



INNOVATIONS 21.1











SOFTWARE INNOVATIONS

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.

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. First courses will be available soon.













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	÷		
8	Diagnostics menu	MONITORING \ GROUP 1											
Ω	System technical data	GROUP 1									Modify	trigger	۲
-1	Diagrams	ENGINE SPEED				6834 rpn	ı				8	?	~
•	Maintenance data	INTAKE MANIFOLD ABSOLUTE PRESSURE				101 kPa					0	?	0
10	Technical data	BAROMETRIC PRESSURE				2650 kPa					8		~
36	Troubleshooting by symptoms	INJECTED FUEL AMOUNT				33					0		
	Releases and Procedures (TSBs)												? °
4%	Component Replacement Guides												6
¢,	Repair times												θ*
<													
**										•	?	a 📾	10:18

Customization of component information

GRP VIN		😑 🙆 ? 🎟 - 🗆 ×	altest Component customization		×
🔶 🚖 🏠 > ошт	OARD INCINE : FUNDINE : FATE C3 14 - FMM C3 Engine Management Module	Connect	Bircolau		
🖏 Diagnostics menu	CY4.Injector.cylinder 4	Select another configuration	*Component		~
	e a constantino de la constant		CY4, Injector, cylinder 4	\sim	Û
			Information	^	_
Maintenance data					
🄏 Technical data					
7 Troubleshooting by symptoms	System components	CY6 ?+			
References and Proceedures (TSBs)	Injector			~	
1 Component Replacement Guides	Power supply: 55 V	5 10	Image		
😪 Repair times	Resistance: 2 - 3 Ω Tightening torque:			0	
<		× × ×			
u⊄p		·····································	*Mandatory field		

Others

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











GRP

Export/Import vessel list

Vehicle/vessel list Reports Workshop management	Model 359 MAG MPI	Ť	License plete/Vessel 7* MH 1 4 19	~	VIN/Serial number ~	Customer	×			
Workshop			7° MH 1 4 19							
					153665646071453			0	ø	
	4.3 GXI		7° MA 16 4 15		4565455646DF145			0	۲	
My tasks	D2876 L5423/433		8457 B°		WMA05XZZ1CM587868			0	۵	
Reception	D#250		7º BA 23 4 06		331155646DF1453			0	۲	
Human resources	VX Deluxe		6° GI 1 1 12		951375646DF1453			0	۵	
Start window										

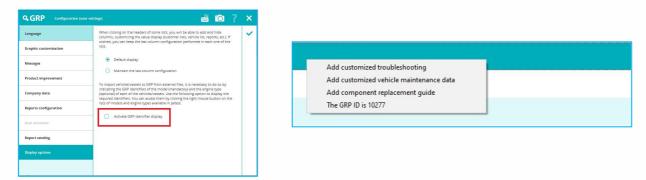
It is possible to export/import the vessel list through Excel or CSV files quickly and easily. This allows the user to share the vessels created in Jaltest with others from other platform or ERP of their company, and vice versa.

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	License 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.



Others

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

The vessel record, vessel types, brands, customized 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.

Allahitetti CARP VIIA OFAM 🕀 民 🔚 🛃	1 10 ? III - □ ×		OEM RP1210 NS > QSL 9 > ECM CM2250 Port, Electronic Diesel	iControl, Common Rell	= [2] ? = = [2] ? = = □ = =
Calibration \ INJECTOR CODING \ MODIFY		Signostics menu	CALIBRATION \ INJECTOR CODING \ MO	DIFY	Bira.
🔉 System technical data 🕂 Add customized help	~	Ω System technical data	1 NEXT, YOU MUST INTRODUCE 9 ALPHANU	JMERIC CHARACTERS. ALL LETTERS MUST BE INTRODUCED IN	JPPERCASE
Diagrams	^ ×	-J Diagrams			
Maintenance data		Maintenance data	INJECTOR 1	N3AC29BC1	N3AC29BC1
Technical data		🄏 Technical data	INJECTOR 2	J3AC29BC2	[3AC29BC2
roubleshooting by symptoms		32 Troubleshooting by symptoms	INJECTOR 3	B3AC29BC3	B3AC29BC3
References and		Releases and Procedures (TSBs)	INJECTOR 4	C3AC29BC4	C3AC298C4
Component Replacement Guides		Component Replacement Guides	INJECTOR 5	E3AC29BC5	E3AC29BC5
Repair times		Repair times	INJECTOR 6	R3AC29BC6	R3AC29BC6
A Section 1 and		<			
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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.

			(#) 😫 🖶 😬 🐚 ? 🔡 – 🗖])
8	Diagnostics menu		ACTUATE COMPONENTS \WARNING LAMPS	
Ω	System technical data	SEL	ECT AN OPTION	1
ł	Diagrams	See	rch in the option list	1)
4	Maintenance data		CHECK ENGINE LAMP	
10	Technical data		CHECK GAUGES, WARNING LAMP	
2	Troubleshooting by symptoms		OIL LEVEL, WARNING LAMP	
٤,	Releases and Procedures (TSBs)		WARNING 1, WARNING LAMP	
1%	Component Replacement Guides		WARNING 2, WARNING LAMP	
Ċ,	Repair times		TROLL MODE, WARNING LAMP	
<			CONTROLLER, WARNING LAMP	
			E 🗢 🔒	11 09

INDMAR

	N <u>OEM</u> 60 RP1250		ď	6	?				×
> INBOARD ENGINE > INDI	IAR > 5.7 L > MEFI 5-6, Engine electronic control system					s	÷		
	MAINTENANCE \ LEARNED VALUES RESET								
Ω System technical data	I RESET THE VALUES STORED IN THE CONTROL UNIT								~
-J Diagrams	NEXT, CONTINUE TO RESTORE THE VALUES								×
Maintenance data	LAMBDA/O2 SENSOR 1 (BANK A) BLM CELL				2				?°
ha Technical data	LAMBDA/O2 SENSOR 1 (BANK B) BLM CELL				2				6
Troubleshooting by symptoms									
Releases and Procedures (TS8s)									
Component Replacement Guides									
Repair times									
<									
~						11	1	9. 面	09.56

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	OEM RP1230 OARD ENGINE > JOHN DEERE > 40	D45TFM75 > ECU DE-10				Lialtest GRP VIN → INBO	RP1230 ARD ENGINE > JOHN DEERE > 609			- D	
Diagnostics menu	System selection	Types		Select a system from the list and click on Connect button (Options: 1/1)		Diagnostics menu	Engine type: 9.0 285 (6090AFM	75)		Select anothe type	
System technical data		ALL	×	Search by system name OAcci	tions	Ω System technical data	Types 🔨 🗸	Sections 🔨 🗸	Search in technical data	Q ~	
Diagrams		Engine	×	ECU DE-10 (Level 12), Radial piston diesel injection pump	<u>a</u>	-J Diagrams	Accessories belts	Vibration damper	Tightening torques (Rocker arm)		
Maintenance data						Maintenance data	Fuel system	Rocker arm	Rocker arm shaft Tighten the screws in numerical order according to the figure		
Technical data						🄏 Technical data	Oversupply	Engine lubrication	The screw should not be re-used		
Troubleshooting by symptoms						Troubleshooting by symptoms	Lubrication	Fuel system	3 2 1 4 5 6		
Releases and Procedures (TSBs)						Releases and Procedures (TSBs)	Cooling system	Intake manifold			
Component Replacement Guides						Component Replacement Guides	Adjustments and tolerances	Exhaust manifold	<u></u>		
Repair times						Repair times	Tightening torques	Cylinder head cover	8° 8° 8° 8° 8°		
						<	Liquid capacity and quality	Oll crankcase	1st stage: 15 lb-ft (20 Nm) 2nd stage: 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

Reorganization 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.

sident GRP VIN	≝ ⊕ 🗟 🗄 🖶 🙆 ? ≡ – □ ×	•jaltest 🚥 🗰 🤐 🕮 🕮 🛑 🖸 ? 🗰 – 🗆 🗙
> INBOARD ENGINE > MERCUP	Y MerCruiser > 62 MPI > PCM-555 G3, Engine electronic control system	> INBOARD ENGINE > VOLVO PENTA > D6 > EVC-E, System's parameter setting Stranget System's parameter setting
🖏 Diagnostics menu	Select the desired action	
	Search in the list of actions	System technical data S. Move joystick to the side to be calibrated and rotate it to correct the wrong drift movements, until a correct lateral movement of the vessel is achieved.
-J Diagrams		Diagrams unit a correct tainer movement of the vesse is achieved. Example:
Maintenance data	READ FAULT CODES	🖝 Maintenance data
h Technical data		🗶 Technical data
Troubleshooting by symptoms	MONITORING RELATIVATE COMPONENTS	² / ₂ troublehooting by symptoms 0 ↔ 0 ↔ 0 ↔ 0 ↔ 0 ↔ 0 ↔ 0 ↔ 0 ↔ 0 ↔ 0
Releases and Procedures (TSBs)		Felesses and II 3. When the correct joystick position is reached, press the "DOCKING" button to memorize the setting.
Component Replacement Guides		Component Replacement Guides 22
Repair times	DATA RECORDER	🗞 Repair times
<		
4		🗝 🖓 😭 1004

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.

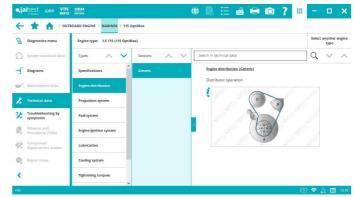
OUTBOARD

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.

GRP VIN	🗯 🌐 🖶 🗄 🖶 🛍 – 🗆 ×	GRP VIN	OEM RP1210		⊕ 🖪 🗄 🖶 🖾 📍 🗰	- 🗆 🗙
> OUTBOARD ENGINE > MERCU	URY > 350 Verado > PCM G3, Engine electronic control system 🚽 🧲 Disconnect		BOARD ENGINE > MERCURY > 35 Je	et FourStroke 🤌 ECM G3, Engine ele	ictronic control system	Connect
Diagnostics menu	Select the desired action	Sa Diagnostics menu	System selection	Types	Select a system from the list and click on Connect button (Option	: 1/1)
	ßearch in the list of actions		Special Functions (shortcuts)	ALL 🗹	Bearch by system name	e OActions
-J Diagrams			Maintenance Resets	Engine 😿	ECM G3, Engine electronic control system	E
Maintenance data	READ FAULT CODES	Maintenance data				
Technical data	MONITORING ACTUATE COMPONENTS 🔚 SYSTEM CHECKS	Technical data				
Releases and Procedures (TSBs)		Releases and Procedures (TS8s)			<	
Component Replacement Guides		Component Replacement Guides				
Repair times	DATA RECORDER	Repair times				
<		<				
~	西 🗢 🚊 🏥 10.07	-4-				🗆 🗢 🔒 🛗 10:07

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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÷	*	A	Q	> OUTBOARD ENGINE > SEVEN MARINE
				₿earch by model name Osystem
Ω	System t	echnical	data	Select a model from the list (Options: 5/5)
-1	Diagram	5		527
<u>ر</u>	Mainten	snce dat	0	557
10	Technica	l data		\$775
3/5	Troubles sympton		by	627
8	Releases Procedui		j	627SV
4%	Compon Replacer	ent nent Gul	des	
¢,	Repair ti	mes		
<				
-9-				-











YAMAHA

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

Helm Master system with the functionality of vessel control Joystick calibration in docking maneuvers. 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.

- 🚖 🏫 🤉 out	BOARD ENGINE > YAMAHA > V MAX SHO 200 > ECM EFI, Engine electronic control system	s	Connect	🔶 🚖 🏫 🤉 oute	OARD ENGINE > YAMAHA > F150	Helm Master, System's parame	ter setting 5	
Diagnostics menu	-[>+ Wiring diagram	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)	6
System technical data	CB5M	(M)	<u> </u>	Ω System technical data	System Scan	ALL 🗹	Search by system name	Actions
Diagrams	A P Cart I Cart	CY20M	à q		Special Functions (shortcuts)	Electronic module	Command Link Plus, Digital throttle and shift	
Maintenance data		Сору Сулям	S. Const	Maintenance data	Maintenance Resets	Engine 🗹	ECM EFI, Engine electronic control system	
Technical data	CS5M	T total	a	🄏 Technical data			Helm Master, System's parameter setting	
Troubleshooting by symptoms	CSEM	I valve, port side	7	75 Troubleshooting by symptoms				
Releases and Procedures (TSBs)	CB11M			Releases and Procedures (TS8s)				
Component Replacement Guides			2/4	Component Replacement Guides				
Repair times	CBMM		8	Repair times				
		5						

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/desulfurization procedure.

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

	OEM appano	1 II	? ≡ - □ ×
> STATIONARY ENGINES > D	EUTZ > TCD 2.9 > EMR4 - EDC 17 CV52, Electronic Diesel Control, Common Rail		
	SYSTEM CHECKS \ END OF LINE TEST (EOL)		
	i STARTED PROCESS		~
			×
Maintenance data	PROCESSING.		?
De Technical data	PROCESSING		L.
Troubleshooting by symptoms	EXHAUST GAS AFTERTREATMENT SYSTEM, OPERATING STATUS	INITIATING	î s
Releases and Procedures (TSBs)	ENGINE SPEED	663 rpm	
Component Replacement Guides	SCR CATALYST INLET TEMPERATURE, MEASURED VALUE	77 °F	
Repair times	ADBLUE/DEF PUMP, ABSOLUTE PRESSURE	155,020 inH2O	
<	ADBLUE/DEF PUMP, ACTIVATION STATE	38 %	?
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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.

	Col-FF) FF Legissa - LEC MD1, Electronic Dised Control, Common Rat		INFO	Disentitive 430 > 1CM 430 Disentitive, Disent Control, Common Rati Common Ration Common Ration Common Ration	
Diagnostics menu	AMAINTENANCE \ REGENERATION OF THE SCR CATALYTIC CONVERTER		🕅 Diagnostics menu		
System technical data	Add customized help	~	Ω System technical data	Search in the list of actions	
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 example.	×		CAMSHAFT POSITION SENSOR	
Maintenance data	The engine speed changes automatically. Perform this maintenance in a well-ventilated place or in the outside.		Maintenance data	EGR SOLENOID VALVE (EXHAUST GASES RECIRCULATION)	1
Technical data	Once the test has been started, it must not be stopped, since doing it can damage the catalytic converter.		🎽 Technical data		
Troubleshooting by symptoms	Apart from the rest of initial conditions mentioned inside the action in the diagnostic tool, it is advisable to meet the following requirements: A. Engine oil temperature > 40 °C (104 °F)		Troubleshooting by symptoms	INJECTOR RESET	
Releases and Procedures (TSBs)	B. Artinophenic pressure. > 2000 FPB (0.007 ppl) C. Fuel temperature 40 PC (10-75 PL) D. Cluckt petiel not pressed. Accelerator pediel not pressed. E. Parking brank papilied.		Releases and Procedures (TSBs)		
Component Replacement Guides	E. Hanking unanz appinet. F. Input temperature on the Diesel Oxidation Catalyst (DOC) > 50 °C (122 °F) G. SCR statisyst Intet temperature > 50 °C (122 °F) H. No other action related to the component must be in process.		Component Replacement Guides		
Repair times	······		Repair times		
			<		
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