

off-Highway Vehicles

INNOVATIONS 25.2













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.

BRANDS AND MODELS

OHW - HEAVY EQUIPMENT

This version includes the **ACE** brand.

The number of models in **DOOSAN**, **HITACHI**, **HYUNDAI CE**, **JCB**, **JOHN DEERE CE**, **LIEBHERR**, **SANY**, **VÖGELE**, **VOLVO CE** and **XCMG** brands has been expanded.

OHW - COMPACT EQUIPMENT

This version includes the **ACE** brand.

The number of models in **HITACHI**, **HYUNDAI CE**, **JCB**, **JOHN DEERE**, **KRAMER**, **VOLVO CE** and **WACKER NEUSON** brands has been expanded.

STATIONARY ENGINE

The number of models in the **CUMMINS** brand has been expanded.

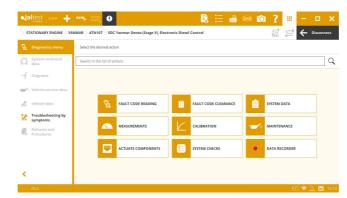
MULTI-PURPOSE VEHICLE

This version includes the **CARON** brand.

The number of models in the **MULTICAR** brand has been expanded.

DIAGNOSTICS AND SYSTEMS

It is important to note the development of the new **Yanmar Stage V** engine control system, with the **EDC Denso** system. This system is available, among other connection routes, in **4TN107** model of **YANMAR** brand in STATIONARY ENGINE.















OHW - HEAVY EQUIPMENT

BOSCH REXROTH

BODAS RC Series 31 (on CAN) programmable control unit.

CATERPILLAR

CHM (on CDL) central computer in 700 Series models.

TCCM (on CDL) transmission in **700 Series** models, advanced functions in actuations.

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> 0	> OHW - HEAVY EQUIPMENT > CATERPILLAR > 730 Series > CHM, CDL, Body computer					
8		Select the desired action				
Ω	System technical data	Search in the list of actions	Q			
÷	Diagrams					
	Vehicle service data					
10	Vehicle data					
?%	Troubleshooting by symptoms					
倱	Releases and Procedures	TAULT CODE READING				
<						
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Fault code troubleshooting guides in several systems such as the **C-9.3** engine control system and **ARD** and **SCR / DEF** exhaust gas aftertreatment systems.

New wiring diagram configurations in C-4.4, C-7.1, C-13, C-15 and C-18 engine control systems in MCM (on SAE J1939 and CDL) central computer and in SCR/DEF (on SAE J1939) exhaust gas aftertreatment system.

DEVELON

E-EPOS (on RS232) system in DX-7 Series models, operation data.

HITACHI

• MC (on SAE J1939) central computer in **ZX 7 Series** models.

HYUNDAI CE

- MCM (on RS232) central computer for 9 Series excavators.
- New JDC 572.9 diagnostics cable.













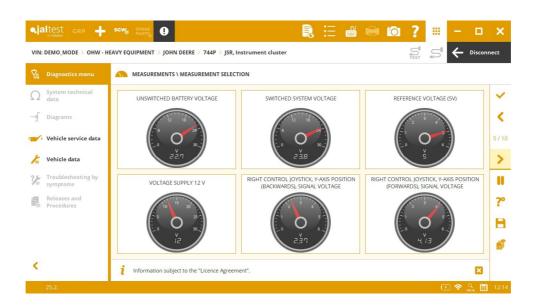


JCB

New wiring diagram configurations in **DieselMax 448 Stage V** (on SAE J1939) engine control system in **140X, 150X** and **220X** models.

JOHN DEERE CE

TCU and PDU (on SAE J1939) systems for G and P Series wheel loaders.
JSR, ATC, BHM and HVS (on SAE J1939) systems for P Series wheel loaders.



LIEBHEER

• VIU (on SAE J1939) gateway in A Series, LH Series and R Series models.













TEREX FINLAY

CATERPILLAR C-3.4B (on SAE J1939) engine control system in **595** and **870** models, diesel particulate filter maintenance reset, SCR catalytic converter maintenance reset, component replacement and exhaust gas aftertreatment system checks.

OHW - COMPACT EQUIPMENT

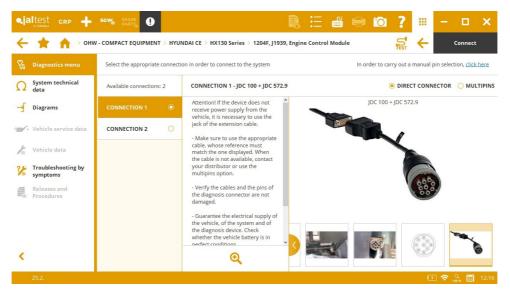
CATERPILLAR

MCM (on CDL) central computer in **900 Series** models, implement control valve calibration and hydrostatic module calibration.

C-3.4B (on SAE J1939) engine control system, diesel particulate filter maintenance reset, SCR catalytic converter maintenance reset, component replacement and exhaust gas aftertreatment system checks.

HYUNDAI CE

New JDC 572.9 diagnostics cable.



MCM (on RS232) central computer for Series 9 excavators.













JCB

FC (on SAE J1939) cooling system for telescopic wheel loaders.
EHCU hydraulic system, CHM central computer, CLUSTER and KEYPAD instrument clusters and JSR and JSL electronic modules for skid-steer loaders.

	Act Equin		CB > 155 > CHM, Body computer				5	S	~	Disconnec
6		8	FAULT CODE READING							
Ω	System technical data	i	FAULT CODES							
ſ	Diagrams			FAULT C	ODE					
	Vehicle service data	01		SPN 5485	3.02					
ŀ,	Vehicle data									
18	Troubleshooting by symptoms									
8	Releases and Procedures									
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CLUSTER (on SAE J1939) instrument cluster for telescopic wheel loaders, advanced operations in fault code clearance.

New wiring diagram configurations in **DieselMax 430 Stage V** (on SAE J1939) and **DieselMax 448 Stage V** (on SAE J1939) engine control system.

JOHN DEERE CE

⊕ TCU and PDU (on SAE J1939) systems for G and P Series wheel loaders.

• JSR, ATC, BHM and HVS (on SAE J1939) systems for P Series wheel loaders.

LIEBHERR

• VIU (on SAE J1939) gateway in A Series, LR Series, PR Series and R Series models.

> OHW - COMPACT EQUIPMENT > LIEBHERR > A 916 Compact > VIU, Gateway						
ີທີ Diagnostics menu						
Ω System technical data	Select a measurement and use the buttons up/down to change the measurement displa	y order.	~			
→ Diagrams	ALTERNATOR CONTROL LAMP	10	<			
🔨 Vehicle service data	POWER REDUCTION, CAUSE: ENGINE PROTECTION	3	37			
Vehicle data	OPERATION TIME, ENGINE MANAGEMENT SYSTEM CONTROL UNIT (TIME SINCE THE ENGINE START-UP)	7 hh:mm:ss	>			
Troubleshooting by symptoms	COOLANT FLUID LEVEL	8	1			
Releases and Procedures	OIL TEMPERATURE	34 °C	?			
	ENGINE SPEED	2991 l/min	E			
	ENGINE OPERATION TIME, (TIME ELAPSED SINCE THE IGNITION)	6 s	6			
<	ENGINE START, TERMINAL KL50	1 s				













STATIONARYENGINE

In general, **fault code troubleshooting guides** have been added in several engine control systems and in exhaust gas aftertreatment systems.

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← ★ ↑ > \$T/	ATIONARY ENGINE > CATERPILLAR > C-9.3	5	s	can	
🖏 Diagnostics menu	Search in the symptoms list				9
Ω System technical data	+ Add customised troubleshooting				\checkmark
→ Diagrams	?{ᇦ, ARD, Exhaust gas treatment system, Air flow regulator.			^	
\min Vehicle service data	?{클 ARD, Exhaust gas treatment system, NOx oxide level.				
🎽 Vehicle data	?ែក្តី ARD, Exhaust gas treatment system, Oxygen concentration.				
? Troubleshooting by symptoms	RD, Exhaust gas treatment system, The AdBlue/DEF fluid dosing unit is operating erratically المراجع				
Releases and Procedures	?ែក្តីខ្លួ SCR / DEF, Exhaust gas treatment system, AdBlue/DEF dosing module.				
	?ໃຫຼື SCR / DEF, Exhaust gas treatment system, AdBlue/DEF temperature in the tank too high.				
	?ត្រូវ SCR / DEF, Exhaust gas treatment system, AdBlue/DEF temperature in the tank too low.				
<	?ር፱ አርደ / DEF, Exhaust gas treatment system, NOx oxide level.				
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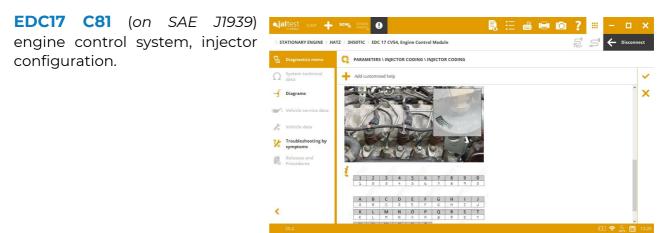
CATERPILLAR

New wiring diagram configurations in C-4.4 (on SAE J1939) engine control system.

IVECO FPT

New wiring diagram configurations in **EDC MD1 CS069 Stage V** (on SAE J1939) engine control system in **F34 (F5)** and **F36 (F5)** models.

HATZ



JOHN DEERE

In general, JOHN DEERE engine technical data have been added.













MAN

New wiring diagram configurations in **EDC17 CV42** (*on SAE J1939*) engine control system.

YANMAR

• EDC Denso engine control system in 4TN107 model.

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> STATIONARY ENGINE > YANMAR > 4TN107 > EDC Yanmar Denso (Stage V), Electronic Diesel Control					
🖏 Diagnostics menu	E SYSTEM CHECKS				
Ω System technical data	Search in the list of actions Q				
) Diagrams	- CYLINDER CUT-OUT				
Vehicle service data	REQUESTED ENGINE RPM				
🎉 Vehicle data	EGR VALVE OPENING CONTROL				
Troubleshooting by symptoms					
Releases and Procedures	EXHAUST GAS THROTTLE ACTUATOR				
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MULTI-PURPOSE VEHICLE

In general, diagnostics coverage has been extended for engine control systems. It is important to note new functionalities in **EDC 17 C81** engine control system and in **HAKO** and **LADOG** brands.









