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JALTEST 18.3

Presentation of Innovations

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1. RELEASE NOTES

The **new software version Jaltest 18.3** once again offers more improvements and innovations that consolidate this tool as a benchmark in multibrand diagnosis of commercial, agricultural and OHW (Off-Highway) vehicles.

This version, the following software innovations are particularly noteworthy:

- Jaltest is more intuitive, with shortcuts to the maintenance reset.
- New search functions of models by entering the system name, search of components in a model's diagrams...
- History of the measurements selection of a system. In addition, the display of measurements can also be paused now.
- The results of a System Scan can be stored in a customised brand.
- **And much more...**

Furthermore, we have introduced new brands and models in specific markets, such as KARSAN in buses. It is also important to highlight the connection through **ISOBUS in agricultural vehicles** and systems of implements. Last, but not least, Jaltest Soft 18.3 includes more **technical information**, by adding new guides and procedures, maintenance services, etc.

This version, the coverage is increased with 594 models, 3383 systems, 2581 diagrams and new technical data that includes step-by-step troubleshooting guides, diagnosis help, etc.

- Updating the **FMS Standard** in accordance with the latest revision of the regulation.
- DAF, **new** VECU body computer **system** in NEW Euro 6 models.
- Iveco, **new** Iveco Stralis 2016 **models**.
- Mercedes-Benz, Setra, **specific wiring diagrams** for buses in EBS, ECAS, CLCS and ICUC systems.
- Mitsubishi-Fuso, **particulate filter regeneration** in 4M40/4M50 engines.
- Renault, **clutch calibration** with disc replacement in V3 models.
- Tata, new models in truck, light commercial vehicles and buses.
- Volvo, **calibration of the variable** geometry turbine (VGT) in V3 models.
- Trailer, **operation data** related to brake pads in Wabco EBS E.

- New **particulate filter regenerations** and **injector coding** in Volvo V2 and V3 engines.
- New **particulate filter regenerations** and **injector coding** in Caterpillar engines.
- New John Deere CE **brand** with more than 200 **models**.
- New **particulate filter regenerations** in Deutz engines.
- New **calibrations** and **parameters** for IVT John Deere transmissions.
- New **calibrations** and **parameters** in Valtra models.
- **And much more...**

Please, take into account that this document is just a summary of the most relevant information of this new version. For further information, please visit **Jaltest Report**.

2. NEW SOFTWARE FUNCTIONS

2.1. JALTEST SOFT

2.1.1.Model filter "Search by system"

A new filter is added in the model selection of a brand. In order to facilitate the model selection, from now on you can filter the model family, search by name, search by category and/or use the new "Search by system" filter.

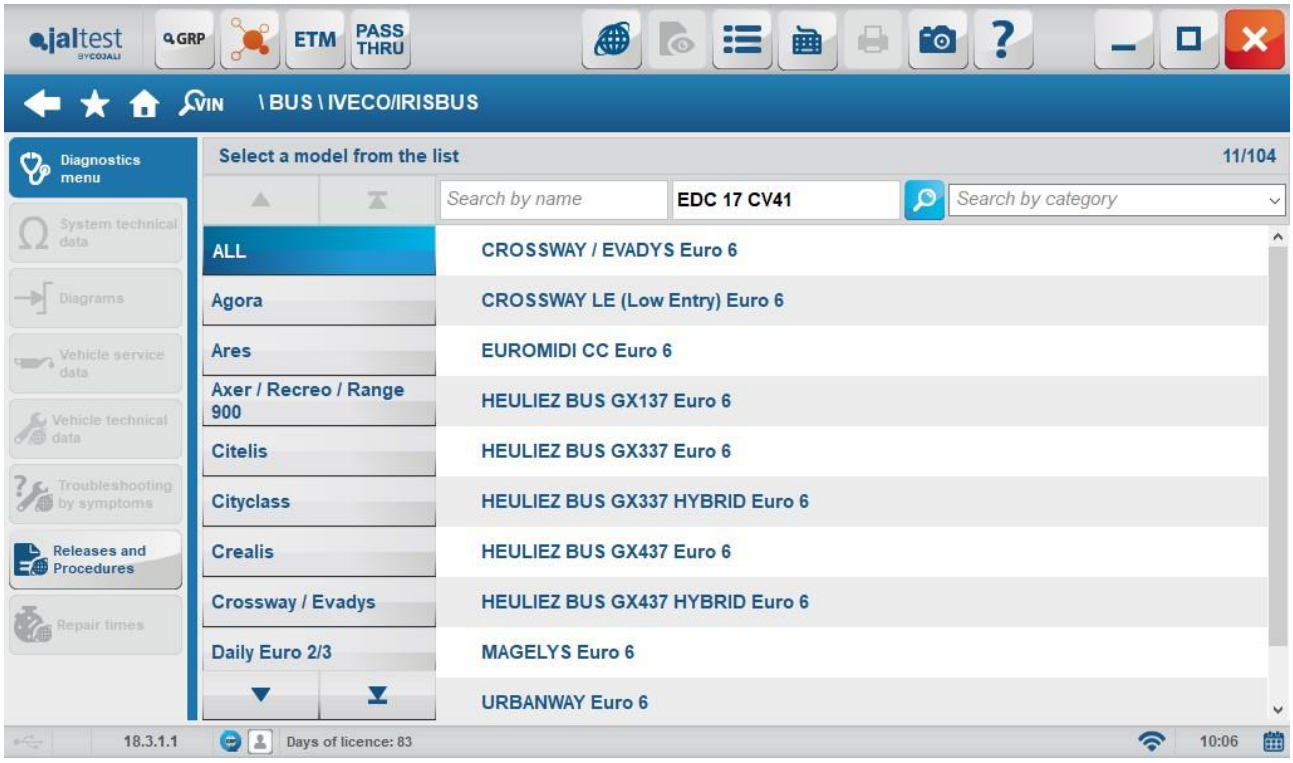

Image 1 Model search with the EDC 17 CV41 system in IVECO/IRISBUS buses

2.1.2.Component search in the model system list

In which system can I find a specific sensor?

Which control unit is the rain sensor in a Volvo FH V4 model connected to? In the front module, in the instrument cluster or maybe in the cab module?

From now on, with Jaltest Soft, you can search a component through the "Component search in the model system list" hyperlink by selecting the model which you want to search in. This option is available in the "Diagrams" main

menu, where you can filter by text and the result of the search returns all the systems with diagram configurations that have a component whose name contains the text of the search.

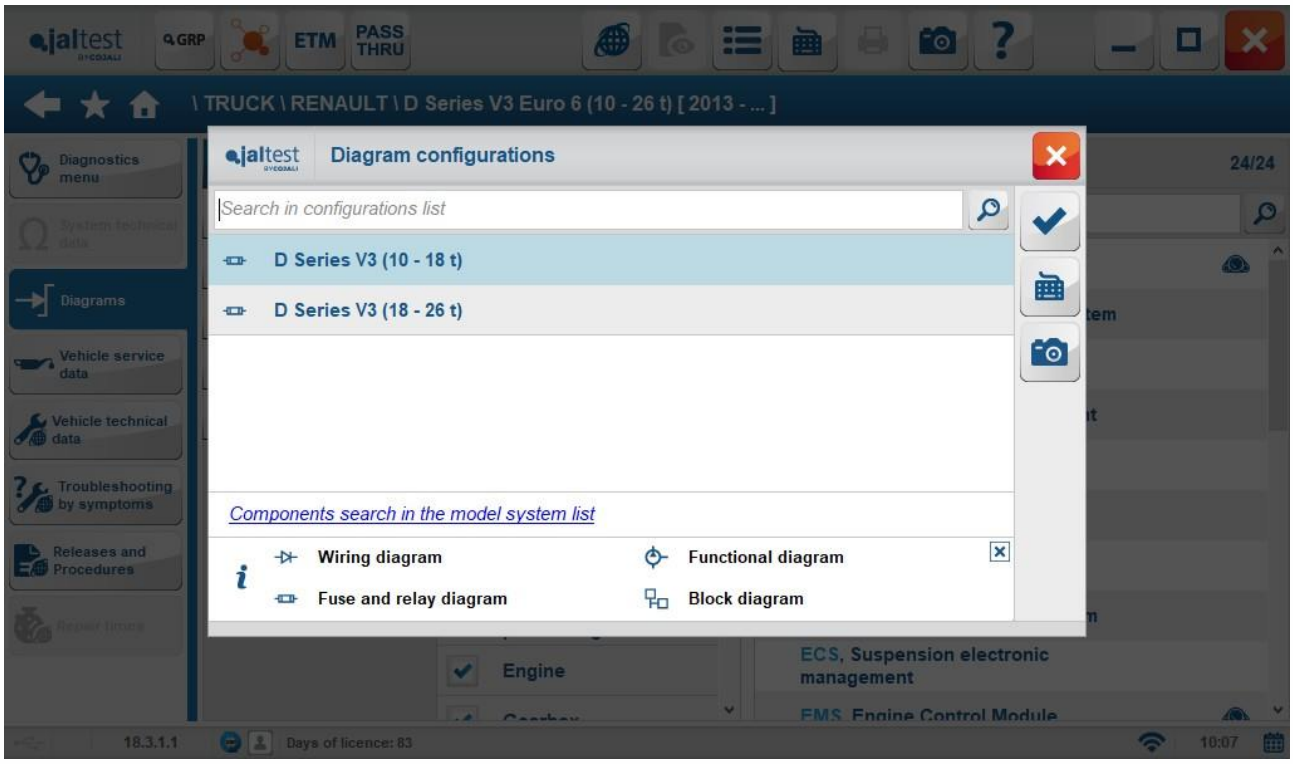

Image 2 Component search in the D Series V3 Euro 6 model in Renault

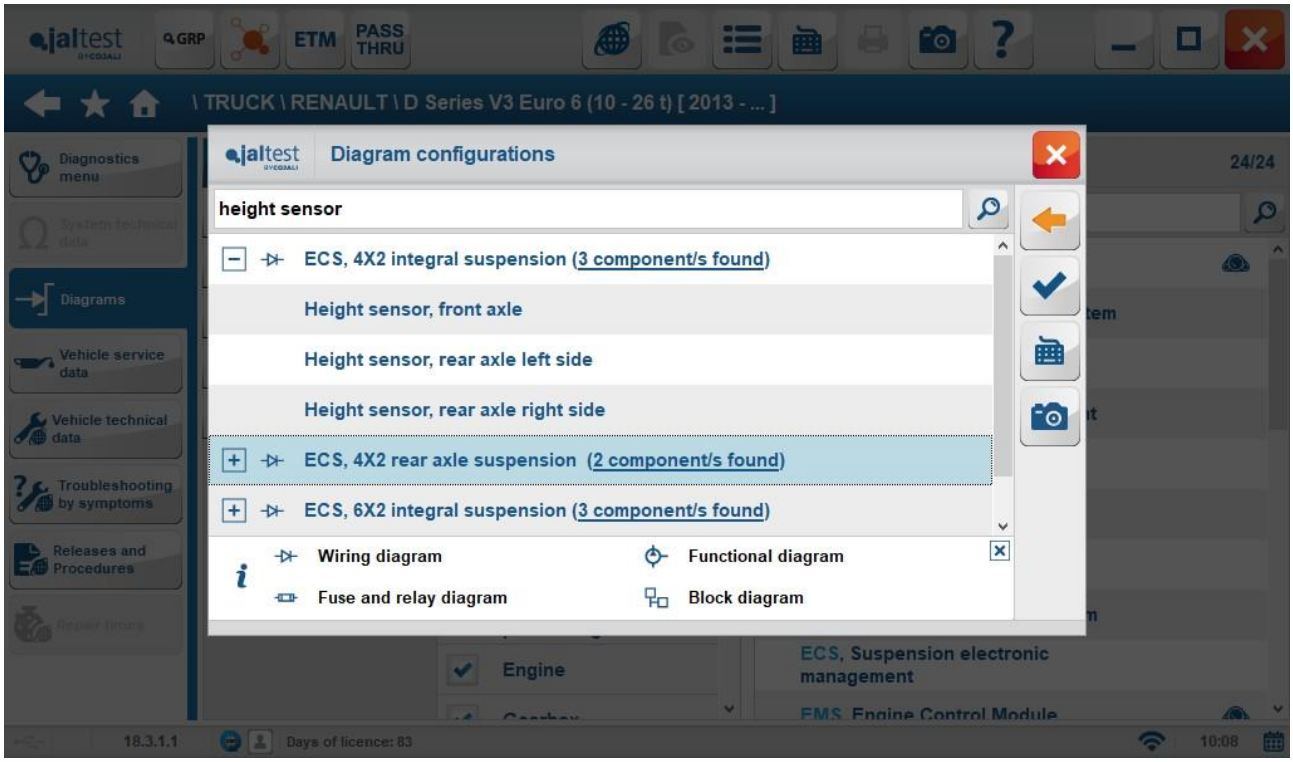

Image 3 Search by text "height sensor" in the diagram configurations

2.1.3. "Pause" function in the measurements selection

Image 4 "Pause" function, measurements in virtual instruments

2.1.4. Maintenance reset shortcuts

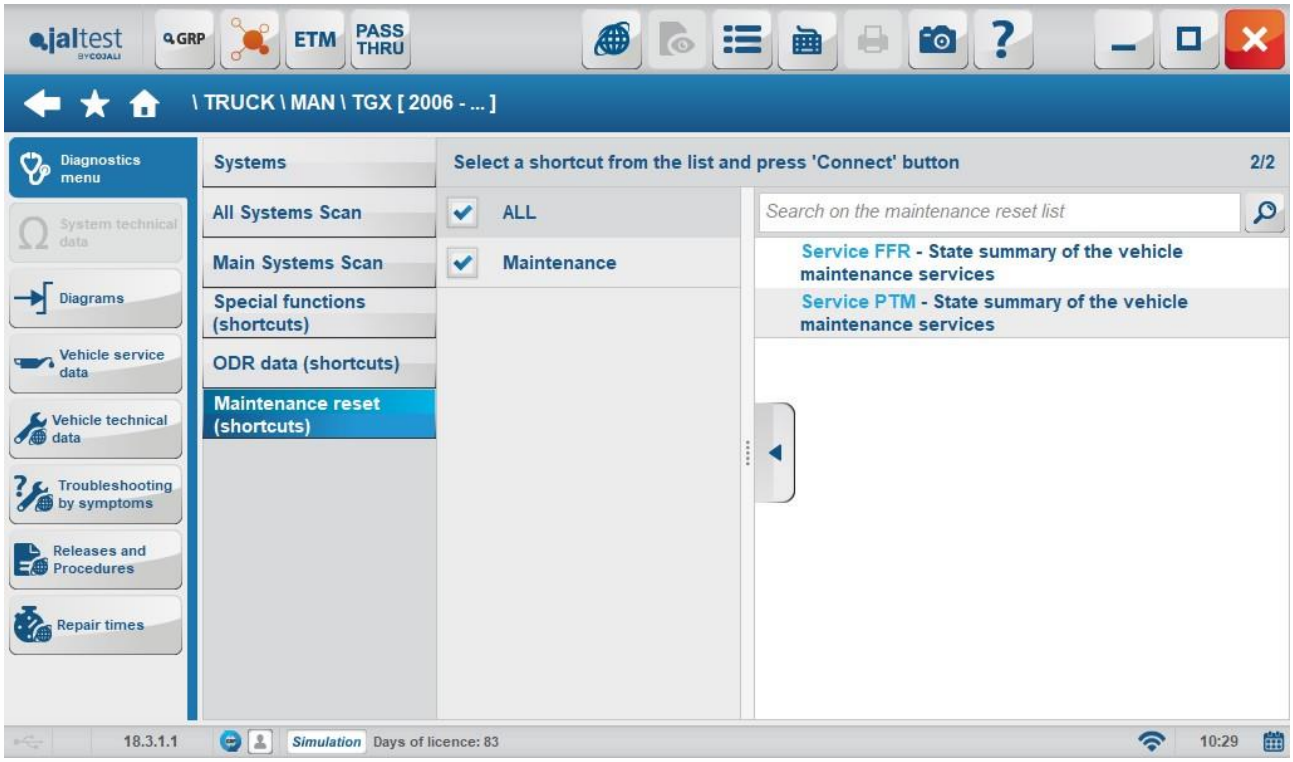

Image 5 Maintenance reset shortcuts in MAN TGX

2.1.5.Customised brands

Now, you can save the **system scan results** of a model in a customised brand.

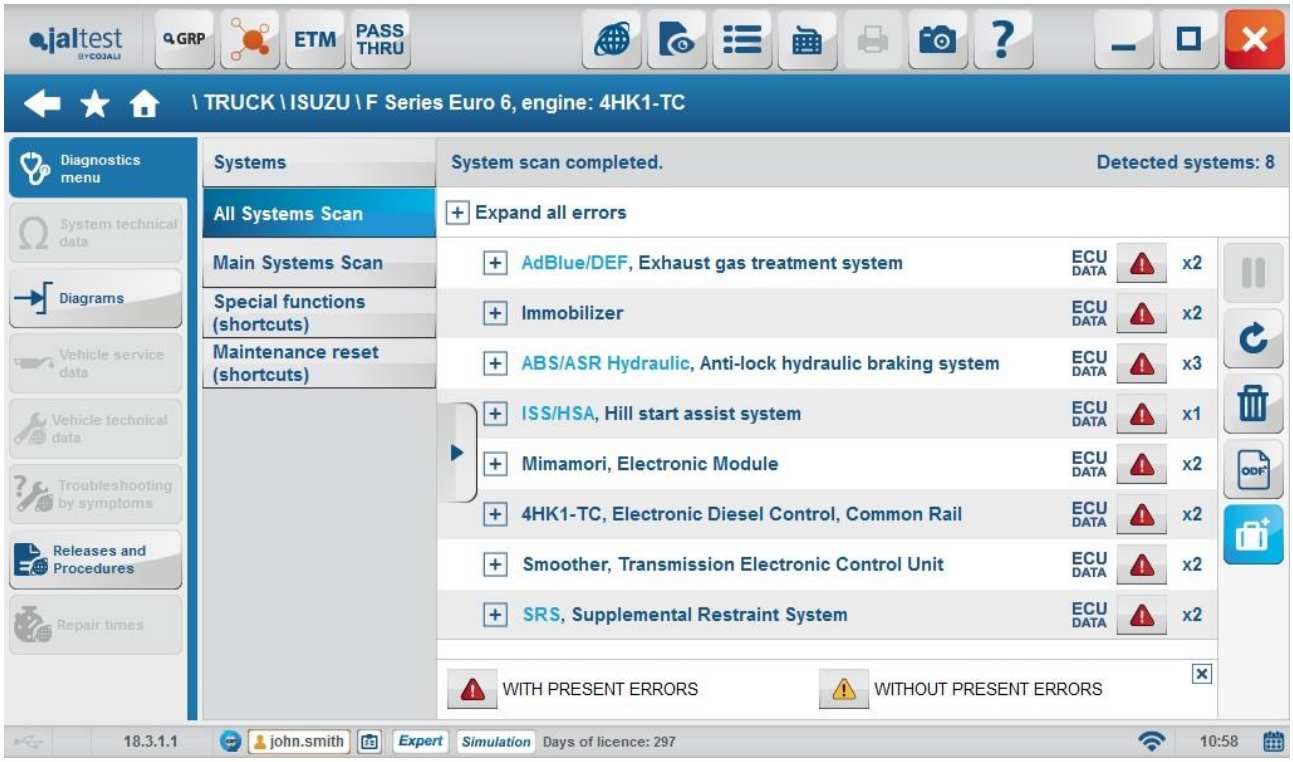

Image 6 System scan in ISUZU F Series Euro 6

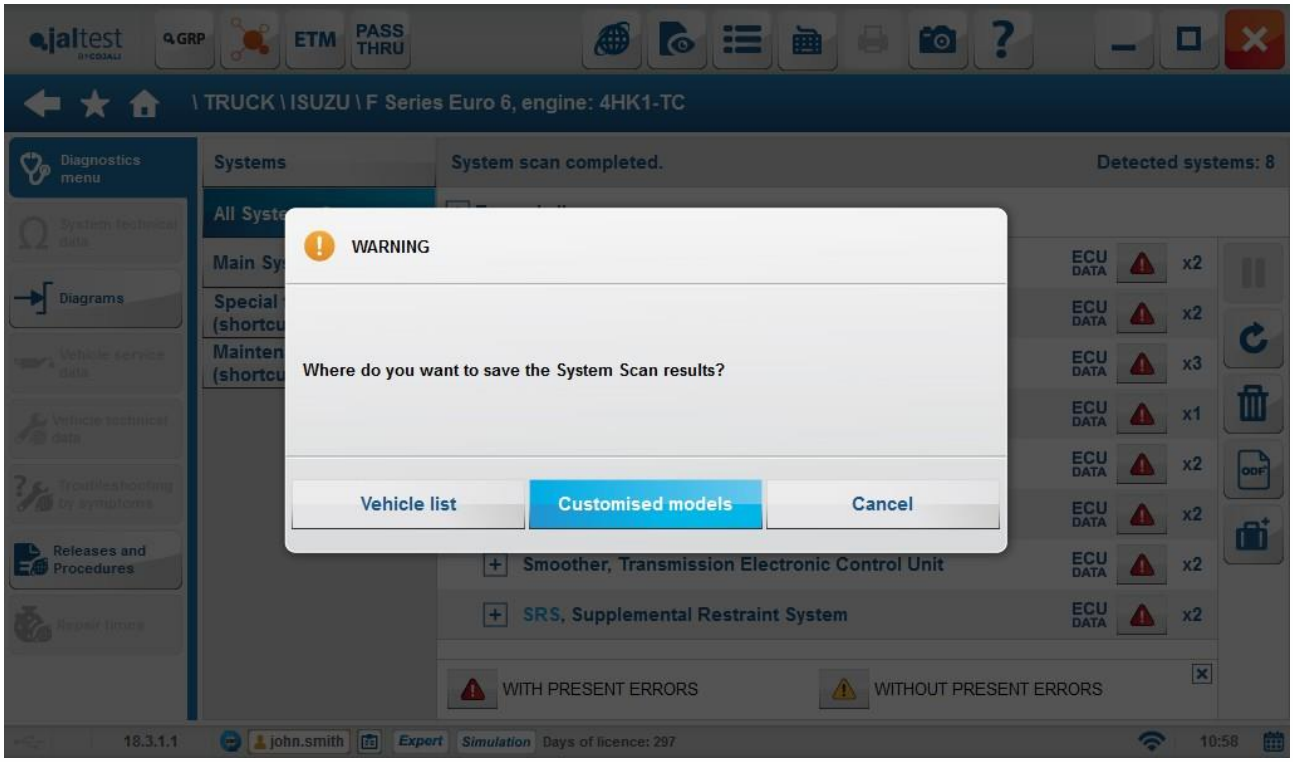

Image 7 Save the system scan results in customised models

3. NEW DIAGNOSIS FUNCTIONS AND SYSTEMS

Please, take into account that this document is just a summary of the most relevant information of this new version. For further information, please visit **Jaltest Report.**

3.1. DAF

In the **XF** and **CF Euro 6 (New F7/BH Series)** models:

- New **VECU** (Vehicle Electronic Control Unit) system.
- **PCI (Paccar Control rail Injection)** Engine control system.
  - System operation data and reset.

3.2. Iveco

- New models [2016 - ...]:
  - Stralis XP / Hi-Way / Hi-Road/ Hi-Street Euro6
  - Stralis X-Way Euro 6
  - Stralis NP CNG/LNG Euro 6

It includes information of the electronic architecture of communication bus.

- New **VCM Step 2** (Vehicle Control Module) system.

3.3. MAN

- Improvement in the control of specific references in Euro 6 models of the most systems such as EDC 17, PTM, ZBRII, INS, BHTC, Tipmatic 12+2 Scania, etc.

3.4. Mercedes-Benz

The following innovations are included in vehicles with MB4 technology:

- Improvement in the control of specific references in the drivetrain systems such as MCM, ACM, CPC and TCM.

Also available for MERCEDES-BENZ buses and other body works with MB chassis.

- **VRDU** (Video Radar Decision Unit), deletion of the memory of the errors stored permanently.

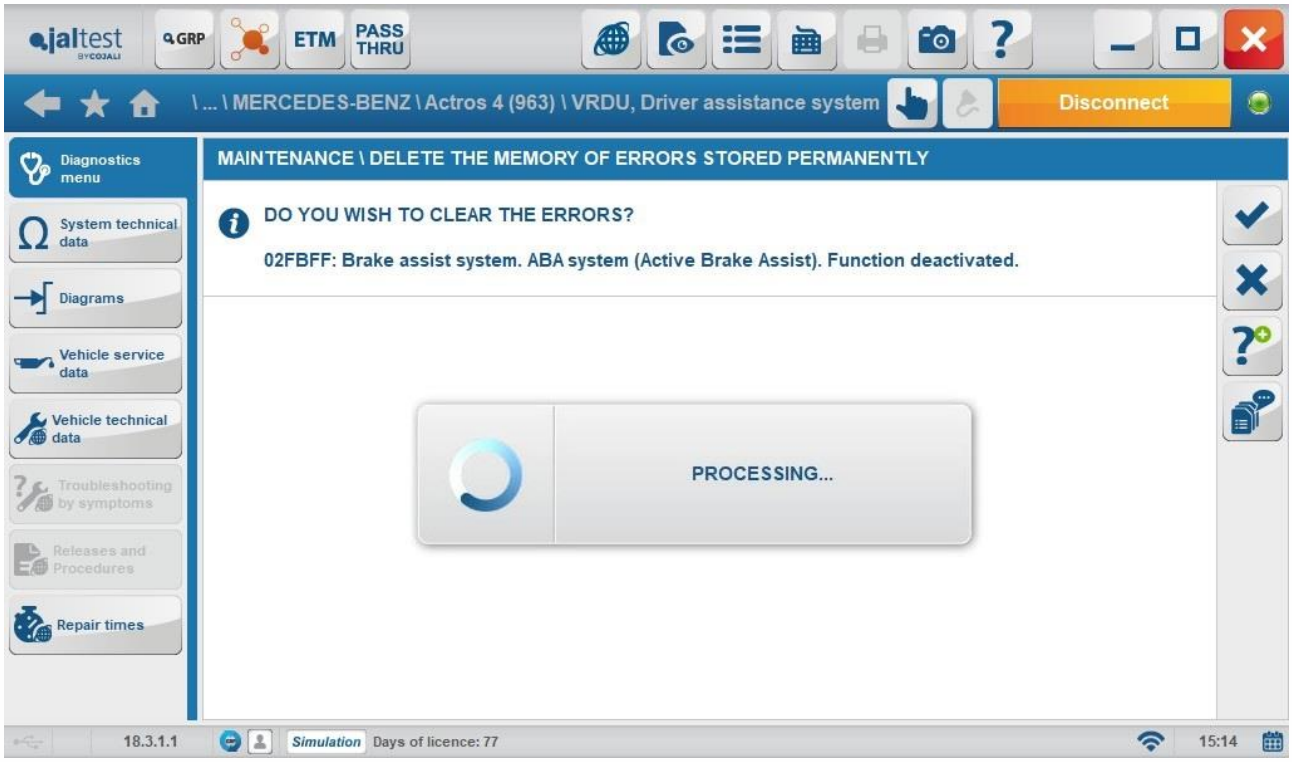

Image 8 02FBFF Error deletion in the VRDU system

3.5. Renault

- **TECU** (Transmission Electronic Control Unit) **in vehicles with V3 technology**, clutch calibration with disc replacement.
- **ECM ZD DTi 3** (Electronic Control Module) **in D Series models**, DPF (Diesel Particulate Filter) and system reset after the filter replacement.

Note: *It also advisable to carry out the new "NH3 concentration reset in the SCR" function in the* **ADCM** *system after performing the DPF (Diesel Particulate Filter).*

3.6. Scania

In the new **R, G, P** and **S Series** Euro 6 models.

- **APS2** (Air Process System), actuations of the dump and regeneration solenoid valves, pressure sensors check.

3.7. Volvo

- **EMS** (Engine Management system) **in vehicles with V3 and V4 technologies**, engine oil pressure check (EEV Standard) and calibration of the VGT (Variable Geometry Turbine).

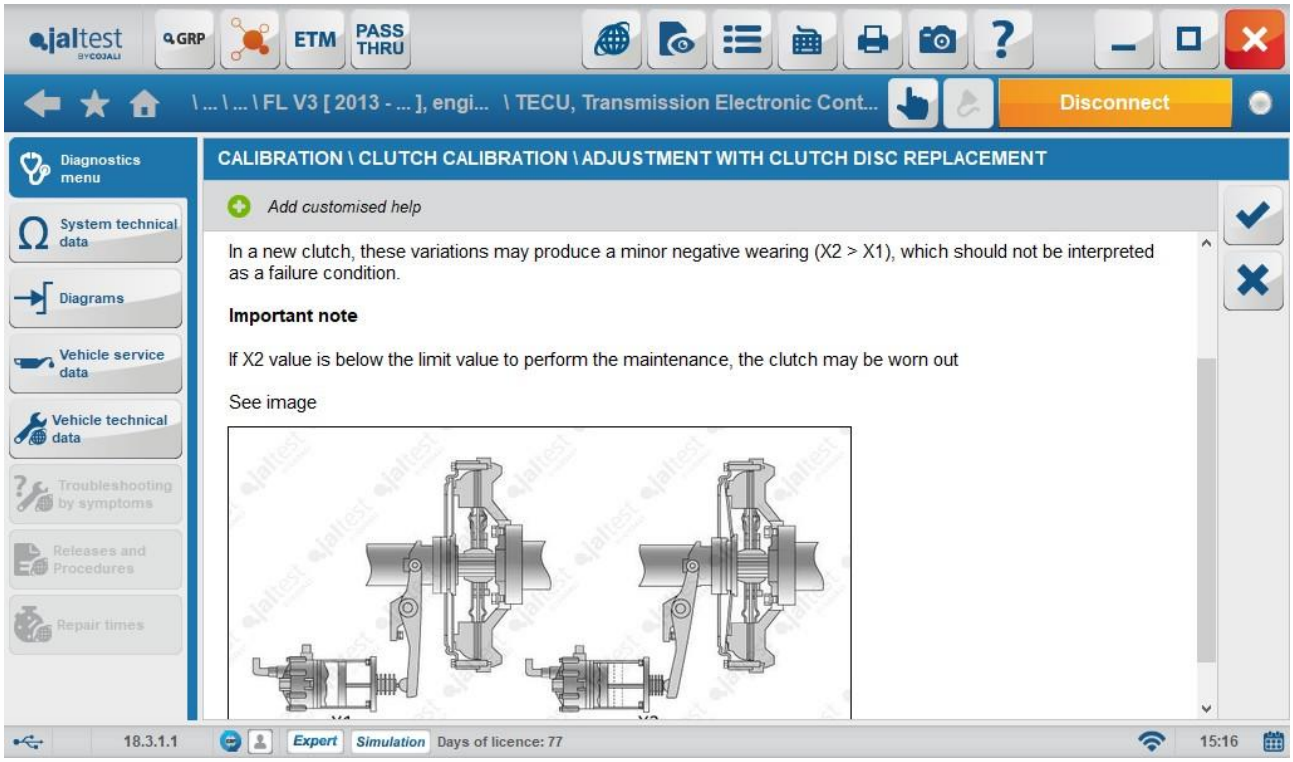

Image 9 Clutch calibration with disc replacement in the FL V3 model

- **FLS** (Forward Looking Sensor) **in vehicles with V4 technology**, distance sensor *Also available in VOLVO buses and other body works with VOLVO chassis.*
- *In Volvo hybrid buses, new* **HPCU** (Hybrid Powertrain Control Unit) *system.*

3.8. Trailer

Jaltest keeps improving its coverage in Trailer systems, including the new references of Trailer EBS modules, and it remains the leader in the diagnosis of this type of vehicles.

3.8.1.Knorr-Bremse

- *New controlled diagnosis codes in the* **TEBS Gen 2** *system:*

3.8.2.Wabco

- **EBS E trailer**, brake pads wearing data and extension of other histograms in ODR (Operating Data Recorder).

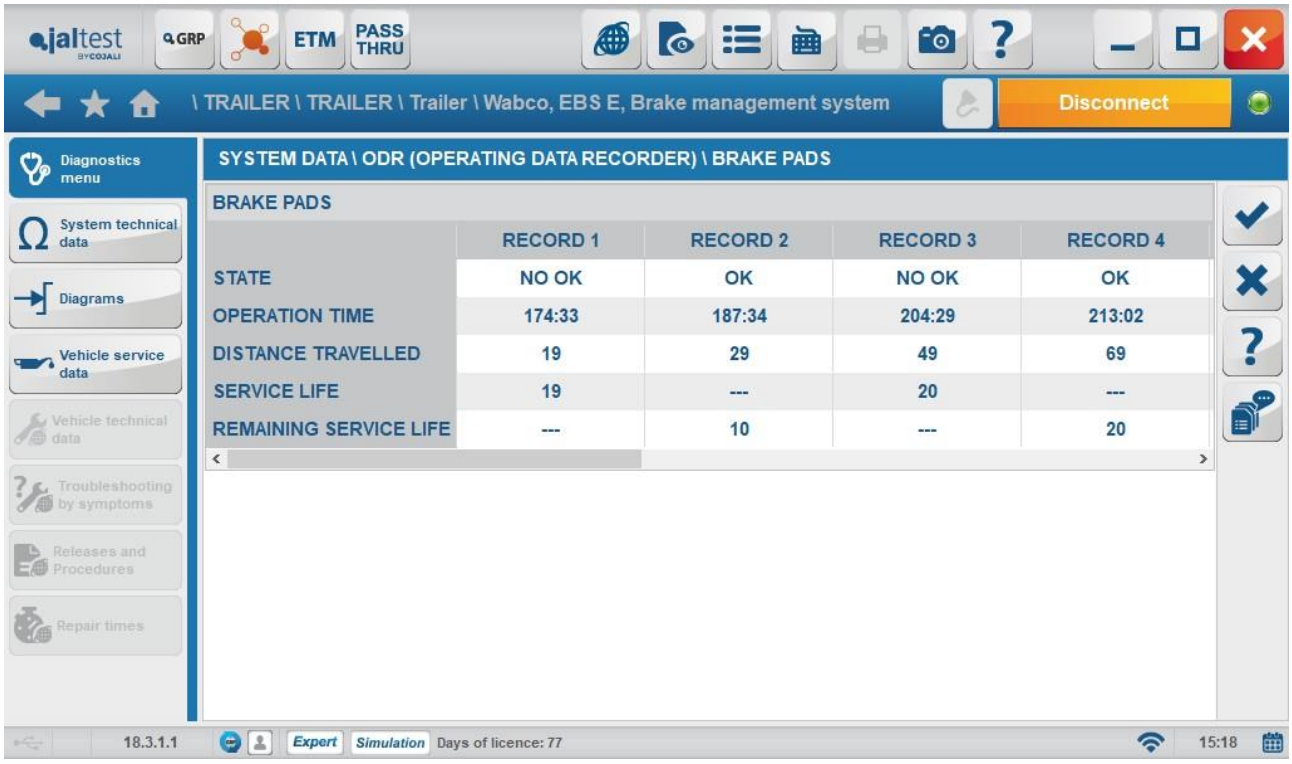

Image 10 Information about the brake pads wearing in the EBS E system

3.9. LCV

3.9.1.Iveco

- New **RRM (Radio Receiver Module)** system of Bosch.

Image 11 RPM Audio system image in the Iveco Daily

3.9.2.Fiat

- **EDC 8F3 CF5 V2 CAN** (Electronic Diesel Control), extension of measurements and fuel pressure control valve reset in the injection rail.

3.9.3.Ford

- New SID211 system in Ford Transit models.

3.9.4.Mercedes Benz

- New systems in the models of the **Vito [447]** family:
- **CDI6** system in **OM642 engines**, improvement in the control of references.
- **CDID3** system in **OM651 engines**, new resets and maintenances are included.

3.9.5. Piaggio

- DPF (Diesel particulate filter) reset in the **EDC 17 C08** system in the Porter model.

3.9.6. Renault

- Nuevo **HEPS (Hydraulic Electrical Power Steering)** system.

3.9.7. PSA Group

- **EDC 17 CP52 KWP2000** (Electronic Diesel Control), injector coding, turbocompressor calibration, fuel tank drain, new resets and maintenances, such as the reset after the Lambda sensor replacement or DPF (Diesel Particulate Filter) replacement.

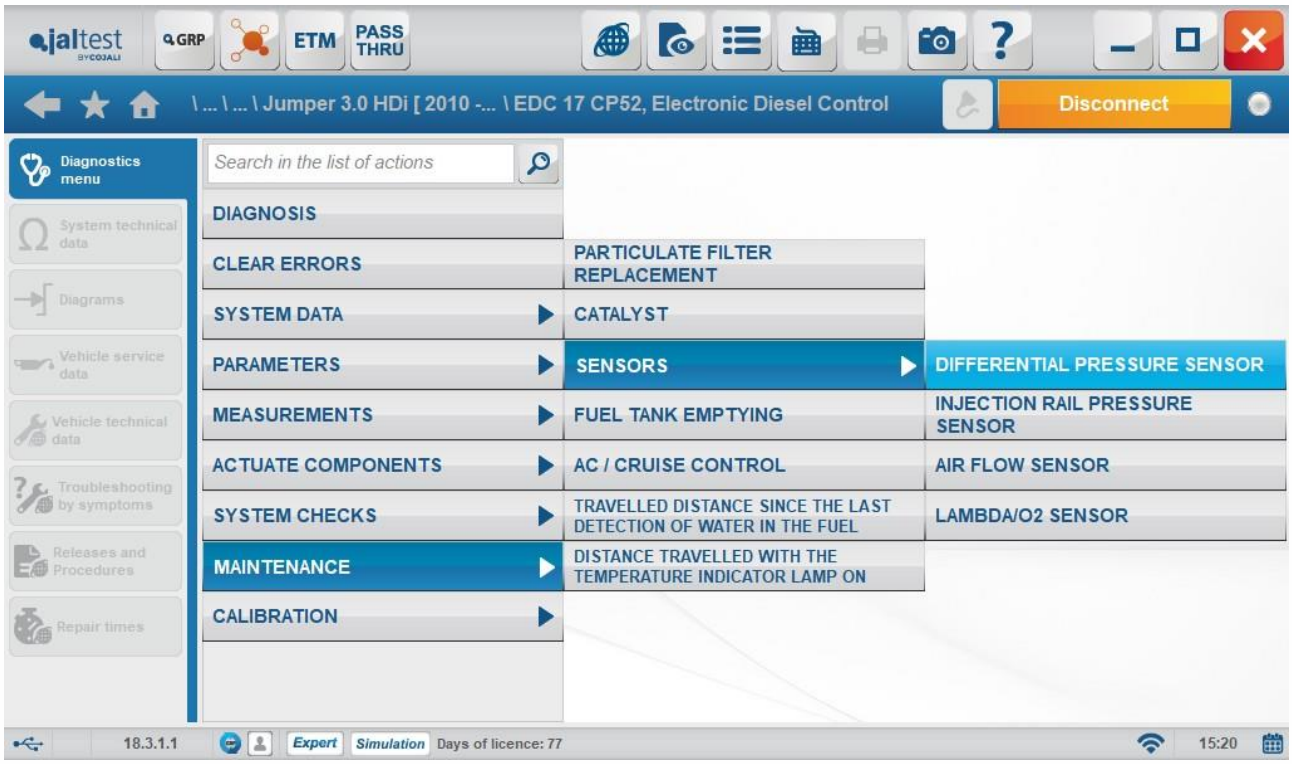

Image 12 MAINTENANCE menu in the EDC 17 CP52 system

3.10. Manufacturers

- Jaltest integrates influential innovations in all markets through the MANUFACTURERS routes. It is noteworthy the innovations listed below in Cummins and Allison, but 18.3 version also increases its coverage in brands such as BENDIX, CATERPILLAR, DETROIT DIESEL or NAVISTAR among others. We recommend you check the innovations of the Jaltest Soft US project.

3.11. Other brands

- Please, take into account that this document is just a summary of the most relevant information of this new version. For further information, please visit **Jaltest Report.**

3.11.1. Agrale

- Speed limit modification in MWM systems of Agrale vehicles, **EDC 7 C1 Euro 3 o Maxxforce 7.2/4.8 Euro 5**.

3.11.2. Ashok Leyland

- New EDC 17 CV54 (Electronic Diesel Control) and EDC 16 systems.

3.11.3. CAMC

- New EDC 17 CV44 (Electronic Diesel Control) /CV54 Hanma system.

3.11.4. Dongfeng

- New actuations of the **AdBlue/DEF ACU** (Aftertreatment Control Unit).

3.11.5. Ford Otosan

- Improvement in the control of references in the **EDC 7 EcoTorq Euro 5** system and maintenance control lamp reset and engine oil change.

3.11.6. Hino

- Engine control system **J05D**, operation data and new activations.
- Improvement in the control of references in **P11C, J05D/E, S05C, J07E** and **A09C** engines.

3.11.7. Isuzu

- New systems of the brand.
  - ISS (Idle Start Stop)
  - HSA (Hill Start Assist)
- Engine control system **RZ4E-TC**, system settings and configurations.

3.11.8. Mitsubishi Fuso

- New MCM 6R10 system and ISS (Idle Start Stop) system.

- **EDC 7 C4-6.6** (Electronic Diesel Control), DPF regeneration in **MR 4M4** and **4M50** engines.

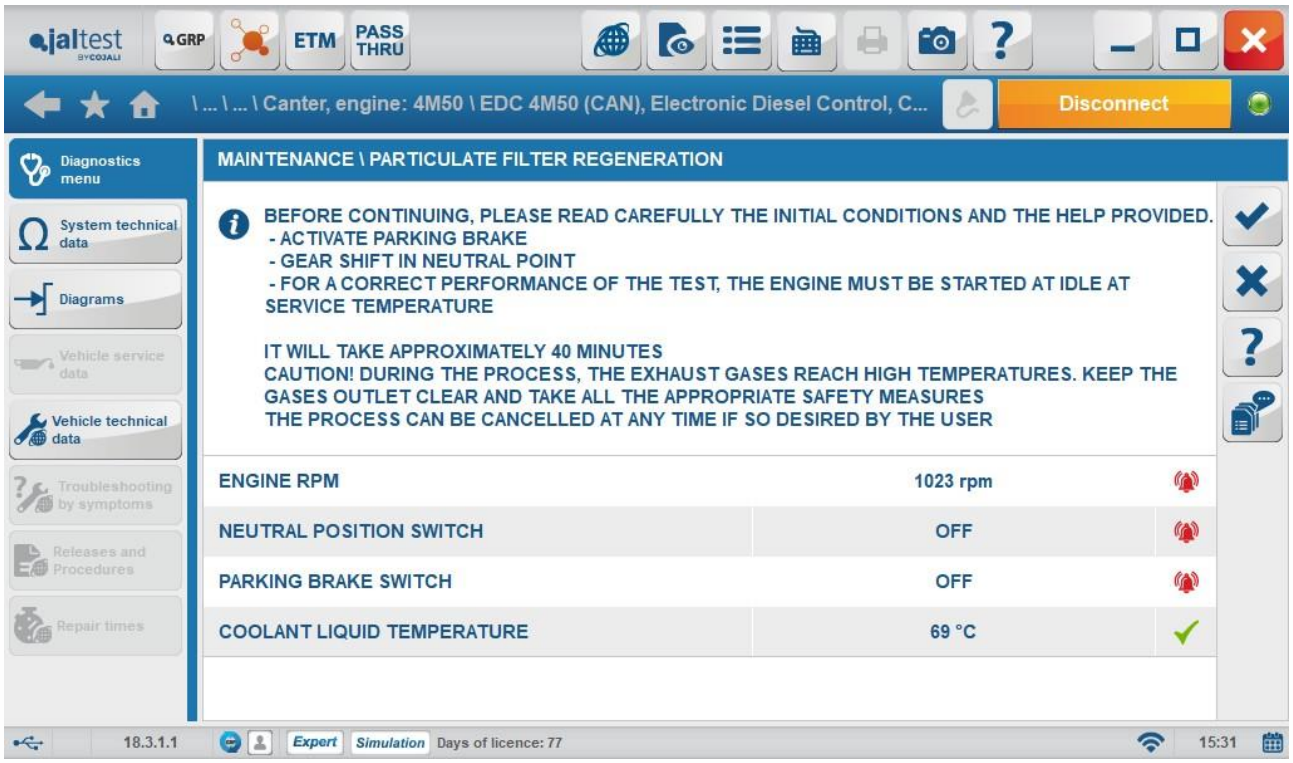

Image 13 Initial conditions of the particulate filter regeneration

4. TECHNICAL INFORMATION

This section lists some of the most important innovations in terms of technical information.

4.1. DAF

- **Technical data of the vehicle** in XF and CF Euro 6 models (New F7/BH Series) with MX11 and MX13 engine types. Procedures such as the AdBlue/DEF EAS-4 module filter change are included. The version also has **maintenance services** for all DAF Euro 6 models.
- **System Display** of the fuel circuit of the **ECS-DC6** (Engine Control System) in LF Euro 6 models.

4.2. MAN

- **Diagram** of CAN communication network in the TGX Euro 6 vehicle.

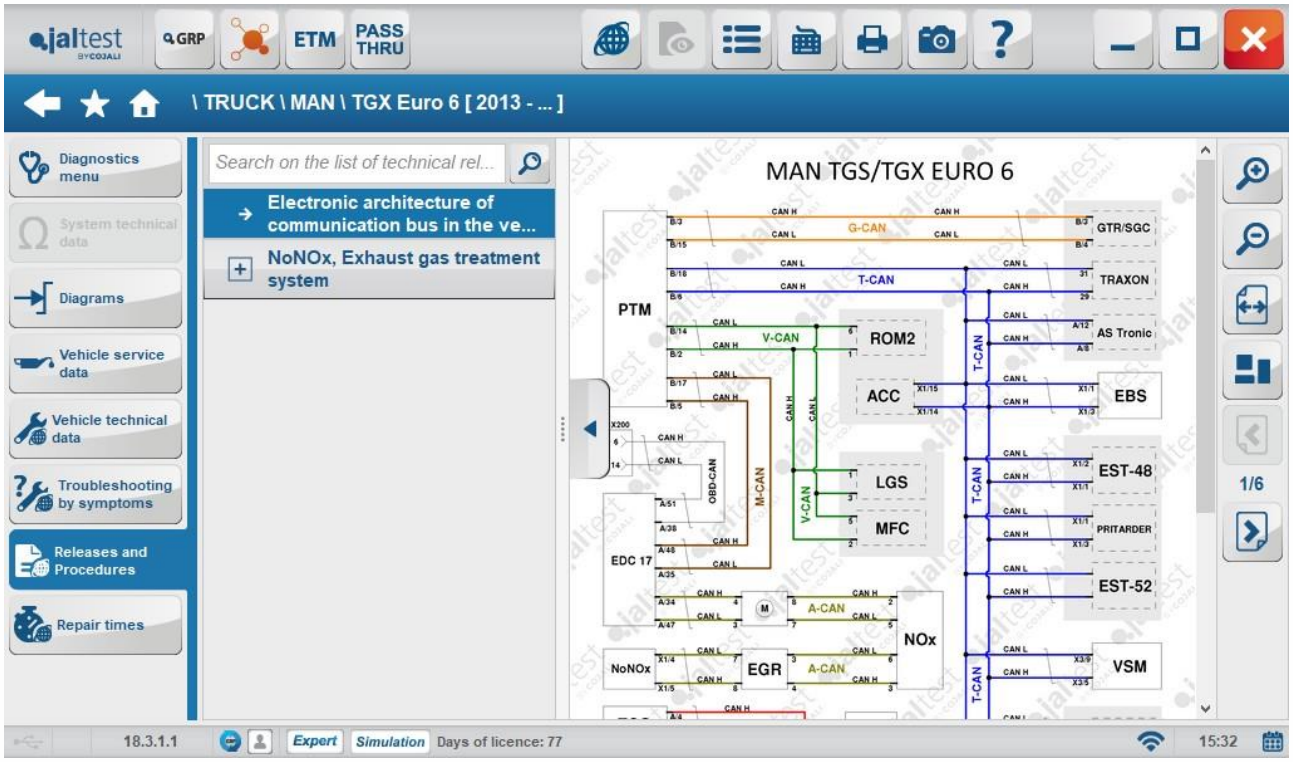

Image 14 CAN Architecture in MAN TGS and TGX Euro 6

4.3. Mercedes-Benz/Setra

- **System Display** of the **ESP 9 CEI** system in Sprinter.
- **Procedure** of the maintenance rest in the Vito [447] model.

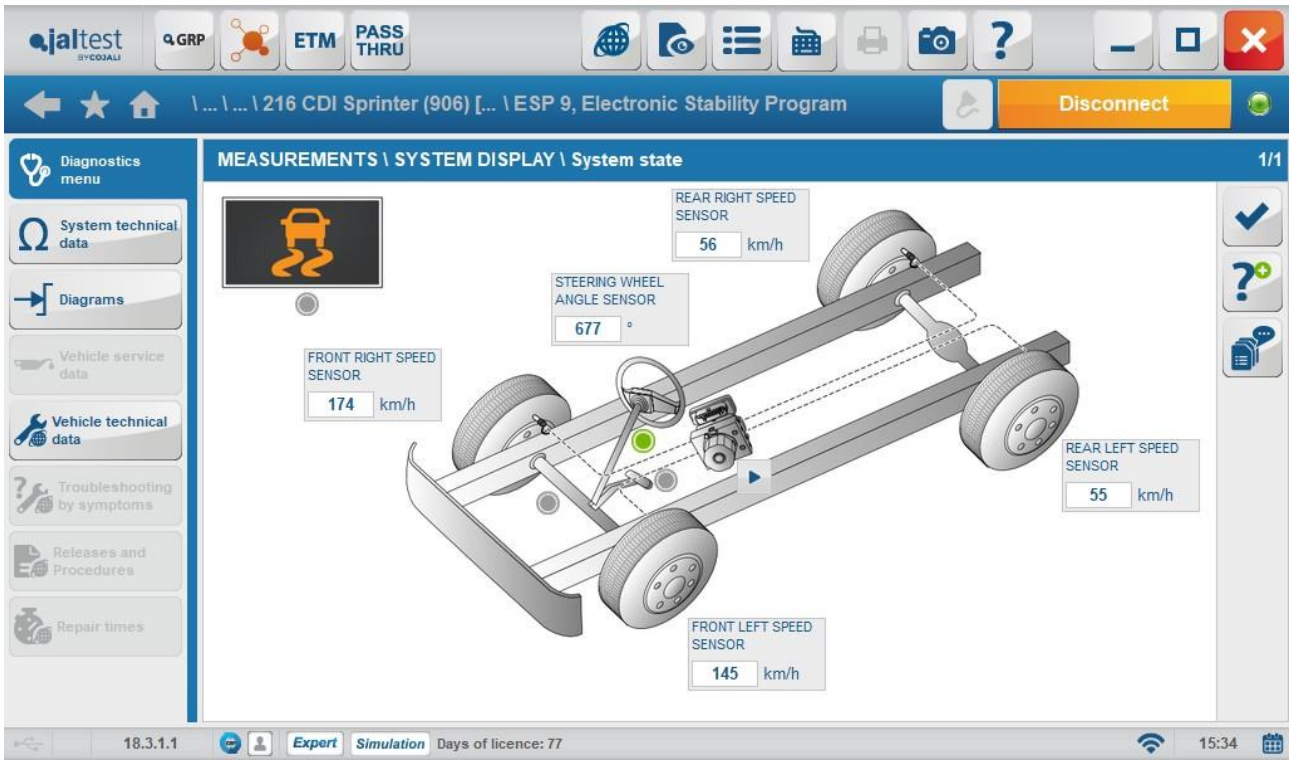

Image 15 System Display of the ESP 9 system in Sprinter

4.4. Renault

- **Fault Code Troubleshooting** in the **ECM** (Engine Control Module), **ACM** (Aftertreatment Control module) and **TECU** (Transmission Electronic Control Unit) systems in models with V3 technology.

4.5. Volvo

- **Manual diagnosis** in Volvo Euro 6 buses with V3 technology.

4.6. Wabco

- Wiring diagram configurations in buses for Wabco **EBS Gen3** systems and the advanced emergency braking system **OnGuard Plus**.

4.7. Other brands

- **Fault Code Troubleshooting** in **Isuzu** systems and new **wiring diagrams** configurations, for example in the **Aisin 465** transmission or in the **ABS/ASR** systems.
- **Fault Code Troubleshooting** in engine control systems in **Hino J05E, J08E...**
- **Calibration** or learning process of the change values in the **Duonic** transmission in **Mitsubishi Fuso**.

5. RELEVANT INFORMATION: NEW BRANDS, MODELS AND CABLES

In this section, we have taken into account global information of the Jaltest project, for all the markets and vehicle types.

5.1. Brands

The new brands in this version are:

- ASHOK LEYLAND, TATA, KARSAN and BLK in buses.
- CHEREAU and PSI in the manufacturers route.
- MULTICAR, HYDREMA and WAKER NEUSON in OHW vehicles and Construction equipment.

ISOBUS accesses have been created in agricultural vehicle.

5.2. Models

The most relevant models in this version are:

- **Fiat** Ducato 115 Multijet (2016 - ...) model
- **Ford** Transit 2.0 (2016 - ...) model
- **Isuzu** Turquoise Euro 6 bus model with 4HK1 engine.
- Old **Neoplan** bus models.
- **Otokar** Ulyso T Euro 6 bus model.
- **Higer** KLQ6932 / HGS9 bus model.
- **Iveco** Stralis Euro 6 [2016 - ...] models.
- **Mitsubishi Fuso** Super Great model with 6R10 engine.
- **UD Trucks** Condor model with GH7 engine.
- Models in **TATA** trucks and light commercial vehicles

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