

off-HIGHWAY VEHICLES

INNOVATIONS 23.2













SOFTWARE INNOVATIONS

The new software version Jaltest 23.2 once again offers more improvements and innovations that consolidate this tool as a benchmark in multi-brand diagnostics for commercial vehicles, agricultural equipment, OHW equipment, material handling equipment and vessels.

This version includes the ability to configure a **follow-up check for performed diagnostics actions**.

Client list			🖶 🙆 ?	×	> OHW - COMPACT EQUIPMI	ENT > JCB >	325T > ECM Kohler (Stage	e V), Electronic Diesel Control, Co	nmon Rail		5 5	
Vehicle/vessel list	Language	Fault code reading	Maintenance	<	😪 Diagnostics menu	🔛 AC	TUATE COMPONENTS \ EGR	R VALVE				
Reports	Graphic customisation	😸 Generate diagnosis report			Ω System technical							
Workshop management	Messages	Measures and system data	code list.	^	- Diagrams			ī				
My tasks	Product improvement	Include diagnosis price			me Maintenance data	TES	~	Select the follow-up mark				0
Reception	Company data	Automatic time			🄏 Vehicle/vessel data		0	Select the follow-up mark result obtained	or the action depen	ding on the		
Human resources		M Include client validation			Troubleshooting by symptoms		WARNING					
Alarms and notifications	User accounts	 Include general comments 			Releases and Procedures				ок	NO OK		
Go back to Jaltest	Report sending	Include the follow-up mark for perfo										
	Display options	This mark appears in the diagnostics menu. For instance, it can be used to problem was detected in the vehicles	reports and in the system action state the actions through which a vessel.									
					 1							

This enables the user to include their opinion concerning the vehicle behaviour during the diagnostics session in the report.

HW - COMPACT EQUIPME	INT > JCB > 325T > ECM Kohler (Stage V), Electronic Diesel Control, Common Rail			ACTUATE COMPONENTS \ EGR VALVE	
Diagnostics menu	ACTUATE COMPONENTS	Voltare: 24.	2V	INITIAL CONDITIONS:	
			Marine and American Street Str	IGNITION ON THE ENGINE MUST BE STOPPED	
System technical data	Bearch in the list of actions		Q	THE ENGINE MUST BE STOPPED ENGINE SPEED 1500 rom	- 1
	and a second s			ALARMITHE INITIAL CONDITIONS ARE NOT MET	
Diagrams	EGR VALVE	2 + 2		PROCESSING	
Maintenance data	IGNITION RELAY	\$ + \$			
				PRESS THE BUTTONS TO CONTROL THE COMPONENT AND CHECK WHETHER IT IS PROPERLY OPERATED EGR (EXPRAUST GAS RECIRCULATION) VALVE POSITION, 81 %	_
Vehicle/vessel data		🗗 🗵		REAL VALUE	
Troubleshooting by				COMPONENT STATE ON	
symptoms				THE PROCESS HAS FINISHED	
Releases and Procedures				TEST RESULTS	
Procedures				ACTION FOLLOW-UP MARK	
				ACTUATE COMPONENTS \ IGNITION RELAY	

Finally, it is important to note the new access to the **GRP user manual** from Jaltest.













BRANDS AND MODELS

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 - HEAVY EQUIPMENT

In this version, new brands such as **EPIROC** and **TREPEL** have been added.

DOOSAN

New models for **MT Series** articulated haulers.

KOMATSU

New 10 models have been added.

OHW - COMPACT EQUIPMENT

New brands such as **NC ENGINEERING** and **REFORM** have been added, and the number of models in **JCB** and **KOMATSU** brands has been increased.

STATIONARY ENGINE

Increased number of models in **MERCEDES-BENZ** brand.

MULTI-PURPOSE VEHICLE

In this version the following new brands have been added: **BOBCAT** and **REFORM**.

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.

It is important to note the development of the EMS EMEI control system for **STAGE V Scania** engines, which has advanced functions for diagnostics tasks. This system is available in STATIONARY ENGINE or other brands such as **DOOSAN**, **POWERSCREEN** or **TEREX FINLAY**.



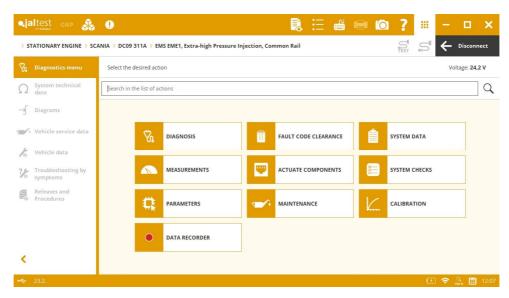












OHW - HEAVY EQUIPMENT

BELL

New wiring diagram configurations in **B Series** and **D Series** models.

CATERPILLAR

⊕ C-2.8 / C-3.6 (on SAE J1939) engine control system.

⊕ C-9.3B (on SAE J1939) engine control system.

New wiring diagram configurations in the SCR / DEF anti-pollution system for models with C-7.1, C-9.3, C-13, C15 and C18 engines.

OHW - HEAVY EQU	IPMENT > CATERPILLAR > 650 Series > C-9.38, J1939, Engine Control M	odule S	← Disconnect
Diagnostics me	MAINTENANCE \ ASH CLEANING REGENERATION		
Ω System technic data	the regeneration will start after the warmp up st.	AGE, IT WILL TAKE APPROXIMATELY 90 SECONDS	~
J Diagrams			>
Vehicle service	the PARTICULATE FILTER REGENERATION IS STARTING		1
🖉 Vehicle data	THE PARTICULATE HELER REGENERATION IS STARTING		
Troubleshootir symptoms	INGINE SPEED		•
Releases and Procedures	EXHAUST GASES TEMPERATURE BEFORE THE PARTICULATE FI	LTER 238 °C	
	EXHAUST GAS TEMPERATURE	250 °C	
	ADBLUE/DEF TANK LEVEL	30 %	
Keduce size	SCR (SELECTIVE CATALYTIC REDUCTION), STATE	OFF	

DOOSAN

DOOSAN EDC DL06/DL08 EDC17 CV41 engine control system, new measurements in the exhaust gas aftertreatment system with dynamic System Display.

JCB

DECU instrument cluster, maintenance reset.













KOMATSU

- **BBC** hydraulic system for monitor R in wheel loaders.
- ⊕ **TRANS** transmission system for monitor R in wheel loaders.
- ENG engine control system for monitor D in crawl excavators.
- **PUMP** hydraulic system for monitor D in crawl excavators.
- MON instrument cluster for monitor D in crawl excavators.
- **ENG** engine control system for monitor F in crawl excavators.
- **ENG** engine control system for monitor B in crawl excavators.
- **PUMP** hydraulic system for monitor B in crawl excavators.
- MON instrument cluster for monitor B in crawl excavators.

New wiring diagram configurations in **WA Series** models.

W - HEAVY EQUIPMENT	> KOMATSU > WA 500-8 Series > TRANS, Transmission 🚽 Concern	nect	🔶 🌟 🏫 эон	W - HEAVY EQUIPMENT > KOMATSU > WA 500-8 Series > ENG, Engine Com	trol Module 🗧 🛒 🕵	Connect
	CALIBRATION \ TRANSMISSION CALIBRATION \ SHIFT SOLENOID CONTROL		😪 Diagnostics menu	-[>+ WA 470-8; WA 500-8; WA 600-8		Select anot configuration
ystem technical ata	Transmission solenoid calibration	~	Ω System technical data	Search in the component list Q	20 CM 10	11.8
agrams	Search in the guide $Q_{\rm c}\vee\wedge$	×	Diagrams	Show full list		
shicle service data	Collapse all the steps	? °	Whicle service data	+ Add personalised component information		
icle data	Service Mene 0.9		🔏 Vehicle data	CA1, Engine management control unit		Jane -
ubleshooting by optoms	05 Maintenance Mode Setting 06 Phone Newbor Entry		3 Troubleshooting by symptoms	CA12, Accelerator pedal	h Mitala Z	2
ases and edures	97 Default		Releases and Procedures	CAN3 H, CAN High diagnostic line		. Č.
				CANS L, CAN Low diagnostic line		1000
	Adjustment 01			CB1, NOx sensor before the SCR catalyst		2
	Show check marks in the procedure steps.			CB10. Ar mass flow sensor		1. S.P

LIEBHERR

Master 4, Ethernet central computer with new measurements for excavators.

POWERSCREEN

• SCANIA EMS EMEI (on SAE J1939) engine control system.

TADANO FAUN

MERCEDES-BENZ ACM3 exhaust gas aftertreatment system, check of dosed quantity of AdBlue/DEF and maintenance services such as the diesel particulate filter regeneration and the exhaust gas aftertreatment system regeneration.

VOLVO CE

ACM exhaust gas aftertreatment system, diesel particulate filter regeneration with dynamic System Display.













OHW - COMPACT EQUIPMENT

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 and coverage on Jaltest website.

The **VCU** central computer from **WACKER NEUSON** has been developed for electric haulers.

•ja	altest GRP 🎄	0			R :=	É) ()	?		-		×
> 0	HW - COMPACT EQUIPME	NT > WACKER NEUSON	> DW10e Series > VCU, Body	computer				TEST	S	÷	Disconn	ect
		Select the desired activ	on									
Ω	System technical data	Search in the list of ac	tions									Q
	Diagrams											
	Vehicle service data											
10	Vehicle data											
?/5	Troubleshooting by symptoms	₹.	DIAGNOSIS	Î	FAULT CODE CLEAR	ANCE	Ê	SYSTEM DA	ATA			
	Releases and Procedures		MEASUREMENTS	~ ^	MAINTENANCE		•	DATA RECO	ORDER			
~~	23.2								•	<u></u>	2 🖽	13:38

BOBCAT

DOOSAN EDC DM02 / DM03 (on SAE J1939) engine control system.

CASE CE

New wiring diagram configurations in SR 175 Series and SV 185 Series models.

CATERPILLAR

⊕ C-2.8 / C-3.6 (on SAE J1939) engine control system.

C2.2 (on SAE J1939) engine control system, actuation of the intake throttle valve, the cold start control relay and check of the injection rail pressure.

> OHW	- COMPACT EQUIPME	IT > CATERPILLAR > 910 Series > C-3.6, J1939, Engin		Ξ 🗳			s	←	Disconn	ect
8 oi	ignostics menu	SYSTEM CHECKS				TEST				
Ω Sys	stem technical ta	Search in the list of actions								C
-f Dia	agrams	CYLINDER CUT-OUT							î	•
Vel	hicle service data	OPERATION TEST OF THE EXHAUST GAS AFTER	RTREATMENT SYSTEM							5
🋵 Vel	hicle data	OPERATION TEST OF THE PARTICULATE FILTE	R REGENERATION							
	oubleshooting by mptoms									
	leases and ocedures	INTAKE AND EXHAUST SYSTEM								
		FUEL PRESSURE RELIEF VALVE (PRV)								
<		AFTERTREATMENT FUEL DOSING								













JCB

🧃 🕂 🚓 🚓 🕒 🗎 🗄 🖶 🙆 **? 💷** – 🗆 🗙 ← ★ A > OHW - COMPACT EQUIPMENT > JCB > 403 PLUS > 404J, J1939, Engine Control Module S S Connect Diagnostics menu Ω System technical data 9 Q Search in the component list 2 2 Show full list Q Vehicle service data + Add personalised component inf **4** ↔ CSS 🎽 Vehicle data CA1, Engine management control unit ß Troubleshooting by symptoms CAN H Diag Line, CAN High diagnostic ?+ U 3 • Releases and Procedures CAN L Diag Line, CAN Low diagnostic line <, U 4 CB1, Accelerator position sensor 1 X1 28 >₂ CB11, Intake air temperature se < CB20 58

New wiring diagram configurations in 1T-2; 35Z-1; 36C-1; 3T-2; 403 PLUS; 50Z-2; 56Z-2

KOMATSU

• ENG engine control system for monitor D in crawl excavators.

 PUMP hydraulic system for monitor D in crawl excavators.

 MON instrument cluster for monitor D in crawl excavators.

🕀 ENG engine control system for monitor F in crawl excavators.



VOLVO CE

Technical release for the maintenance reset in the IC instrument cluster for ECR Series (XY D) Compact model.

WACKER NEUSON

- VCU vehicle control system for electric haulers.
- VCU vehicle control system for electric wheel loaders.

New wiring diagram configurations in DW 40; ET 40; ET 50; ET 60; EW 60; EZ 50 and EZ 80 series.









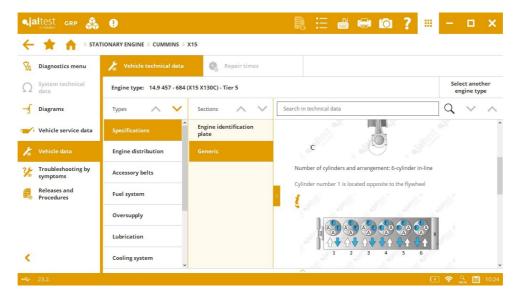


and 60C-2 models.



STATIONARY ENGINE

Overall, technical data in new CUMMINS engine types has been added.



CATERPILLAR

- ⊕ C-2.8 / C-3.6 (on SAE J1939) engine control system.
- ⊕ C-9.3B (on SAE J1939) engine control system.

C2.2 (*on SAE J1939*) engine control system, actuation of the intake throttle valve, the cold start control relay and check of the injection rail pressure.

CUMMINS

Technical releases and procedures in **X15** engines such as "*Check the fuel pump*" and "*Check for leaks in the turbocharger*". Technical releases in **B4.5 / B6.7** engines such as "*Check for leaks in the oil cooler*", among others. In addition, new technical releases and procedures have been added in **L9** engines.

DEUTZ

EMR4 EDC17 CV56 (*on SAE J1939*) engine control system, maintenance service for the AdBlue/DEF module cleaning.

DOOSAN

• EDC DM02 / DM03 (on SAE J1939) engine control system.







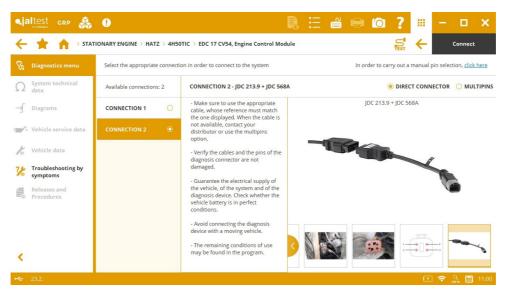






HATZ

• JDC 568A diagnostics cable.



MERCEDES BENZ

ACM3 (*on SAE J1939*) anti-pollution system, check of the dosed quantity of AdBlue/DEF and maintenance services such as the diesel particulate filter regeneration and the exhaust gas aftertreatment system regeneration.

New wiring diagram configurations in **OM 470**, **OM 473**, **OM 933/934** and **OM935/936** models, among others.

PERKINS

Extended diagnostics coverage for the **904 J** (*on SAE J1939*) engine control system.

New wiring diagram configurations in **403J** and **404J** models.

VM MOTORI

TENNECO SCR/DEF (*on SAE J1939*) anti-pollution system, check of the pump and the AdBlue/DEF pressure, dosing test, etc.

VOLVO PENTA

ACM exhaust gas aftertreatment system, diesel particulate filter regeneration with dynamic System Display.













MULTI-PURPOSE VEHICLE

Overall, extended diagnostics coverage for engine control systems. It is important to note new functionalities in the VOLKSWAGEN EDC VW (CPYA) system in AUSA, HAKO and SCHMIDT brands, in the TENNECO SCR/DEF anti-pollution system in CMAR and MACRO CLEAN brands and in the VOLVO ACM V3 system in MACRO CLEAN brand.

	OLTI-PORPOSE VEHICLE	MACRO CLEAN > M40 > SCR/DEF, Exhaust gas treatment syst	am.				S	s ←	Discon	nact
		SYSTEM CHECKS \ ADBLUE/DEF PUMP RPM								
2	System technical data	100 % / 10000 mbar 90 % / 9000 mbar			6.000 rpm 5.500 rpm	×		ADBLUE/DEF	m	<
ſ	Diagrams	80 % / 8000 mbar			5.000 rpm 4.500 rpm	×		ADBLUE/DEFI 8%		1
r.	Vehicle service data	70 % / 7000 mbar 60 % / 6000 mbar			4.000 rpm 3.500 rpm	×		ADBLUE/DEF P 5100 m		1
ŀ,	Vehicle data	50 % / 5000 mbar 40 % / 4000 mbar			3.000 rpm 2.500 rpm					1
6	Troubleshooting by symptoms	30 % / 3000 mbar			2.000 rpm					
8	Releases and Procedures	20 % / 2000 mbar 10 % / 1000 mbar 0 % / 0 mbar 0 \$ 5\$ 10\$ 15\$	20 s 25 ;	4	1.000 rpm 1.000 rpm 500 rpm 0 rpm 30 s					
		୍ ୍ ୍ ୍ ୍୍୍ ୍ ୍ ୍ ୍ ୍ ୍ ୍ ୍ ୍ ୍ ୍ ୍ ୍	•							
<		DIRECTION OF ROTATION, ADBLUE/DEF PUMP MOTOR					ORWA			

> MULTI-PURPOSE VEHIC	E > SCHMIDT > SK Series > EDC VW (CPYA), Electronic Diesel Control	5. S ←	Disconnec
	MAINTENANCE \ DIESEL PARTICULATE FILTER \ PARTICULATE FILTER	REGENERATION	
Ω System technical data	INOW THE FOLLOWING STEPS WILL BE PERFORMED:		
Diagrams	ASH AND SOOT CONTENT RESET IN THE PARTICULATE FILTER		
	NOTE:		
Vehicle service data	WHEN STARTING THE ACTUATION, THE ENGINE SPEED RATE IS AUTOM	MTCALLY INCREASED	
🖗 Vehicle data	THIS PROCESS MAY TAKE SEVERAL MINUTES		1
Troubleshooting by symptoms	THIS PROCESS MAY TAKE SEVERAL MINUTES		
Releases and Procedures	ENGINE SPEED	2090 rpm	Â
	DIESEL PARTICULATE FILTER REGENERATION STATUS	REGENERATION FAILURE	
	PARTICULATE FILTER ASH CONTENT	735 cm ³	
	SOOT LEVEL (MEASURED VALUE)	28 g	









