

# e altest commercial vehicles

# **INNOVATIONS 21.2**











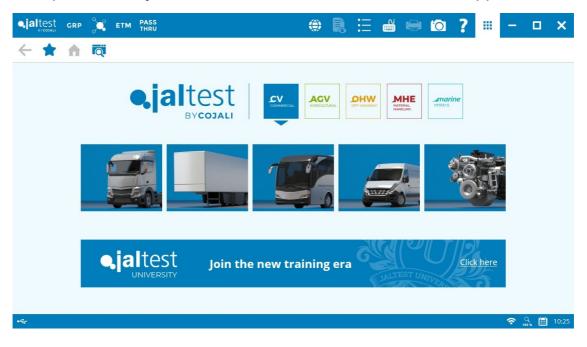


# **SOFTWARE INNOVATIONS**

The new software version **Jaltest 21.2** 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, and vessels.

In this version, Jaltest changes its start window display by adding accesses to licence modules independently. Vehicles types from different groups cannot be mixed in the main window. Moreover, Jaltest includes a new module called **MHE** with coverage in material handling equipment: forklifts, boom lifts, scissor lifts, telescopic handlers, etc. and it can be purchased independently or as complement to **AGV** and/or **OHW**.

Jaltest keeps in memory the access of the last session for the next application restart.



Jaltest ADS advertising with available banners:

- Jaltest Tools with access to the catalogue of COJALI website.
- Jaltest University with access to this section of Jaltest website.
- **Jaltest Telematics** with access to the promotional video of predictive maintenance.

Banners change automatically and appear in any selected group CV, AGV, OHW, MHE or MARINE.













## Model wiring diagrams

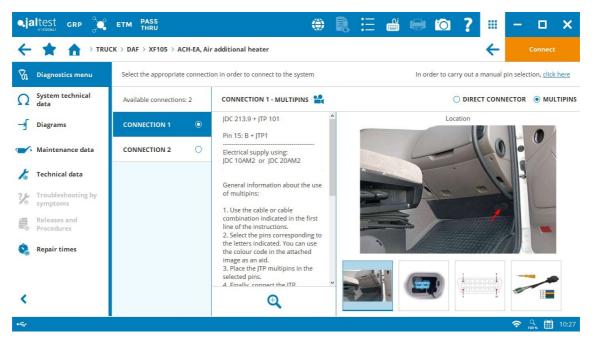
Promotional module of wiring diagrams organised by model with page index and component search. Only available in some brands.

- 🚖 🏫 > TRUCH	K > VOLVO > FH V4 [ 2013 ], engine: D13K, D13K, D13A/C, D16G	🔶 🌪 🏠 > TR	UCK > VOLVO > FH V4 [ 2013 ], engine: D13K,	D16K, D13A/C, D16G
Diagnostics menu	Syr • jaltest Diagram configurations 🔐 😥 🗙 et buttor (Options: 30/30)	Diagnostics menu	UIN (A793223/ B778827/ D20349 Electrical power supply	91/ £839236/ W116104/ CKD936574) - Show page index Select another configuration
System technical data	All Search In configurations list Q C @Name OActions	Ω System technical data	Search in the component list Q	1 5 0 1 1A 3 5 0 6
Diagrams	M 💱 VIN (A740874/ B645496/ D200003/ W112925)		Show full list	
Maintenance data	Spe 🕁 VIN (A773445/ 8716638/ D201150/ £830460/ W115148/ CKD925530)	Maintenance data	C1.3, Connection to ground (80)	
Technical data	OD + + VIN (A793223/ B778827/ D203491/ E839236/ W116104/ CKD936574/	🍾 Technical data	C1.4, Connection to ground (77)	
Troubleshooting by symptoms	Max + VIN (A820927 / 8850525 / D206125 / E850716 / W121195 / CKD947428)	Troubleshooting by symptoms	C1.5, Connection to ground (76)	
Releases and Procedures	Ma (Wi (A849538/ 8913387/ D209348/ (870105/ W129580/ CKD958868)	Releases and Procedures	C1.8. Connection to ground (79)	
Repair times	- [>+ Wiring diagram	Repair times	C1.8, Connection to ground (78)	
	1 Fuse and relay diagram		C1.9, Connection to ground (79)	
	Compressed air 🗹 CIOM, Cabin module	<	CA02P, Fuse holder with 6 fuses (31A)	

## **Jaltest videos**

Updated Jaltest video menu with videos organised by categories. In addition, some of them have been related as procedure in the corresponding paths and models.

They can also be related to software functionalities, for example, in this version there is a video showing the use of multipins in all connections.









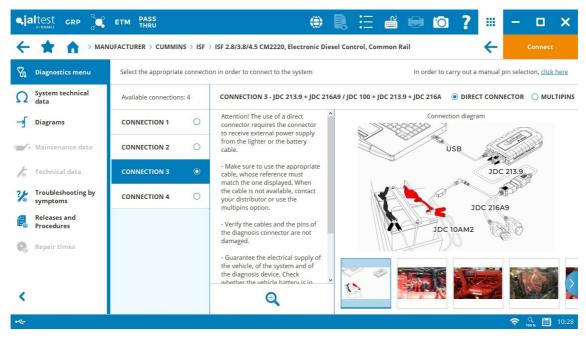






## Moving image, connection instructions

Moving images have been included for complex Jaltest Link V9 connections in which the JDC 100 cable and external power supply must be used. Moving images for all connections of Jaltest coverage will be included the next version.



## **Other innovations**

- Text search in troubleshooting guides and procedures.
- Full-screen display of troubleshooting guides and procedures.

## GRP

## **GRP Enterprise management from Jaltest**



All devices registered in the same Jaltest user can create and manage GRP Enterprise directly from Jaltest.

Available for Administrator users only.













## New "Predictive Maintenance" tab in reports

It is possible to include the components affected by the repair or maintenance task in reports, which are listed by name and reference. Also, it is possible to include a comment and the wearing percentage. If this new tab is filled in, it contributes to Jaltest predictive maintenance and Jaltest Telematics is advertised.



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The diagnosis and/or maintenance report has all the information in an Annex.

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## Other innovations

- Files in maintenance reports can be attached (All GRP levels).
- Multiple clients and vehicles can be selected for the next functions:
  - Deletion Export

Also, the forms have more columns and new filters.

- The GRP form printing is improved.
- The vehicle documentation is available from the diagnosis menu.













Diagnostics menu	System selection	Types		Select a system from the list and click on Connect button (Options: 2/2)			
System technical data	System Scan	ALL		Q •Name OActions			
Diagrams	Special functions (shortcuts)	Brakes	×	ABS 6, Antilock braking system			
🖍 Maintenance data		Engine		EDC 7 UC31 Euro 3, Electronic Diesel Control, Common Rail			
💮 Technical data							
<ul> <li>Troubleshooting by</li> <li>symptoms</li> </ul>							
Releases and Procedures				<			
Repair times							

## ETM

#### Extended coverage:

Wabco 4th generation modules

480 106 004 0

480 106 201 0

It includes a new connection cable MDC08.

Knorr-Bremse 4th generation modules

K050211 K050214 K093190

K102265

K102311















# **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.

## CITROËN

Nemo 1.3 HDi [A9] with FHY/FHZ engine

## DACIA

New brand that includes **Dokker** models

## FIAT

Talento 2.0 [296] with M9R [2019 - ...] engine

Toro 2.0 with ECD engine

Fiorino '07 [225] 1.3 MultiJet with 199 B1.000 engine

Fiorino '07 [225] 1.3 MultiJet with 55283775, 330 A1.000 engine

Fullback [305] 2.4 with 4N15 engine

## ISUZU

N Series - ELF with 4HV1 engine

## **IRIZAR**

i4 Hybrid with Eaton gearbox

## **IVECO**

Acco Euro 6

S-Way Euro 6D [2019 - ...]

S-Way NP CNG/LNG Euro 6D [2019-...]

X-Way Euro 6D [2019-...]

## **MERCEDES-BENZ**

Econic 5 [2020 - ...] Vito [447] 111 CDI with OM 622.951 engine

## **MITSUBISHI**

L 200 3.2 3.2 4x4 Triton with 4M41 engine













## **MITSUBISHI FUSO**

FI with 4d34i engine

## NISSAN

NV300 [X82] with M9R [2019 - ...] engine

## **OPEL/VAUXHALL**

Combo [E] 1.6 with B16DT [2018 - ...] engine Combo [D] 1.3 with A13FD / LN9 engine

## PEUGEOT

Bipper [A9] 1.3 HDi with FHY / FHZ engine

## RENAULT

Trafic III with M9R. [2019 - ...] engine Kangoo [FW/KW] 1.5 dCi with K9K 608 engine

## **SCANIA**

L Series Euro 6 family with diesel engine P 340 Euro 6 [2017 - ...] with gas and diesel engine S 590 Euro 6, S 770 Euro 6, ...

## TATRA

T.10 BS-VI

T.14 BS-VI

1918 BS-VI

712 BS-VI

1412 BS-VI

## TATRA

Phoenix E

## VOLKSWAGEN

Crafter 55 (SY, SZ) with 2.0 TDI (2018 - ...) engine Multivan T6 [SH]2.0 TDI with CXE / CXF / CXG / CXH engine California T6.1 2.0 TDI with CXE / CXF / CXG / CXH engine Caddy 1.6 TDI CAYD / CAYE [2015 - ...]













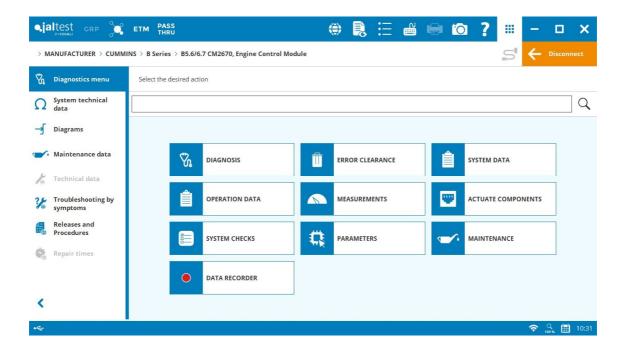
# **DIAGNOSIS AND SYSTEMS**

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.

Overall, technical information and troubleshooting guides of the most common error codes in the workshop have been expanded thanks to the communication channels with clients such as the technical support offered by the project, training, Jaltest Feedback and "Product improvement" option.

We work each update to expand the references and variants of all systems increasing coverage and ensuring the reliability of the interactions with the vehicle systems. New references of supported control units in brands such as DAF, RENAULT, SCANIA, VOLVO, etc.

In systems that apply to several brands, such as **CUMMINS** systems, the speed limit modification has been developed in systems such as **L9N CM2380** in buses, as well as the coverage has been expanded with advanced functions of the **B6.7 CM2670** system. In **WABCO** brand systems, the development of 446 220 100 0 reference of the **IVTM** tyre pressure control system and the development of the control unit replacement (parameter copying and pasting) in the **EBS Euro Gen 3** brake system are worth noting.















## TRUCK and BUS

## DAF

**TPMS** tyre pressure control system.

**CCC** climate control, component activation.

Troubleshooting guides by symptoms in exhaust gas aftertreatment systems where the catalyst efficiency loss guide in EAS3 and EAS 4 systems is worth noting. In addition, the verification check of the NOx sensors before and after the SCR catalytic converter has been developed in the EAS3 system.

Diagrams by model in the main brand models.

Possibility of performing manual diagnosis in XF, CF and LF Euro 6 models.

## FORD

**Ecotorq EDC 17 CV41** engine control system, operation data, cylinder cut-out and pressure relief valve reset.

Possibility of performing manual diagnosis in **F-MAX** model in which wiring diagram configurations in **EBS 5**, **TraXon**, **EST-52** systems have also been included.

#### IRIZAR

In the last version, the coverage of systems in this brand increased in most of its models, and in this version the coverage of wiring diagram and operation diagram configurations has been expanded. The diagrams of the VSE ETS steering control system or the Gateway VCM system are worth noting.

🗧 🚖 🏫 > BUS	> IRIZAR > i4 > ETS, Steering controller			S Connect
Diagnostics menu	🔶 Operation diagram			Select anothe configuration
System technical data	Search in the component list Q			Star at
J Diagrams	Show full list			
Maintenance data	+ Add personalised component information	en Marine 1		100
Technical data	CA050, Hydraulic pump		Creat Contract Contra	D all?
Troubleshooting by symptoms	CB009, Centring circuit pressure sensor to exile straight driving		STATISTICS AND	crees
Releases and Procedures	CB010, Pressure sensor for the steering circuit			
Repair times	CCVX, Check valve	en de la constante de la const		
	CE1, OII crankcase			•••
(	CE2, Steering oil tank	NO NO		

## **IVECO/IRISBUS**

Euro 6 engine types such as 11,1 VGT 480 (F3G FL611D) or 12,8 570 (F3H FL611D).

Extended coverage in technical information with new wiring diagram configurations, electronic architecture of communication bus and fuse and relay box.













In addition, maintenance services in **Stralis Hi-Way AS Euro 6** models and procedures such as the distribution phasing in **Cursor 13 (F3H FE611)** engine or the fuel filter change in **Cursor 11 F3G** engines have been included.

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	CK > IVECO > Stralis Hi-Way AS Euro 6 [ 2013 ]			UCK > IVECO > Stralis Hi-Way AS Euro 6 [ 2013 ]	
🗞 Diagnostics menu	Engine type: 11,1 VGT 480 (F3G FE611A)	Select another Show technica engine type release	I Diagnostics menu	Distribution phasing	÷
$\Omega$ System technical data	+ Add customised sheet		System technical	Qaltest To display Jaitest Tools references used in this guide, <u>dick here</u> ,	
- Diagrams	General - M1 Service		Diagrams	Search in the troubleshooting guide $Q_{\rm constraints} \sim N_{\rm constraints}$	
🛹 Maintenance data	General - M2 Service		A Maintenance data	Collapse all the steps	
🄏 Technical data	Additional - EP1 Service	Manual Martanana lanice depanding on time. Services T     Additional Service     Additional references on whose Services EP	🖌 Technical data	If the correct position is not reached, remove the tool from the crankshaft position sensor seat and rotate the engine again until reaching the correct position.	
Troubleshooting by symptoms	Additional - EP2 Service		Troubleshooting by symptoms	Important note: The engine rotation direction is indicated with an arrow in the image.	
Releases and Procedures	+ Additional - EP3 Service		1/3 Releases and Procedures	Important note:General Illustrations for Information purposes only.	
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## MAN

EDC 17Ry engine control system and FISC injection management system for D1556 engines.

**EDC MD1 ASM2020** engine control system, cylinder cut-out, acceleration test, fuel high pressure test, etc.

EDC 17 engine control system, injector coding.

HDS/SCR AdBlue exhaust gas aftertreatment system, replacement of Denox 1.x module.

⊕ Euro 6 engine types such as 12,4 500 (D2676 LF51) or 6.9 250 (D0836 LFLAN). In addition, procedures such as the adjustment of valves and engine brake in the 4,6 190 (D0834 LFL78) Euro 6 engine type, as well as the fuel filter change in D2676 LF51-52-53 engine types, have been included.

## MERCEDES-BENZ

In vehicles with MB4 technology:

**MCM** engine control system, boost air system check.

MS maintenance control system, new maintenance service for coolant change. Information of manual reset through the instrument cluster.

**ASAM** cab module, battery replacement, calibration of suspension level for vehicles without CLCS suspension system.

**MPC** lane change **ADAS** system, camera calibration.

In vehicles with MB5 technology:

**CPC5** drive control system, configuration of the vehicle speed limit and engine idle speed rate.













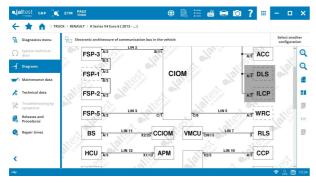
In **buses**:

**IBH** auxiliary heater, technical release to unlock the heater.

#### RENAULT

**VMCU** vehicle control system in vehicles with **V4 technology**, parameter configuration of lights.

**TECU** transmission in vehicles with **V3 and V4 technology**, disassembly and assembly procedure of fork cover.



Diagrams by model in **DXi** models.

Electronic architecture of LIN vehicle communication lines in vehicles with V4 technology. Technical data of EBS brake system have also been included in these vehicles.

⊕ Euro 6 engine types such as **10,8 460 (DTI 11) [2019 - ...]** or **12,8 520 (DTI 13) [2019 - ...]**. In addition, the checking procedure of the cam position in DTI 13 engines from 2016 and from 2019 with Optibrake+ engine brake has been included.

#### SCANIA

**EMS MD1** engine control system, reset of the AdBlue/DEF dosing counter.

**TMS2** transmission, clutch adaptation.

**CCS3** climate control, system reset after the component replacement.

**CMS** chassis control system, parameters of the battery operation, configuration of the transmission shaft damping level, etc.

**BMS (EBS 7)** brake control system with COO8 coordinator, steering angle sensor calibration.

**ECS SMS** – **ELC4** suspension control system, driving level configuration.

**EMS XPI,** engine control system, fuel dosing valve check.

Guided procedures in Euro 6 engines, such as the assembly and disassembly of the V120 fuel high pressure pump in **DC16** engines.













⊕ Euro 6 engine types such as 730 (DC16 108)
EMD1.

Wiring diagram configurations for buses in the COO coordinator, as well as for CNG Euro 6 EMS OCS1 and EMS EMO1 engine control systems in the P 280 Euro 6 truck model.

< 1	🕈 🏫 > TRU	ICK > SCANIA > R 730 Euro 6 [ 20	17 ]		
🗞 Dia	gnostics menu	Engine type: 730 (DC16 108)	) EMD1 - Euro 6 [ 2017 ]		Select another engine type
Ω Syst	tem technical a	Types 🔨 🗸	Sections 🔨 🗸	Search in technical data	Q ~ /
🚽 Diaj	grams	Specifications	Components	Fuel system (Components)	
🗾 🖌 Mai	intenance data	Engine distribution	Injection System	Operation diagram	
∕₀ Tec	hnical data	Accessories belts	Fuel pressure		- 6 - 62 - 61
	ubleshooting by nptoms	Fuel system			line
	eases and cedures	Oversupply			663 3
Rep	air times	Lubrication		J D A2 H I	
		Cooling system		Fuel filter Replace the fuel filters	
		Adjustments and			

## **SOLARIS**

The **IVTM** tyre pressure control system has been developed in the Urbino 12 Euro 6 model.

## VOLVO

**Hilison** transmission in **FE V3** models.

**EMS** engine control system in vehicles with V3 and V4 technology, idle speed rate modification.

**TECU** transmission in vehicles with **V3 and V4 technology**, gear activation with gearbox not installed in the vehicle.

Diagrams by model in vehicles with different technologies.

Replacement procedure of the **I-Shift** transmission pressure sensor in vehicles with **V2** technology.

Operating diagrams and components of the fuel system of **D13A** engines in trucks and **DH12E** engines in buses with access from vehicle technical data.

## TRAILER

Improved adjustment of the total distance travelled in Trailer EBS systems, by not allowing the value to be reduced.

## **KNORR-BREMSE**

**TEBS Gen2** brake system, continuous updating and improvement of references.

## HALDEX

**EB+ 3rd Gen** brake system, parameter copying and pasting functionality from brake modules from previous generations.













## LIGHT COMMERCIAL VEHICLE

## FIAT

⊕ MD1 engine control system and UPCU exhaust gas aftertreatment system for M9R engines.

## **MERCEDES-BENZ**

**EZS** ignition and start-up electronic switch in **Sprinter 907** models.

CR41R engine control system in Vito [447] models.

#### **PSA GROUP**

 Airbag TRW EP3 system in Jumper and Boxer Euro 6D models.

**EDC 17 C60** engine control system, activations, system checks, Diesel Particulate Filter regeneration, NOx sensor reset, EGR valve calibration, etc.

%a ⊨	agnostics menu	MAINTENANCE			
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- Di	agrams	Expand all actions			
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to da	hicle technical ta	PARTICULATE FILTER RESET			
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Re Pro	leases and ocedures	- ANTI-POLLUTION SYSTEM			
<b>Č</b> , R.	pair times	- CLEANING PROCESS			
Re Re	epair times	CLEANING PROCESS			

### RENAULT

**SID 321** engine control system in **Master** models with M9T (2019 - ...) engine, activations, system checks, injector coding, Diesel Particulate Filter reset, SCR catalytic converter regeneration, etc.

**UPCU** exhaust gas aftertreatment system.

Airbag Gen 2 system.

#### **VOLKSWAGEN**

① Central computer and steering system control unit in **Crafter [SY, SZ]** models.









