

e altest commercial vehicles

INNOVATIONS 20.2











SOFTWARE INNOVATIONS

The new software version **Jaltest 20.2** 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.

Next, the most relevant software innovations are shown.

Obtain VIN automatically

In the vehicle browser of the main window of Jaltest, the search by VIN has been divided in: manual search and automatic search. Moreover, the option "Perform the system scan directly in the model" can be checked, which is valid for both searches.

•jaltest Vehicles brow	wer 🛍 🔯 ?	×	•jaitest vehicles bro				
Search by VIN	Perform the system scan directly in the model.	~	Search by VIN	Perform the system scan directly in the model.			~
Search by model	The type of vehicle is agricultural		Search by model	The type of vehicle is agricultural			
Search in vehicle list	Automatic search		Search in vehicle list	Automatic search			
	As a help to correctly select your vehicle, as well as to obtain additional information, it is advisable to use the automatic identification of the VIN number.			As a help number.		omatic identification of the VIN	
	Note: To obtain the VIN automatically, make sure you turn the vehicle ignition on and use the OBD 4116 pin connector. Obtain VIN automatically			Note: To:	READING VIN (Vehicle Identification Number)		
	Manual search			Manual search			
	Enter the VIN of the vehicle to access diagnostics menu and other functions.			Enter the VIN of the vehicle to access diagnostics me			
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 Q © Note if the "before the system scan directly in the mode" loss has been checked, made sure that the dagnosis cable connected to the vehicle is the correct one. See the set of th				8 9 10 11 12 13 14 1 model" box has been checked, make sure that the diagnosis		

Define triggers in measurements

In the measurement selection, triggers can be configured. The selected measurements will be paused once any of the defined values has been reached. The values that can be defined for a measurement are: more than, less than, equal to and different from.

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\rightarrow TRUCK \rightarrow NISSAN \rightarrow NT500 \rightarrow EDC (Engine ZD30), Engine 0	iontrol Module		> TRUCK > NISSAN > NTSO	> EDC (Engine ZD30)	Engine Co	ntrol Module	S 🔶 Discons	nnect
Diagnostics menu MEASUREMENTS \ MEA	SUREMENTS SELECTION		S Diagnostics menu		ITS \ MEASU	UREMENTS SELECTION		
Ω System technical Groups		(Total: 34 / Selected: 7)	Ω System technical data	Groups 🔨	×	Select the measurements you want displayed	(Total: 62 / Selected: 6)	÷
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K Vehicle sechnical	 Do not show this message again. 	0	Vehicle technical data	Temperature	×	CAMSHAFT SPEED SENSOR	Add trigger	0
Troubleshooting by symptoms		?*	75 Troubleshooting by symptoms	Time	×	S ENGINE COOLANT TEMPERATURE	Add trigger	? °
Releases and Procedures	ACCEPT CANCEL		Releases and Procedures	Speed	×	Gan state	Modify trigger	
🗞 Repair times			Repair times	Angular velocity	×	FUEL PUMP RELAY	Add trigger	
				Voltage	×	CONTROL RELAY OF THE GLOW PLUG	Add trigger	
<			<	Mass	×	ENGINE OIL PRESSURE	Add trigger	











Furthermore, the measurements paused through a trigger or through the corresponding button will save their value in the diagnosis report.

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Sh Diagnostics menu	MEASU	REMENTS \ MEASU	REMENTS SELECTION					🖏 Diagnostics menu	MEASUREMENTS \ MEASUREMENTS SELECTION				
Ω System technical data		~ ~					←	Ω System technical data	ACCELERATOR PEDAL POSITION 1			8	~
J Diagrams	ALL	• jaltest	Configure trigger 🔐 🙆	×↓	Sort 📲 🗰	+ New group	<u>Q</u>	Diagrams	ACCELERATOR PEDAL POSITION 2				
Vehicle service data	Pressure		d condition is fulfilled in the selected measurements, all the arements will be paused.	~			<u>1</u>	Vehicle service da	ta BATTERY VOLTAGE				? °
K Vehicle technical	Temperatu	Condition: More than	×]			Add.trigger	•	Vehicle technical data	CRANKSHAFT RPM SENSOR	-			B
% Troubleshooting by symptoms	Time	Value (V): 3,5				Add trigger	? °	% Troubleshooting b symptoms	Y ENGINE COOLANT TEMPERATURE				6
Releases and Procedures	Speed	🗹 Save th	ne measurements in the diagnosis report.					Releases and Procedures	FAN STATE	OFF		8	θ
🚱 Repair times	Angular vel	ocity 🗹	AIR CONDITIONING, SIGNAL STATUS					Repair times					
	Voltage		STARTER MOTOR STATE										
<	Mass		ENGINE HEATING SWITCH					<					

Measurement graph display tools



When the measurements are displayed through a graph, it is possible to zoom in them.

Moreover, if all displayed measurements have the same unit, the Y-axle range can be configured by clicking on the "filters" icon on the left.

Improvements in the data recorder

The data recorder has been improved. From now on, the measurements are displayed during the recording and, in addition, triggers can be used to pause the test or to write comments at any moment during the recording. Furthermore, the measurements can be graphed and displayed with instruments.

TRAILER > TRAILER > Tra	iler > Wabco EBS E, Brake management	system	S	← Disconn	ect	> TRAILER > TRAILER > Trail	iler > Wabco EBS E,	Brake management system			5	← bis	
Diagnostics menu	DATA RECORDER					🖏 Diagnostics menu	DATA RECO	ORDER					
System technical data	0				\checkmark	Ω System technical data		•jaltest Enter comment	iii iii iii	×			
J Diagrams	RECORDING MEASUREMENTS AN	ID DIAGNOSIS ERRORS. PRESS CANCEL TO FINISH THE RECOI	RDING		×	-J Diagrams		Please, insert the comment that you want to save	e in the recording:	~			
Vehicle service data	🗞 DIAGNOSIS 🌘	SPEED SENSORS, WHEEL C SENSOR	4 km/h		?	Vehicle service data		Example of comment during the recorder			82 km/h		
Vehicle technical data	SYSTEM DATA	SPEED SENSORS, WHEEL D SENSOR	78 km/h		0	& Vehicle technical data	SYSTEM D				7 km/h		
Froubleshooting by symptoms		PRESSURES, BRAKE LINE	1 bar		2	3 Troubleshooting by symptoms					12 bar		
Releases and Procedures		PRESSURES, AIR RESERVOIR	11 bar		6	Releases and Procedures					6 bar		
Repair times		PRESSURES, MODULE 2.1	2 bar	0		😋 Repair times					4 bar		
		PRESSURES, MODULE 2.2	4 bar					PRESSURES, MODULE 2.2			6 bar		
		SUSPENSION PRESSURE	10 bar			<		SUSPENSION PRESSURE			11 bar		









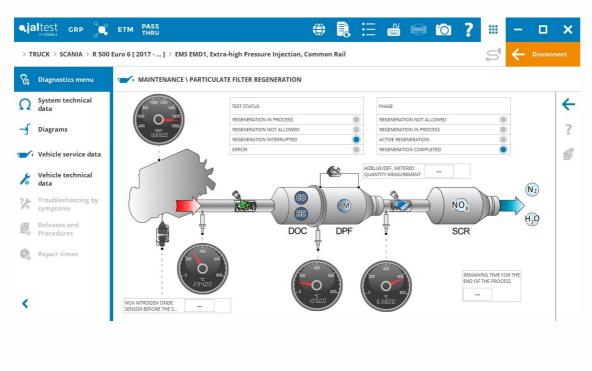


In the data playback, it is possible to navigate directly to the comments defined during the recording. The comment can be read in the information panel at the bottom.

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-}	Diagrams	🖏 DIAGNOSIS 🌘	SOFTWARE VERSION						TE	004023			
	Vehicle service data	SYSTEM DATA	ELECTRONIC EXPANSION M	ODULE (E	LEX)				NON	-EXISTEN	NT		
10	Vehicle technical data	MEASUREMENTS											
?/5	Troubleshooting by symptoms												
€	Releases and Procedures												
Č.	Repair times												
			2 Example of comment du	ring the 1	recording								
<		Name: Wabco EBS E, Brake managem	ent system_23042020173923.scf	X Date:	23/04/20	020 17:3	9						×

System Display in functions

The image shows the measurements represented in a System Display during the particulate filter regeneration in a Scania vehicle. The user will be able to evaluate the exhaust gas system in an easy and intuitive way during the test.













Improvements in vehicle maintenance data

A search filter has been added in the display form of the vehicle maintenance data. Moreover, from now on, the customised maintenance sheets can be copied to other models synchronising the information in the GRP Synchro and GRP Enterprise databases.

Diagnostics menu	Engine type: 12,9 410 (MX13 300) Euro 6 [2013 - 20	17] Select another engine type	Show technical release
C System technical data	+ Add customised sheet	Search in the service list	Q (
J Diagrams	Maintenance Sheet Example 📄 🛒	Maintenance Sheet Example	Ø 1
🔨 Vehicle service data	Intermediate review.	SELECT ALL SERVICES	1
Vehicle technical data	Y Service	🗆 💆 🗭 Example	
Troubleshooting by symptoms	🛨 X Service	<	
Releases and Procedures	First maintenance service		
Repair times			

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🔶 🚖 🏫 > TRU	ICK > DAF >							~			
🖏 Diagnostics menu	Engine t	*Vehicle type TRUCK			Brand DAF		~		elect another engine type	Show techni release	ical
	+ 40	*Model CF MX-11 E6		~ [ingine type		^			Q	0
- Diagrams	Mainte	*Name			10,8 290 (MX11 10,8 330 (MX11					۵	B
↔ Vehicle service data	E In	Maintenance SI *Services	neet Example		10,8 370 (MX11 10,8 400 (MX11						
K Vehicle technical data	1 Y	Name			10,8 440 (MX11	320) Euro 6 [2013 - 20				
% Troubleshooting by symptoms	📰 ×	Example				•	• 🔟				
Releases and Procedures	E Fi										
						Add new	service				
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GRP

Report sending to an email address

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In the last version, the report sending to a customised email address in the configuration menu was presented and, in this version, this functionality is improved allowing the configuration of one or several mailing addresses and the body of the email at the same time.

Priority of the work orders

It is possible to establish a priority in the work orders of GRP Enterprise. The priorities can be: normal, low, high and urgent.

The tasks acquire the priority of the order.

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Human				Associate vehicle from portfolio	Associate new vehicle			
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<	*Comercision Reid			portfolio	Associate new client		id orde	er
	*Compulsory field						. 🗇	118











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.

ASHOK LEYLAND

19XX, 28XX, 46XX and 55XX models.

HYUNDAI

H-350 with D4CB engine.

IVECO

ACCO Euro 5.

MAHINDRA

Bolero, Bolero CNG, Maxximo.

MAN

12C Lion's City 12 m and 18C Lion's City 18 m buses manufactured from 2016 with D1556 LOH engine.

MAZ

New models by engine type.

MERCEDES-BENZ

Actros 5 (WDB963) and Arocs 5 (WDB964) manufactured from 2019.

MULTICAR

M31 3.0 with F1C Euro 6 engine.

M26 and M29 with VM R 754 engine.

UX100 with MB engines.

Tremo 1.9 with AVM engine.

NISSAN

NV300 with R9M engine.

OTOKAR

Kent U LE Euro 6.











SCANIA

N 230 UD bus.

New Euro 6 truck models of the R, P, G and S series.

VOLKSWAGEN

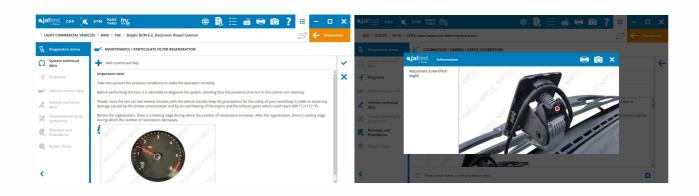
Crafter 30,35,50 [SY, SZ] & T6 [SG].

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.

OUTSTANDING DEVELOPMENTS

- Calibration of the ECAS 5 suspension in DAF Euro 6 models.
- DPF particulate filter regeneration of the **Delphi DCM 6.2** system in **MAN TGE**.
- EDC ASM2020 engine control system and EAM compressed air treatment and generation system in TG Series Euro 6 models of MAN.
- System checks and component reset in the **ADCM** exhaust gas aftertreatment system of **Nissan** in **Euro 6** models.
- Modification of parameters in the EMS XPI engine control system of Scania, such as the idle speed rate, reduction of the vehicle speed limit in economy mode, etc.
- Calibration of the camera of the ADAS LPOS V3 system in Volvo buses.
- Deletion of the inducement mode of the SCR exhaust gas aftertreatment system in the EMS engine control system of **Volvo** and **Renault** models with V4 technology.
- Coverage extension in the Cummins ISB5.9 CM2150 system installed in many brands, as for example TATA.













TRUCK and BUS

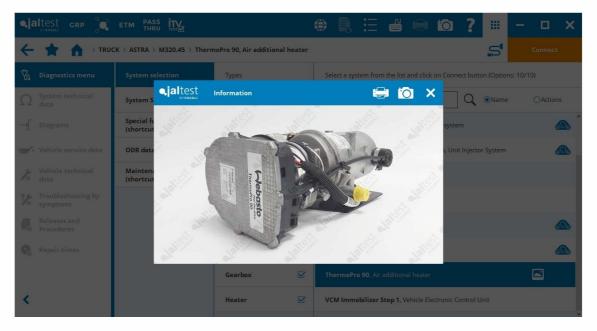
ASHOK LEYLAND

Cummins ISB5.9 CM2150 engine control system, operation data, cylinder cut-out, modification of parameters such as the speed limit or the automatic shutdown at idle speed, and the reset of the maintenance service.

Delphi H3/H4 engine control system, additional information of the FFD errors and system actuations.

ASTRA

Webasto ThermoPro 90 auxiliary heater.



DAF

Constant update and improvement of the references and variations of the systems in DAF.

PCI engine control system, it is important to highlight the calibration procedure of the oil level sensor and the turbocharger actuator operating test.

ZF TraXon transmission, check of the shift rail positions with the vehicle stopped.











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> TRUCK > DAF > XF E6 > P	CI, Diesel Control Injection, Common Rail	🚍 🔶 Dis			> TRUCK > DAF > XF E6 (New	w F7/BH Series) > TraXon, Gearbox with electronic control 🗧 🧲 Discon	nnect
🖗 Diagnostics menu	SYSTEM CHECKS \ TURBOCHARGER ACTUATOR \ ENGINE VA	RIABLE GEOMETRY TURBOCHARGER (VGT) ACTUATOR POSITION			🖏 Diagnostics menu	SYSTEM CHECKS \ SHIFT RAIL POSITIONS \ STOPPED VEHICLE	
Ω System technical data	t THE PROCESS HAS FINISHED		~	/	Ω System technical data	+ Add customised help	~
- Diagrams	THE COMPONENT WORKS CORRECTLY		>	<	Diagrams	General information	×
🛫 Vehicle service data	POSITION 1 (HIGH LIMIT)	17 %	0	?	🛫 Vehicle service data	The purpose of this test is to check if the gearbox allows you to select all gear positions. The activation of these components allows the technician to see the state of the solenoid valves and the position sensors of the gearbox.	
Vehicle technical data	POSITION 2 (LOW LIMIT)	3%		3	Vehicle technical data	When the solenoid valve cycle is completed, it must be possible to hear movement of the piston and the application of air pressure in the cylinder.	
% Troubleshooting by symptoms	POSITION 3 (HIGH LIMIT)	80 %		ĩ	% Troubleshooting by symptoms	After several seconds, the solenoid volve must cease to be energized and the air intake on the cylinder piston must be heard. Results interpretation	
Releases and Procedures					Releases and Procedures	The values of the shift group positions that are read by the different position sensors are shown.	
Repair times					Repair times	2 1278-TD 1277-70 1277-70 7463-0611	
						13,R1,R3 Spittur 96,841,5 U C C C C C C C C C C C C C C C C C C C	
<					<	a)() () () () () () () () () () () () ()	~

HINO

E13C engine control system, data operation reading and reset.

JO8E (K line) engine control system, parameter setting of the Power Take-Off (PTO) and of the data of the amount of Particulate Matter (PM) gathered in the filter.

ISUZU

• EBS system in C/E Series - GIGA models.

Instrument cluster system in **FX Series** models.

Smoother G (AMT) transmission, VIN number modification.

MAN

The system coverage of the new TG Series Euro 6 models has been extended.

Powertrain PTX system, extended module.

MITSUBISHI FUSO

Brake system in **Fighter** models with **6M60** engine.

EZGO hill start assist system, component activation.

NISSAN

• ADAS systems, ICC driver assistance system and camera control system where the calibration of Euro 6 models has been included.







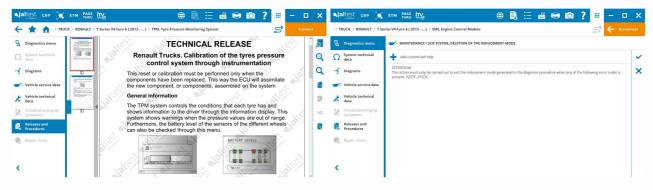




RENAULT

Constant update and improvement of the references and variations of the systems in Renault. In models with V4 technology

• **TPM** Tyre Pressure Monitoring system, that includes the calibration through the instrument cluster in a technical release.



SCANIA

Constant update and improvement of the references and variations of the systems in Scania.

UD TRUCK

DCU exhaust gas aftertreatment system in the **Big Thumb (GE 13 Nissan Diesel) Euro 4**model.

VOLVO

Constant update and improvement of the references and variations of the systems in Volvo.

TRAILER

BENDIX

TABS6-ADV MC brake system, check of the wheel speed sensors, activation of the modulator and the ABS lamp.

KNORR-BREMSE

TEBS Gen2 brake system, constant update and improvement of the supported references and variations.











LIGHT VEHICLES

FIAT

CNG IAW 5SF4 engine control system with F1CFA401A engine.

GREAT WALL

Delphi DCM 3.7 engine control system.

HYUNDAI

Denso CRDI engine control system in the H-350 model with D4CB engine.

MAHINDRA

⊕ EDC 17 C55 engine control system.

MERCEDES-BENZ

- CR61 engine control system in the new Sprinter WDB907 model with OM652 engine.
- **CR41** engine control system, DPF particulate filter regeneration in the **Vito [447]** model.

NISSAN

EDC 17 C84 engine control system in the NV300 model with R9M engine.

ΤΑΤΑ

CNG engine control system in **ACE** models, component activation.

VOLKSWAGEN

Delphi DCM 6.2 engine control system, DPF particulate filter regeneration.

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> LI	GHT COMMERCIAL VEHIC	.ES > VOLKSWAGEN > Crafter 50 2.0 TDI [2017], engine: DASB > Delphi DCM 6.2, Electronic Diesel Control		s		
	Diagnostics menu	MAINTENANCE \ PARTICULATE FILTER REGENERATION				
Ω	System technical data	the process has finished				~
-ſ	Diagrams					×
	Vehicle service data	SOOT CONTENT ON THE PARTICULATE FILTER, CALCULATED VALUE	253 g			?
h	Vehicle technical data	SOOT CONTENT ON THE PARTICULATE FILTER, MEASURED VALUE	56 g			6
36	Troubleshooting by symptoms	FUEL CONSUMPTION SINCE THE REGENERATION OF THE PARTICULATE FILTER	548 L			
٩.	Releases and Procedures					
Ø,	Repair times					
<						











TECHNICAL INFORMATION

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.

Technical and maintenance data of the vehicle

In **DAF** the maintenance services in Euro 6 vehicle have been updated relating technical data of the engine types and shortcuts to system actions.

In **MAN** and **MERCEDES-BENZ** the procedure "<u>*Replace the particulate filter*</u>" in Euro 6 models has been included. Furthermore, in **MAN**, technical data in the **D0836 Euro 5** engines are included.

Technical data have been related in the maintenance services of the R, P, G and S Series models of **SCANIA**.

Wiring diagrams and technical information

Diagnostics menu	Ч _П в	ectronic architecture	of communication	bus in the vehicle				Select another configuration
C System technical data	× Į	2	xe	Sont	100		<u>e</u>]	- L • 1 €
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Vehicle service data	. •3		5	NH3		CAN ECB2 NOx sensor		6
Vehicle technical data	ophil	EBS	(contr	EVGT			N X	1 👌 🛚
Troubleshooting by symptoms	,	ک	xe		N sea	P (
Releases and Procedures		OBD	1000	ExFlp		CAN ECB2	NOX	2 1/
Repair times	D.V.	S	5	1 Cami	.2	N 640		

Electronic architecture of the vehicle communication bus, coverage extension of wiring diagrams of the IVECO/ IRISBUS Urbanway and Magelys Euro 6 bus models.

Wiring diagram of the EDC ASM2020 engine control system of the new Euro 6D models of MAN.

Electronic architecture of the vehicle communication bus of the new models of **MERCEDES-BENZ Actros** and **Arocs** of generation 5.

Technical data and wiring diagram configurations in the systems of the new Euro 6D models of **SCANIA**.

Technical data and wiring diagram configurations in the **EMS CNG** engine control system of light vehicles of the **TATA** brand.











Improvement of the coverage and new wiring diagram configurations in **VOLVO** and **RENAULT** models with V4 technology.



Troubleshooting guides and procedures

Checking procedure of the fuel pressure in **DAF Euro 5** models with **DMCI** engine control system.

Troubleshooting guides by symptom in **DAF Euro 6** models: Engine power loss, black smoke expelled by the engine, quick soot load in the particulate filter. Furthermore, troubleshooting guides associated to fault codes that limit the vehicle speed or reduce the engine power have been included in the AdBlue/DEF EAS4 Ecofit UL2 system. Finally, it is important to highlight the checking and reset procedure of the tyre inflation pressure indication.

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> TRUCK > DAF > XF E6 (New F7/BH Series) > EAS-4, Exhaust gas treatment system 🗧 🧲 🖬				🗲 🚖 🏠 > TRUI	🔶 🚖 🏠 > TRUCK > DAF > XF E6 (New F7/BH Series) > EBS-3, Electronic Braking System					
Sa Diagnostics menu	C DIAGNOSIS			🖗 Diagnostics menu	β earch on the list of technical releases Q	Check the tyres pressure.				
Ω System technical data	ERROR(S) STORED IN MEMORY: 2		~	Ω System technical data	Check the tyres pressure.	Expand all steps				
-J Diagrams	😵 P3904 x1 🛕 AdBlue/DEF (Diesel Exhaust Fluid) pump. Low voltage or short circuit to ground. 👔	? %	×	-J Diagrams		General information.				
🛫 Vehicle service data	😣 P3912 x1 🛕 AdBlue/DEF (Diesel Exhaust Fluid) pump. Operation failure. 👔	? %	Û	🛫 Vehicle service data		 Restart the tyre inflation pressure indication. 				
Xehicle technical data			? °	Vehicle technical data		 Step 1.1: Select the vehicle information through the menu of the instrument cluster. 				
Troubleshooting by symptoms			C	% Troubleshooting by symptoms		 Step 1.2: Select the option of tyre pressure. 				
Releases and Procedures			6	Releases and Procedures		Step 1.3: Check tyres pressure and state				
Repair times				🖓 Repair times		5 Step 1.4: Then, you should select one of two possible options				
	S PRESENT ERROR STATES					 Step 1.5: Drive the vehicle at least 5 km to deactivate the instrument cluster warning lamp. 				
<		×		<		Show check marks in the procedure steps.				











Troubleshooting guide by symptom and information about frequent failures in **RENAULT.** In this brand, it is important to highlight the checking procedure of fuel leaks in models with V4 technology. Also, troubleshooting guides associated to fault codes in the main systems have been included.

In SCANIA, troubleshooting guides and information about frequent failures have been included.

Troubleshooting guides associated to fault codes in the main exhaust gas aftertreatment systems, engine and models transmission. in with V4 technology of VOLVO where it is also important to highlight other procedures, such as the checking of fuel leaks or the technical release about the calibration of the **TPM** Tyre Pressure Monitoring system.

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> TRUCK > VOLVO > FH V4 [2013], engine: D13K, D16K, D13A/C, D16G > TECU, Transmission Electronic Control Unit 🗾 🧲 Disconnect										
84	Diagnostics me	nu 🖏	DIAGNOSIS							
Ω	System technic data	al 😣	P1053 x1 Clutch Plates. W	Vearing sensor.						←
-ſ	Diagrams	i	Freeze Frame Data	38 - 6	ault Code Troub	leshooting				C
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10	Vehicle technic data	al 📃	Collapse all the steps							^
3%	Troubleshootin symptoms	; by	Step 1.1: Perform the	following action:						^
	Releases and Procedures		If the checking values are met: Go to step 1.3							
ė,	Repair times		If the checking values a Go to step 1.2	re not complied with:						
			CLUTCH WEARING							,
۲			Show check marks in the proc	cedure steps.						

System Display

Activations from the System Display of the **VIS3** visibility system of **SCANIA**.

System Display of door control modules in **MERCEDES-BENZ** and **MAN**.

Access to System Display during the DPF particulate filter regeneration in the following systems:

- AdBlue/DEF EAS4 Ecofit UL2 of DAF.
- EDC 17 CV41 + Denox 2.2 of IVECO.
- EDC 17 of MAN.
- **ACM** of **MERCEDES-BENZ**.
- EMS EMD1 of SCANIA.
- EMS V4 of VOLVO and RENAULT.









