAR

Models with **C-13** and **C-15** engines communicating on SAE J1939, exchange and injector coding functionalities.

Models with **C-4.4/C-6.6** engines, EGR valve activation, inlet and outlet valve check, etc.

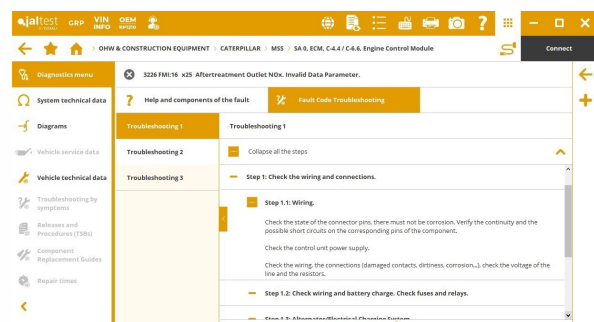
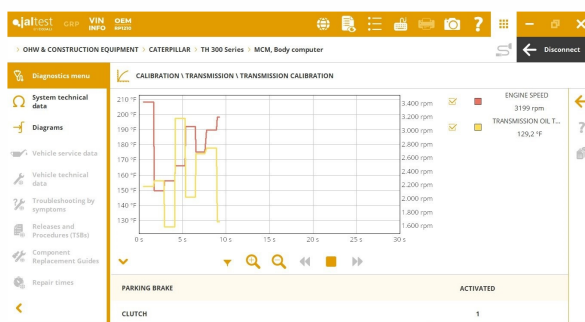
Models with **C-3.3B** engine, cylinder cut-out and fuel pump calibration.

Models with **C-9.3** engine, fuel system check.

SCR/DEF exhaust gas aftertreatment system, AdBlue/DEF system heater check.

All previous models now have System Display for measurements and new fault code troubleshooting. Moreover, there are new wiring diagrams available in articulated haulers and bulldozer. The wiring diagram of the **MCM** machine control module has also been included in telescopic handlers and excavators.

MCM machine control system, calibrations such as the calibration of the right control lever, Joystick rotary switch, telescopic boom retraction/extension solenoid valves and many others in telescopic handlers.



HITACHI

⊕ **ECM** engine control system.

JCB

⊕ New systems developed for excavators: **Liveliink** JCB, HECU hydraulic system, **MECU** central computer, **DECU** instrument cluster and **ECM 430 DieselMax** engine control system with advanced functions such as the injector test, cylinder cut-out and maintenances.

JLG

New wiring diagrams available in machine modules controlled through the **Hydraulics** system.

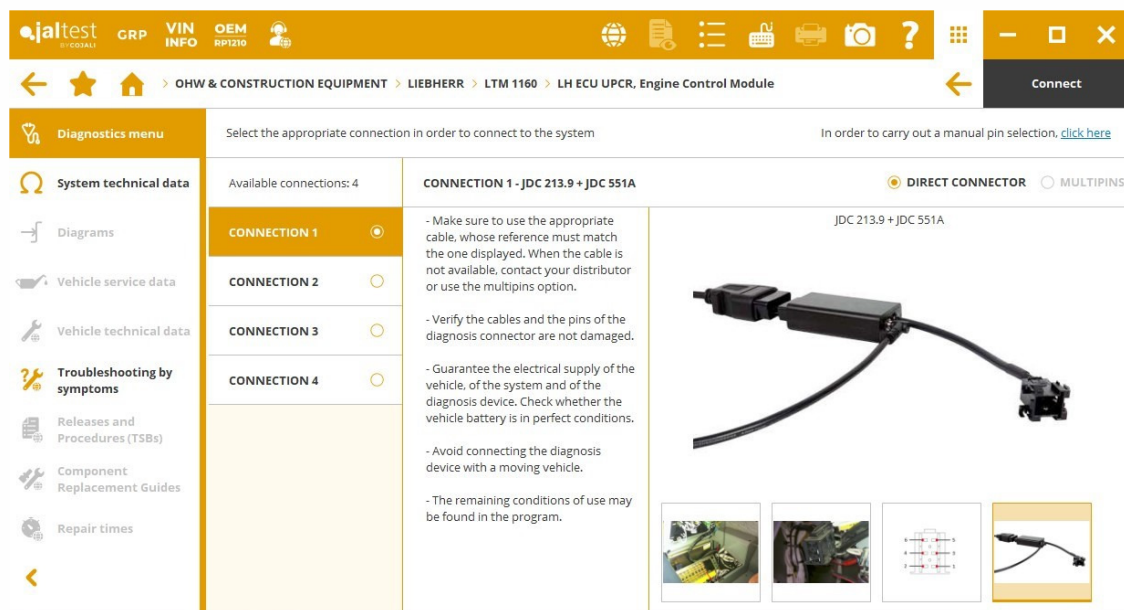
Technical data and maintenance services in models with **Deutz** engines.

LIEBHERR

⊕ **LIDEC1** (RS232) engine control system.

ECU2-HD engine control system, System Display.

New **JDC 551A** cable (6-Pin).



LINDE

⊕ **Display** for electric vehicles.

⊕ **Display** and hydraulic system for diesel and LPG vehicles.

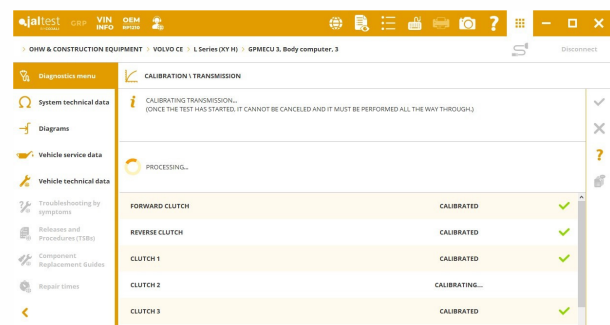
VOLVO

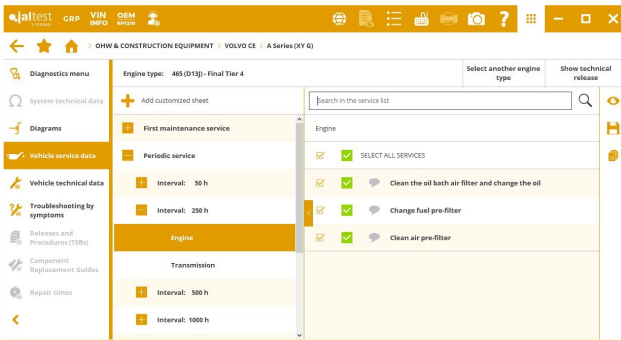
⊕ **TECU** transmission system and **VECU** central computer developed for **EW Series (XY B)** wheel excavators.

ACM exhaust gas aftertreatment system, fuel shut-off solenoid valve actuation, leakage test, etc.

Transmission calibration of the **L Series (XY H)** wheel loaders in the **GPMECU3** system.

VECU central computer for **EC Series** excavators, power valve check.





In addition, there are new diagrams available in excavators as well as new technical data in the **D8H** engine type and new maintenance services in several models.

STATIONARY ENGINE

CATERPILLAR

See innovations in the **OHW & CONSTRUCTION EQUIPMENT** section.

CUMMINS

QSF 3.8 CM2350 engine control system, activations, checks, parameter modification and maintenances such as the SCR catalytic converter regeneration or the particulate filter replacement among others.

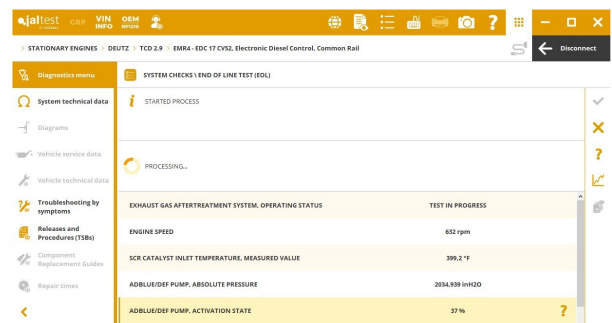
QSB 4.5/6.7 CM2350 engine control system, accelerator lock setting, SCR system operating test, etc.

In addition, other systems such as the **QSG 12 CM2350** engine control system or the **QSX15 CM2350** engine control system also extend their coverage in this version with advanced functions such as the removal of the SCR system inducement mode and other parameter settings.

DEUTZ

EMR4 - EDC 17 CV52 engine control system, AdBlue/DEF fluid quality test and End-Of-Line test, maintenances such as the reset of the injector ZFL correction values and thermal conditioning/desulfurization procedure.

EMR5 - EDC MD1 engine control system, PRV pressure relief valve reset.



IVECO-FPT

EDC MD1 engine control system, SCR catalytic converter regeneration and checks such as the AdBlue/DEF fluid quality test. In addition, this system has new System Display for the fuel system and the exhaust gas aftertreatment system.

JCB

⊕ **ECM 430 DieselMax** engine control system with advanced functions such as the injector test, cylinder cut-out and maintenances.

E-CDIS engine control system, Pressure Relieve Valve reset.

KUBOTA

⊕ New **V1505, V1803** and **V2403** 3-cylinder engines with an engine control system developed with advanced functions such as the throttle and EGR valve activations, cylinder cut-out, injector coding, etc.

PERKINS

404D/404E engine control system, EGR system reset.

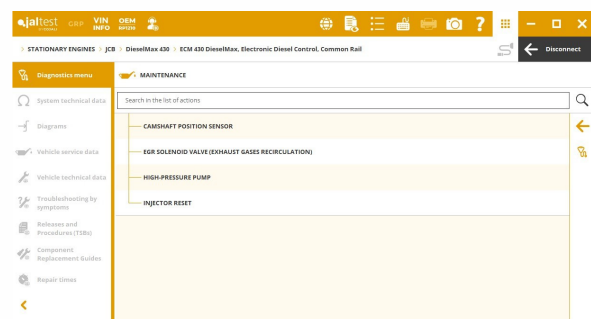
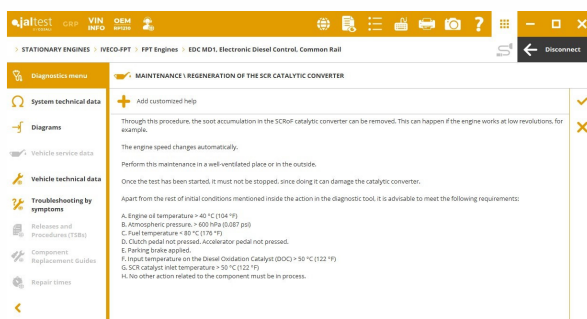
1204E/1206E and **1204F/1206F** engine control system, EGR valve activation, inlet and outlet valve check, etc.

SISU

EEM4S5-MD1 engine control system, system data, activations, checks and injector coding.

YANMAR

EDC Bosch engine control system for Yanmar engines, operation data such as the engine load profile, activations, checks and parameters.



STREET SWEEPERS

New actions in engine control systems and in the aftertreatment system of models with **VM Euro 6** engines such as in **ASH** street sweepers (Cleango 500 and Swingo 200+ models), **HAKO** Citymaster 2200, **JOHNSTON** C200 and much more.