



INNOVATIONS 21.1











SOFTWARE INNOVATIONS

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

The new software version **Jaltest 21.1** offers improvements and innovations that consolidate this tool as a benchmark in **multibrand diagnosis** for recreational and commercial boats, fishing vessels, rescue boats, etc.

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.













Trigger in measurement groups

From this 21.1 version, it is possible to include and edit triggers in measurement groups.

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> 01	JTBOARD ENGINE > SUZUK	I → DF40 → ECM, Engine Control Module		s	÷		ect.
8	Diagnostics menu	MEASUREMENTS \ Group 1					
Ω	System technical data	Group 1		Modify	trigger		۲
-1	Diagrams	ENGINE SPEED	1674 rpm		8	?	~
•	Maintenance data	INTAKE MANIFOLD ABSOLUTE PRESSURE	14750 mbar		8	?	0
1	Technical data	BAROMETRIC PRESSURE	15720 mbar		8		~~
36	Troubleshooting by symptoms	INJECTED FUEL AMOUNT	35		8		
	Releases and Procedures						? °
¢,	Repair times						6
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Customisation of component information

Component: Component: <th>●jaltest GRP 🖁 e</th> <th>ETM DEM PASS</th> <th>. E e e io ?</th> <th>≕ - □ ×</th> <th></th> <th>≝ '⊙</th> <th>×</th>	●jaltest GRP 🖁 e	ETM DEM PASS	. E e e io ?	≕ - □ ×		≝ '⊙	×
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Mathematical data Mathematical data Technical data <td< td=""><td>Ω System technical data</td><td></td><td></td><td></td><td></td><td>~</td><td>Û</td></td<>	Ω System technical data					~	Û
Image Image Image Image			100			^	目
Programmer System components. Description Description Descript		cr.					
Providence Image Providence Image Providence Image Image Image Image Image	7 Troubleshooting by symptoms	CY: System components		2+			
Restance 2-3.0 Interiming services C Restance 2-3.0 In		CY1 Injector	1	X X		4	
CT Inditating torque:		Power supply: 55 V		5 13	Image		
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			v				
-Computery field	۲.	CT6, Injector, cylinder 5		×	*Compulsory field		

Others

- Dynamic helps depending on the measurement value in an action.
- Help in the selection of the wiring diagram configuration.
- Error list order. The present errors are shown first.
- Relevant information on functionalities in the action menu.











GRP

Export/Import vessel list

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Client list	Click on the list headers to add of h	ide columns, order valuers and configure se	earch filters				(5/5)
C Vehicle/vessel list	Model	1 Number plate/Vessel	✓ VN/Serial number ✓	Client	~		
Reports	350 MAG MPI	12345	54321		0	۲	
My tasks	4.3 GXI	7 BA 23 4 06			0	۲	
ft Start window	D2876 LE423/433	8457 B ¹	WMA05XZZ1CM587868		0	۵	
	DF250		1234567		0	۲	
	VX Deluxe	345678			0	۵	
	<						>
<			Export	Import	Add	new vehic	le/vessel
					• ?	<u>_</u>	09.42

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

To import vessels, an empty template with a defined format or with the data of the vessels 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/vessel code	Model identifier	Engine type identifier	Number plate/Vessel	VIN/Serial number	Number or name
1	4432	6400	7° MH 1 4 19	54321	Golden Sea
2	5009	2563	7ª BA 23 4 06	1234567	Trabucco II
3	4445	5714	6° GI 1 1 12	331155646DF1453	Elisa
4	4742	6908	7ª MA 16 4 15	4785446	Vietcom I
8	5471	7126	8457 B°	WMA05XZZ1CM587868	Caribean

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 vessel from the list with a model from Jaltest. This is the only way to enjoy all advantages of being able to create GRP vessels 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.

9 GRP	Configuration (user set		×
Language Graphic custo	tomisation	When clicking on the headers of some lists, you will be able to add and hide columns, sustaining the value aspay (client lists, vehicle list, reports, etc.), if withred, you can keep the last column configuration performed in each one of the loss.	~
Messages Product impr	rovement	Default display Maintain the last column configuration	
Company dat	ita	To import vehicles/vessels to GRP from external files, it is necessary to do so by indicating the GRP identifiers of the model (compulsory) and the engine type (optional) of each of the vehicle/vessels. Use the following option to diplay the required identifiers. You can access them by clicking the right mouse button on the lists of models and engine types available in jutest.	
Reports confi		Activate GRP identifier display	
Report sendin	ing		
Display option	ons		

Others

- Possibility of associating several vessels to a client at once.
- Improvement in the GRP lists including more columns and filters.
- App customisation by user.

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











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.

INBOARD

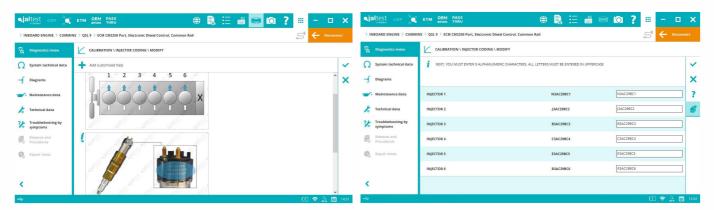
This version, systems from the SAE J1587 / SAE J1708 standard of Marine application have been included. A detection system of SAE J1587 / SAE J1708 systems has been implemented, which will be very useful in vessels with Detroit Diesel, Cummins, Volvo Penta, etc., engines. With it, it will be possible to identify and diagnose all the modules that comply with the standard.

CUMMINS

New functionalities have been included in the following models:

- QSB 6.7 and QSL 9 CM2250: If the control unit is compatible, the injector coding will be available.

- QSC 8.3 and QSL CM850: If the control unit is compatible, the engine operating data can be checked and reset in the operating data.



DETROIT DIESEL

New Detroit Diesel MARINE JDC 629A cable.

System Display in the DDEC III and DDEC IV models.













ILMOR

New functionalities in the MEFI 5 engine control system of the 5.7 L MV-8, 6.0 L MV-8 and 6.2 L MV-8 models; proprietary system measurements, activations and reset of learned values.

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> INBOARD ENGINE		_			ectronic control sys						s	4	Disconn	ect
Ω System technic	al data	SELE	CT AN OPTI	ON										`
		Sear	ch in the o	ption list									Q	>
Maintenance d	110		CHECK EP	IGINE LAMP	6									
🄏 Technical data			CHECK G	AUGES, WARI	NING LAMP									1
Troubleshootin symptoms	g by		OIL LEVE	L, WARNING	LAMP									
Releases and Procedures			WARNIN	G 1, WARNIN	IG LAMP									
Repair times			WARNIN	G 2, WARNIN	IG LAMP									
			TROLL M	DDE, WARNI	NG LAMP									
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		•	MAINTEN	ANCE \ LEARNED	VALUES RESET												
Ω sy	istem technical data	i			IN THE CONTROL UN	т											~
-f Di	agrams		NEXT, CO	INTINUE TO RESTO	ORE THE VALUES												×
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1/2 10	chnical data	LAN	IBDA/O2 S	ENSOR 1 (BANK B) BLM CELL								0				6
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New functionalities in the MEFI 5 and MEFI 6 engine control systems of the 2.4 L, 3.0 L, 4.3 L, 5.7 L, 5.7 L HO, 6.0 L and 6.2 L models; proprietary system measurements, actuations and reset of learned values.

IVECO-FPT

New C13 ENT M77, C13 ENT M83 and N67 ENT M57 models with different variants of the EDC 7 UC31 engine control system. These models have wiring diagrams, technical data of components and troubleshooting by symptoms.

JOHN DEERE

New **4045TFM75** model with the **Level 12** engine control system with technical information and wiring diagram.

Advanced vessel technical data in all John Deere family models: **4045**, **6068**, **6081**, **6090**, **6125** and **6135**.











• 🚖 🏫 > INB	DARD ENGINE > JOHN DEERE > 4	4045TFM75 > ECU DE-10	(Level 12), Radi	ial piston diesel injection pump	Connect	🗲 🚖 🏫 🤉 INE	IOARD ENGINE > JOHN DEERE > 609	0AFM75 > ECU HPCR (Level 14), Elec	ctronic Diesel Control, Common Rail	
Diagnostics menu	System selection	Types		Select a system from the list and click on Connect button (Options: 1/	1)	M Diagnostics menu	Engine type: 9.0 285 (6090AFM	75)	Sei	elect another type
System technical data		ALL	×	Search by system name Q OName	Actions		Types 🔨 🗸	Sections 🔨 🗸	Search in technical data	$2 \sim$
Diagrams		Engine	×	ECU DE-10 (Level 12), Radial piston diesel injection pump	۵	Diagrams	Engine distribution	Rocker arm	Tightening torques (Rocker arm)	
Maintenance data						Maintenance data	Accessories belts	Engine lubrication	Rocker arm shaft Tighten the screws in numerical order according to the figure	
Technical data						🄏 Technical data	Fuel system	Fuel system	The screw should not be re-used	
Troubleshooting by symptoms				2		% Troubleshooting by symptoms	Oversupply	Intake manifold	3 2 3 4 5 6	
Releases and Procedures						Releases and Procedures	Lubrication	Exhaust manifold		
Repair times						Repair times	Cooling system	Cylinder head cover	<u> </u>	
							Adjustments and tolerances	Oil crankcase	1st phase: 15 lb-ft (20 Nm)	
						<	Tightening torques	Cooling system	1st phase: 15 IB-IT (20 Rm) 2nd phase: Loosen the screws at least 90 °	

MAN

New models of the MAN Common Rail **D2862 LE433**, **D2840 LE422**, **D2868 LE433** and **D2848 LE422** engines.

MARINE POWER

New Marine Power brand with a wide range of engines based on GM: **3.0 L, 4.3 L, 5.0 L, 5.3 L, 5.7 L, 6.0 L, 6.2 L, 7.4 L, 8.1 L** and **8.2 L**.

The engine control systems present in the Marine Power models range from the MEFI 1 system to the MEFI 7 system. All of them have the most common diagnostic functionalities and technical information from Marine Power GM systems.



MERCURY/MERCRUISER

Reorganisation of the G3 systems of the models prior to 2012 and new functionalities in the ECM/PCM G3 and PCM G3 systems.

These improvements apply to the following models: 100 Vazer, 4.3 MPI, 5.0 MPI, 350 MAG Black Scorpion, 350 MAG MPI, 5.7 MPI, 377 MAG MPI, 6.2 MPI, MX 6.2 Black Scorpion, MX 6.2 MPI, 496 MAG, 8.1S HO, 8.1S Horizon and 8.2 MPI.











Explanatory technical releases to distinguish the types of engine alarms. It applies to models based on GM and to second generation of the ECM/PCM systems.

	Y MerCruber 2: 6.2 MPI 2: PCM-535 G3, Engine electronic control system	> INBOADD ENGINE > VOLVO PENTA > DE > EVC-2, System's parameter vetting
lagnostics menu ystem technical data	Select the desired action Bearsh in the list of actions Q	
iagrams		Compares Compares
laintenance data		
roubleshooting by mptoms	🔊 MASUHAMINTS 🕎 ACTUATE COMPONENTS 📑 SYSTEM CHECKS	
eleases and rocedures		S. When the correct joystch position is reached, press the "DOCKING" button to memories the setting.
epair times		Repair times

VOLVO PENTA

Control Joystick calibration for the EVC-E and EVC-D systems that apply to the following models: D11, D13, D3, D4, D6, D9, IPS 1050, IPS 1200, IPS 350, IPS 400, IPS 450, IPS 500, IPS 600, IPS 650, IPS 800, IPS 900 and IPS 950.

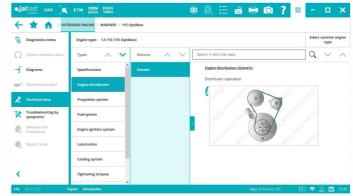
OUTBOARD

MARINER

New system that includes the possibility to perform diagnosis in the ECM and PCM systems through the G3 technology. Depending on the ECU version, the system has the following functionalities: diagnosis, measurements, activations, cylinder cut-out, maintenance reset, trim calibration, engine location. It applies to models from the following families: **OptiMax** and **Verado**.

Wiring diagram configurations in the following models: 200 Verado, 225 Verado, 250 Verado, 275 Verado, 300 Verado, 350 Verado and 400R Verado.

Creation of vessel technical data, as well as maintenance services.



MERCURY

New system that includes the possibility to perform diagnosis in the **ECM** and **PCM** systems through the G3 technology. Depending on the ECU version, the system has the following functionalities: diagnosis, measurements, activations, cylinder cut-out,











maintenance reset, trim calibration, engine location. It applies to models from the following families: **OptiMax, OptiMax Pro XS**, **Verado and Verado Pro**.

Software variants of the ECM G3 system in models until 2020. This innovation will be available in models from the following families: FourStroke, Jet FourStroke and SeaPro.

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Diagnostics menu	Select the desired action	Diagnostics menu	System selection	Types	Select a system from the list and click on Connect butto	on (Options: 1/1)
	Bearch in the list of actions Q		Special functions (shortcuts)	ALL 🗹	Bearch by system name	Name OActions
Diagrams		J Diagrams	Maintenance reset (shortcuts)	Engine 🗹	ECM G3, Engine electronic control system	E
Maintenance data	🕅 DIAGNOSS 📋 EROR CLAMANCE	 Maintenance data Technical data 				
Troubleshooting by symptoms	MIASUREMINTS ECINPONENTS	7 Troubleshooting by symptoms			4	
Releases and Procedures		Releases and Procedures				
🕼 Repair times		Repair times				
	DATA RECORDER					
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Wiring diagram configurations in the following models: 200 Verado, 225 Verado, 250 Verado, 275 Verado, 300 Verado, 350 Verado and 400R Verado.

Creation of the **35 Jet FourStroke** model with **ECM G3** system.

Creation of technical data, as well as maintenance services in the **OptiMax 1.5** engine type.

SEVEN MARINE

New Seven Marine brand from the Volvo Penta group. Models currently available are: **527, 577, 577S, 627** and **627SV.**

These models are equipped with the **MEFI** engine control system and have the functionalities of diagnosis, operating data, proprietary measurements, activations and reset of learned values.

In addition, vessel technical data and maintenance service data have been included.

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81			Bearch by mo	idel name							Q	 Name 		OSystem	
Ω	System technic	al data	Select a mode	I from the list (Options	5/5)										
-{	Diagrams		527												
-^-	Maintenance d	ito	557												
10	Technical data		577S												
28	Troubleshootin symptoms	ξ by	627												
Ø.	Releases and Procedures		6275V												
Ċ,	Repair times														
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YAMAHA

Creation of the **V MAX SHO** model family.

Helm Master system with the functionality of vessel control Joystick calibration in docking manoeuvres. The new system is in the following models: F150, F175, F200, F225, F250, F300, F350, FL150, FL200, FL225, FL250, FL300, FL350, LF150, LF200, LF225, LF250, LF300, LF350.

jaltest GRP 🤾 ETM OF THRU 🛞 🧞		Connect	Ajaltest GRP S	ETM OEM RPIZIO PASS THRU DARD ENGINE > YAMAHA > F150		🜐 Ŗ 🖂 📾 🖨 🧖 📰 ter setting 🌱 🎜	Connect
Diegnostics menu	Show component list	Select another configuration	Diagnostics menu	System selection	Types	Select a system from the list and click on Connect button (Options:	3/3)
2 System technical data	X San - C-	Necon Q		System Scan	ALL 🗹	Search by system name Q ONam	Actions
Diagrams P 37	CM4M	Q	- Diagrams	Special functions (shortcuts)	Electronic module	Command Link Plus, Digital throttle and shift	E
Maintenance data	CY18M, Oil control valve, port side		Maintenance data	Maintenance reset (shortcuts)	Engine 🗹	ECM EFI, Engine electronic control system	E
Technical data	CY20M	2 8	🄏 Technical data			Helm Master, System's parameter setting	6
Troubleshooting by symptoms CB4M		200 PH	Troubleshooting by symptoms				
Refeases and Procedures	- HANNER AND		Releases and Procedures			< 	
Repair times	сүтэм	24	Repair times				
CB11M 53							
	Sa No	Jac'	<				
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STATIONARY ENGINE

CUMMINS

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

QSB 4.5/6.7 CM2350 engine control system, accelerator lock configuration, 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 injector ZFL correction values reset and thermal conditioning/desulphurisation procedure.

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

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> STATIONARY ENGINES > DE	UTZ $>$ TCD 2.9 $>$ EMR4 - EDC 17 CV52, Electronic Diesel Control, Common Rail		lisconnect
	SYSTEM CHECKS \ END OF LINE TEST (EOL)		
	t STARTED PROCESS		~
			×
Maintenance data	PROCESSING		?
🄏 Technical data	PROCESSING		Ľ
Troubleshooting by symptoms	EXHAUST GAS AFTERTREATMENT SYSTEM, OPERATING STATUS	UNEXPECTED ANSWER FROM CONTROL UNIT	Î
Releases and Procedures	ENGINE SPEED	1479 rpm	
Repair times	SCR CATALYST INLET TEMPERATURE, MEASURED VALUE	228 °C	
	ADBLUE/DEF PUMP, ABSOLUTE PRESSURE	3934 hPa	
<	ADBLUE/DEF PUMP, ACTIVATION STATE	12 %	
4		🖸 🗢 🔒 🗎	12:01

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, operating data such as the engine load profile, activations, checks and parameters.

	CO-FPT > FPT Engines > EDC MD1, Biectronic Diesel Control, Common Rail			B > DieselMax 430 > ECM 430 DieselMax, Electronic Diesel Control, Common Rail
Diagnostics menu	AMINTENANCE \ REGENERATION OF THE SCR CATALYTIC CONVERTER		Diagnostics menu	
System technical data Diagrams	Through this procedure, the soot accumulation in the SCRoF catalytic converter can be removed. This can happen if the engine works at low revolutions, for	×	System technical data → Diagrams	Search in the list of actions
Maintenance data	exempte. The engine sed changes automatically. Plefform this maintenance in a well-wentlasted place or in the outside.	0	Maintenance data	EGR SOLINOID VALVE (EXHAUST GASES RECIRCULATION)
Technical data	Once the test has been started, it must not be stopped, since doing it can damage the catalytic converter.		he Technical data	
Troubleshooting by symptoms	Apart from the rest of initial conditions mendoned inside the action in the diagnostic tool, it is advisable to meet the following requirements: A. Engine oil temperature > 40 °C (104 °F) B. Armotphic requirements- 900 PH (007 DH)		% Troubleshooting by symptoms	INJECTOR RESET
Releases and Procedures	C. Fuel temperature < 80 °C (176 °F) D. Clutch pedal not pressed. Accelerator pedal not pressed. E. Parking trake applied.		Releases and Procedures	
Repair times	F. Input temperature on the Diese Diodelion (Cashy)(DOC) 59 °C (122 °F) G. SCR cashy in the temperature 35 °C (122 °F) H. No other action related to the component must be in process.		Repair times	
			<	







