



EW OBU 850

Telematic unit installation manual for technicians

DAF
IVECO
MAN
MERCEDES-BENZ
RENAULT TRUCKS
SCANIA
VOLVO TRUCKS

The contents of the installation manual for technicians

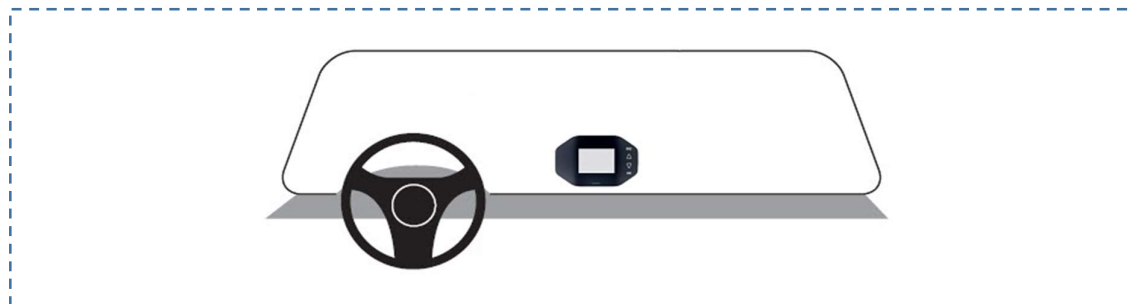
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1. EW OBU installation in the vehicle

The EW OBU shall be installed inside in the middle of the lower part of the windshield, the wipers in resting position or any other object must not obstruct the EW OBU and EW OBU must not obstruct the driver's view in any direction. The EW OBU can't be used in vehicles with metalized windshield, only on places where the windshield is not metalized.

Before mounting the EW OBU, clean the installation area. Remove the protective foil from the EW OBU screen and from the stripes. Stick the EW OBU on the cleaned area of the windshield. The buttons shall be on the right-hand side.



2. EW OBU connection to the vehicle

The EW OBU can be connected in two ways:

- A. **Basic connection – EW TRUCK BASIC**
To 24/12V socket / cigarette lighter
- B. **Fixed installation - reading of all vehicle operating values – EW TRUCK PRO**
Professional installation - FMS vehicle connection + tachograph

A. BASIC CONNECTION



EW OBU connected only via the power cable into the 24/12V cigarette lighter socket or fixed installation to power supply the vehicle

In this connection mode, the vehicle operating values are not read from the vehicle FMS!

B. FIXED INSTALLATION – READING OF ALL VEHICLE OPERATING VARIABLES

In this connection mode the EW OBU is connected to the vehicle's electrical installation. We use the supplied cables including the necessary connectors.

We connect the EW OBU cable harness to the FMS extension connector in vehicle and the tachograph.

The standardized FMS extension connector should be fitted to all Euro 6 trucks.

Note: In case the FMS extension connector is not in the vehicle, it must be ordered from the truck manufacturer.

Another condition is that in the FMS extension connector must be enabled for communication (active CAN BUS). In case it is not it necessary to have it activated by the vehicle manufacturer.

If communication in the FMS extension connector is not enabled the EW OBU will not read the operating information from the vehicle!



Basic schema of connection to the extension connector without a tachograph connection:

Note: for all connection types, the cable on the side of EW OBU must be screwed on by hand

3. List of required components and tools for FULL GPS installation

SUPPLIED MATERIAL		TOOLS AND SUPPLIES	
	EW OBU cable harness 3,5m. <i>PRINCIP EW OBU CABLE 3.5</i>		Insulating tape.
	Pin to FMS connector. <i>TE Connectivity 1-963746-1</i>		Tightening tapes.
	Connector latch (12 pin). <i>TE Connectivity 967632-1</i>		Key for tachograph disassembly.
	FMS connector 12 pin. <i>TE Connectivity 1-967627-1</i>		Dismantling contacts.
	Connector latch (18 pin) <i>TE Connectivity 967634-1</i>		Crimping tool.
	FMS DAF connector 18 pin. <i>TE Connectivity 1-967629-1</i>		TOOL SET
	Cable to the tachograph 4m. <i>PRINCIP TACHO CABLE 4</i>		Screwdrivers: flat- small, large crosses- small, big torx- 20, 25, 30
	Pin to the tachograph connector. <i>TE Connectivity 925596-2</i>		Metric Key: M8, M10, M13, M15
	Connector „C“ to the tachograph. <i>TE Connectivity 927367-1</i>		Pliers: Drill pliers Stripping pliers.
	Connector „D“ to the tachograph. <i>TE Connectivity 927368-1</i>		Other: breaking knife ...

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4. Overview of signals on the EW OBU cable harness

WIRE COLOR	DESCRIPTION
RED	Signal PWR_IN – „KL30“
VIOLET	Signal UAR, infoline D8
BLACK	Signal GND „KL31“
ORANGE	Signal CAN0_H
WHITE/ORANGE	Signal CAN0_L
BLUE	Signal CAN1_H to tachograph
WHITE/BLUE	Signal CAN1_L to tachograph

After installation, the cable from the EW OBU to the FMS extension connector in the vehicle, it is necessary to insert the pins into the attached FMS connector see the individual connection option, see point 5.



EW OBU cable harness 3,5m

5. Possible variants of the required cabling according to the type of connection

EW TRUCK BASIC	
Location of connection points:	Material:
Option 1	
Plugging into a cigarette lighter only or fixed installation to power supply the vehicle	Cable 2m Micro USB 3.0 to cigarette lighter connector EW OBU cable harness 3,5m

EW TRUCK PRO - CONNECTION FMS AND TACHOGRAPH	
Location of connection points:	Material:
Option 2	
FMS extension connector at the fuse box or behind the tachograph	EW OBU cable harness 3,5m Connector FMS 12pin Cable harness to the tachograph Connector "C" Connector "D" pins to connectors 4x

EW TRUCK PRO - CONNECTION FMS AND TACHOGRAPH ONLY FOR TRUCK OF DAF EURO 6	
Location of connection points:	Material:
Option 3	
FMS extension connector at the fuse box	EW OBU cable harness 3,5m Connector FMS DAF 18pin

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OPTION 1 – EW TRUCK BASIC

Plugging into a cigarette lighter only

Basic connection:



Or fixed installation to power supply of the truck.

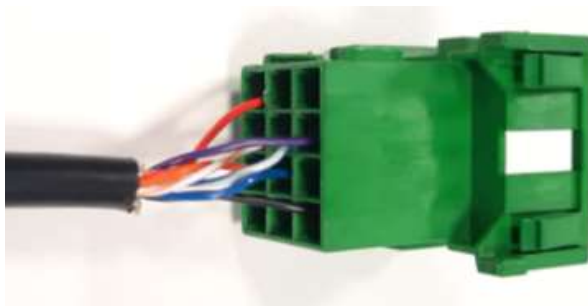
Only the power supply of the unit is connected, connection is possible via FMS extension connector or in fuse box see below chapter 9. Connection points on specific trucks with no extension FMS connector **but in this case it is always necessary to use a fuse 2A!**

All unconnected wires must be isolated by tape!

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OPTION 2 EW TRUCK PRO - CONNECTION FMS AND TACHOGRAPH

Required material:



EW OBU cable harness 3,5m + connector FMS 12pin

+

Cable harness to the tachograph + Connectors „C“, „D“ and 4x pins

Connecting the wires to the FMS connector:

POSITION FMS	POSITION NAME	UNIT CABLE FROM EW OBU	COLORS OF EACH WIRES
1	31 GND (-)	GND	BLACK
5	CAN1_High	CAN1_High	BLUE
8	CAN1_Low	CAN1_Low	WHITE/BLUE
6	CAN0_High	CAN0_High	ORANGE
9	CAN0_Low	CAN0_Low	WHITE/ORANGE
7	Tacho infoline D8	UAR	VIOLET
12	30 PWR (+)	PWR_IN	RED

Manufacturer and type of connector: TE CONNECTIVITY

Connector: FLA-STE-GEH2,8 12P

Pin: TAB 2.8x0.8 CONTACT CF SRC

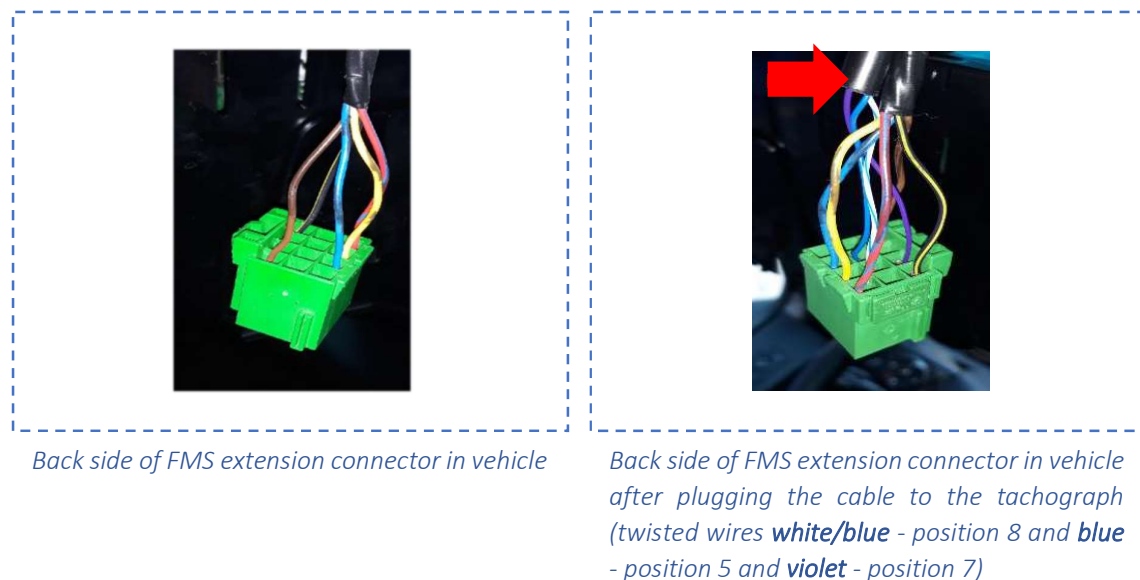
Note: For trucks where there is only CAN tachograph on the extension FMS connector (most often Scania), it is necessary to change the positions of the twisted wires **white / blue** and **blue** with **white / orange** and **orange** to comply with the rule **CAN0 - CAN engine** and **CAN1 - CAN tachograph**

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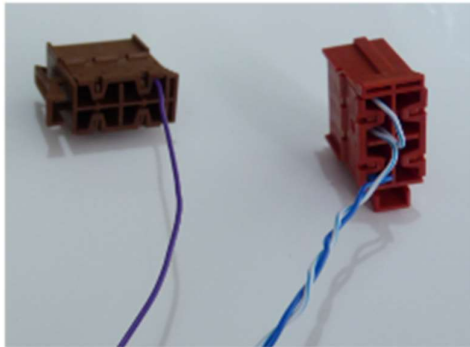
The next step is to connect the EW OBU cable harness with the tachograph. The cable harness to the tachograph is used for this purpose. We connect the cables through FMS extension connector in the vehicle, see below. In most new vehicles, the CAN of the tachograph is available in the FMS connector in positions 6 and 9, can be verified via Web Diagnostics, in this case it is not necessary to connect the wires CAN1_Low and CAN1_High of the cable harness to the tachograph with the tachograph. The UAR D8 signal must be connected in all cases.

View of the extension connector in the vehicle :



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After stretching the cable to the tachograph shorten the cable as needed and to crimp the pins and put the „C“ and „D“ connectors see below and plug into the tachograph.

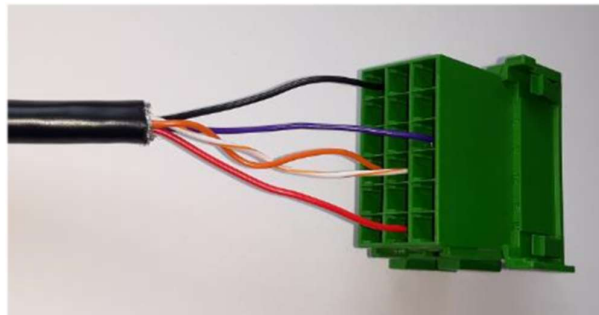


For more information on tachograph engagement see point **6. Connection EW OBU to tachograph**

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OPTION 3 EW TRUCK PRO - CONNECTION FMS AND TACHOGRAPH ONLY FOR TRUCK OF DAF EURO 6

Required material:



EW OBU cable harness 3,5m + connector FMS DAF 18pin

Connecting the wires to the DAF FMS connector:

POSITION FMS	POSITION NAME	UNIT CABLE FROM EW OBU	COLORS OF EACH WIRES
1	31 GND (-)	GND	BLACK
9	Tacho infoline D8	UAR	VIOLET
10	CAN0_High	CAN0_High	ORANGE
11	CAN0_Low	CAN0_Low	WHITE/ORANGE
17	30 PWR (+)	PWR_IN	RED

Manufacturer and type of connector: TE CONNECTIVITY

Connector: FLA-STE-GEH2,8 18P

Pin: TAB 2.8x0.8 CONTACT CF SRC

Attention: twisted wires white/blue and blue we have to cut and isolate them - in this case of connection are not needed or we can plug them into the connector, but warning from the back side of extension connector in vehicle connector must not be fitted with any wire.



Pin to connector

Connector latch

DAF FMS connector 18pin

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6. Connection EW OBU to tachograph

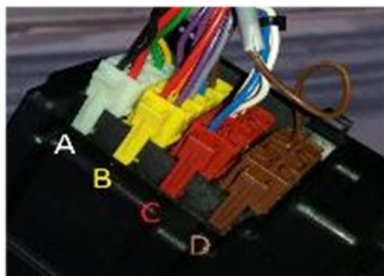
In case of request for tachograph connection, when the signals are not on the FMS extension connector (vehicles DAF), it is **necessary to connect the cable to the tachograph (wires CAN1_L, CAN1_H a UAR) directly to the tachograph.** (the CAN of the tachograph can be available in the FMS connector in positions 6 and 9, can be verified via Web Diagnostics).

The connection below:

Basic connection is used for **Siemens VDO** and **Stoneridge tachograph**. A tachograph version is required for functional remote archiving, required is about **Siemens VDO (version 1.3a and higher)** and **Stoneridge (SE5000 and higher)**. For more information on supported tachograph types, see *Web diagnostics – Service Manuals EVA OBU - Supported tachographs for remote download ver 1.2..pptx*

It is necessary to have enable downloading data on the tachograph for CAN line (performed by AMS - Authorized Metrology Center).

The rear side of tachograph, connect only to connector "C" and "D" description of wiring see below:



The positions and colors of the connectors are identical for the **Siemens VDO** and **Stoneridge** tachographs.

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Connector „C“ (red) - remote download (remote archiving of the tachograph):



CONNECTION:

position **C5** = **blue** - signal CAN1_H

position **C7** and **C8** = **white/blue** - signal CAN1_L

A jumper is used between positions C7 and C8 (activation of the internal resistor) only if we measure between CAN_L and CAN_H 120Ω in the case of 60Ω we do not connect the jumper !!!

Connector „D“ (brown) - info-line (D8, connect if requested reading of card driver and AETR):



CONNECTION:

position **D8** = **violet** - signal UAR

Note: If there is any wire in the tachograph at the connector „C“ and „D“ in the positions that are fitted with the our cabling – (Cable harness to the tachograph) CAN1_L, CAN1_H and the D8 infoline, We need to connect these wires to our cabling, reinstall them with attached the pins and plug it into the connector according to its position.

Attention: If the tachograph is sealed and due to installation it is necessary to break this seal, it is necessary to inform the customer to have the tachograph to seal to AMS - Authorized Metrology Center.

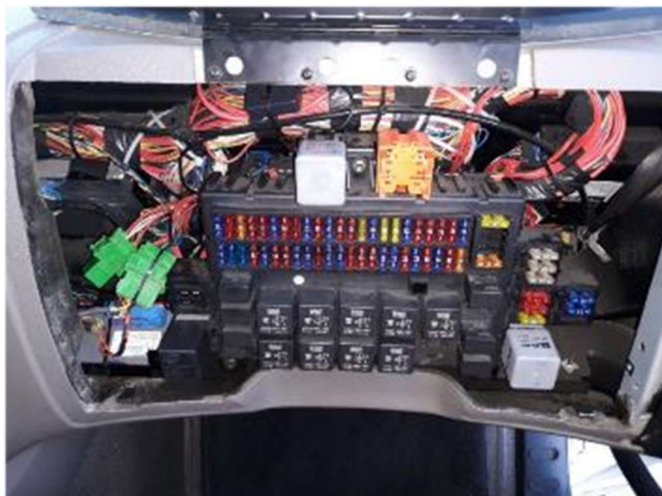
7. Location of the extension FMS connector on specific trucks




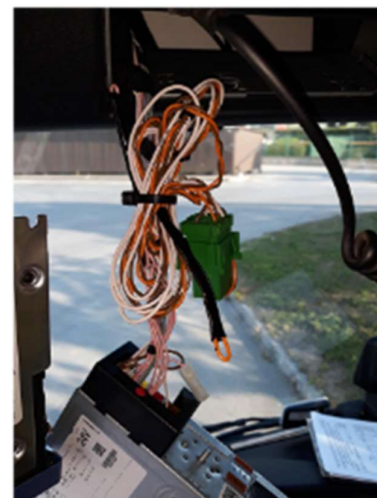
DAF

Where to find: Fuse box on the passenger side – **green** connector

FMS	Connection according to FMS standard = DAF/FMS connector - 18ti pin.
FMS TACHO	All data – CAN motor + CAN tachograph + AETR D8 in connector FMS.
TACHO AETR D8	



	<h1>MAN</h1>	
Where to find: Behind the tachograph - green connector X5080/ST (BU without tachograph)		
FMS connector	In the FMS connector = (FMS connector - 12-pin) CAN engine + CAN tachograph - tachograph mainly only for new vehicles. If the CAN tachograph is not in the FMS connector (can be verified via web diagnostics), it is necessary to connect directly to the tachograph connector "C".	
CAN TACHO	If it is not in the FMS connector, connector "C" must be connected directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO AETR D8	Connect connector "D" directly to the tachograph.	Infoline, reading AETR = connector „D“ pin D8





SCANIA

Where to find: Fuse box on the passenger side – **green** connector C137

FMS connector

In the FMS connector = (FMS connector - 12-pin) CAN engine + CAN tachograph - CAN engine mainly only for new vehicles. If the CAN motor is not in the FMS connector (**can be verified via web diagnostics**), it is necessary to connect directly in the fuse box (CAN_High = yellow, CAN_Low = white) via CAN Sniffer (photo below).

CAN ENGINE: CAN_High = **yellow**
CAN_Low = **white**

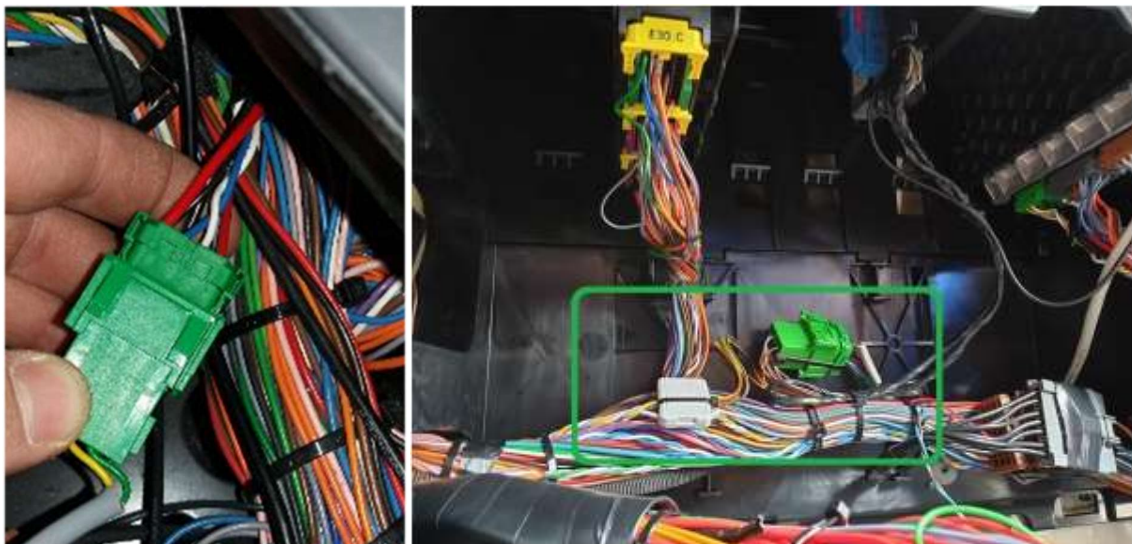
CAN TACHO

Connection according to FMS standard = FMS connector - 12 pin or connector "C"

TACHO AETR D8

Connect **connector "D"** directly to the tachograph.

Infoline, reading AETR = **connector „D“** pin D8





MERCEDES-BENZ

Where to find: Behind the tachograph - **green** connector

FMS connector

In the FMS connector = (FMS connector - 12-pin) CAN engine + CAN tachograph - tachograph mainly only for new vehicles. If the CAN tachograph is not in the FMS connector (can be verified via web diagnostics), it is necessary to connect directly to the tachograph **connector "C"**.

CAN TACHO

If it is not in the FMS connector, **connector "C"** must be connected directly to the tachograph.

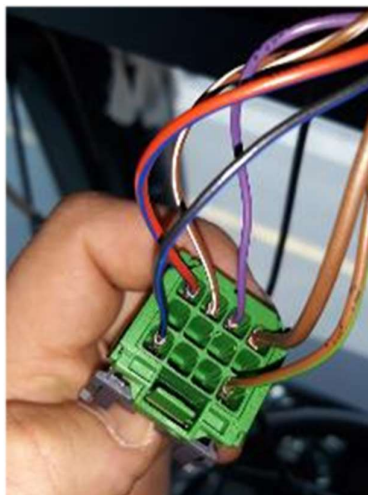
CAN_High = **connector „C“ pin C5**

CAN_Low = **connector „C“ pin C7**

TACHO AETR D8

Connect **connector "D"** directly to the tachograph.

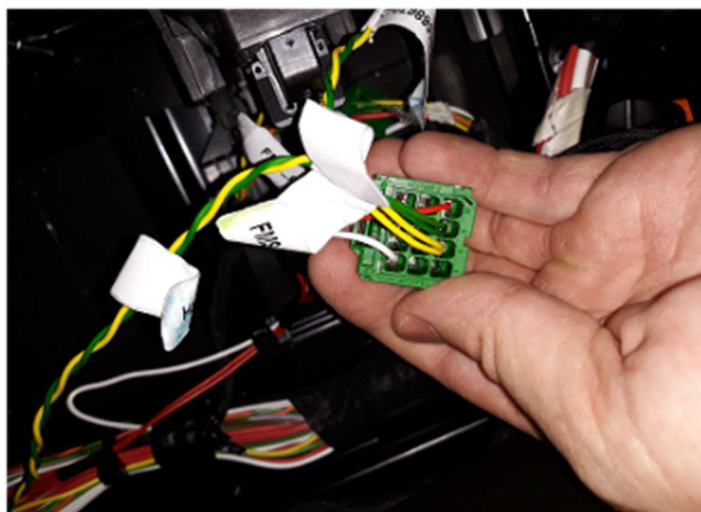
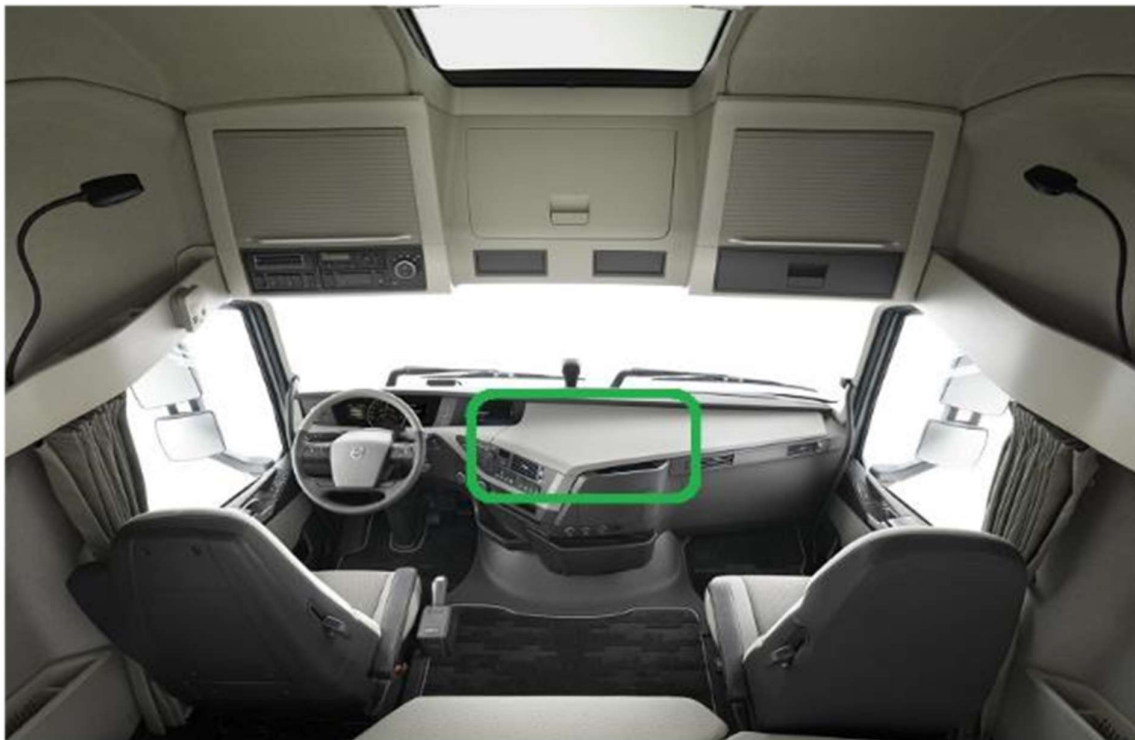
Infoline, reading AETR = **connector „D“ pin D8**





VOLVO TRUCKS

Where to find: Under the fuse box in the center panel - green connector		
FMS connector	In the FMS connector = (FMS connector - 12-pin) CAN engine + CAN tachograph - tachograph mainly only for new vehicles. If the CAN tachograph is not in the FMS connector (can be verified via web diagnostics), it is necessary to connect directly to the tachograph connector "C" .	
CAN TACHO	If it is not in the FMS connector, connector "C" must be connected directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO AETR D8	Connect connector "D" directly to the tachograph.	Infoline, reading AETR = connector „D“ pin D8





RENAULT TRUCKS

Where to find: Next to the steering wheel under the air conditioning control panel – **green** connector

FMS connector

In the FMS connector = (FMS connector - 12-pin) CAN engine + CAN tachograph - tachograph mainly only for new vehicles. If the CAN tachograph is not in the FMS connector (can be verified via web diagnostics), it is necessary to connect directly to the tachograph **connector "C"**.

CAN TACHO

If it is not in the FMS connector, **connector "C"** must be connected directly to the tachograph.

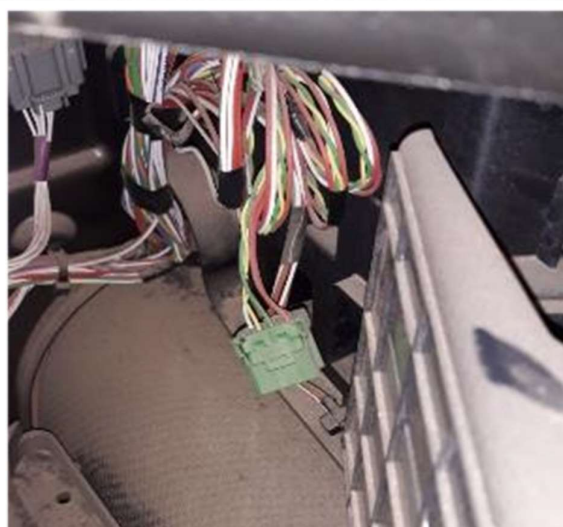
CAN_High = **connector „C“ pin C5**

CAN_Low = **connector „C“ pin C7**

TACHO AETR D8

Connect **connector "D"** directly to the tachograph.

Infoline, reading AETR = **connector „D“ pin D8**





IVECO

Where to find: Behind the tachograph – **green** connector

FMS connector

In the FMS connector = (FMS connector - 12-pin) CAN engine + CAN tachograph - tachograph mainly only for new vehicles. If the CAN tachograph is not in the FMS connector (can be verified via web diagnostics), it is necessary to connect directly to the tachograph **connector "C"**.

CAN TACHO

If it is not in the FMS connector, **connector "C"** must be connected directly to the tachograph.

CAN_High = **connector „C“ pin C5**

CAN_Low = **connector „C“ pin C7**

TACHO AETR D8

Connect **connector "D"** directly to the tachograph.

Infoline, reading AETR = **connector „D“ pin D8**



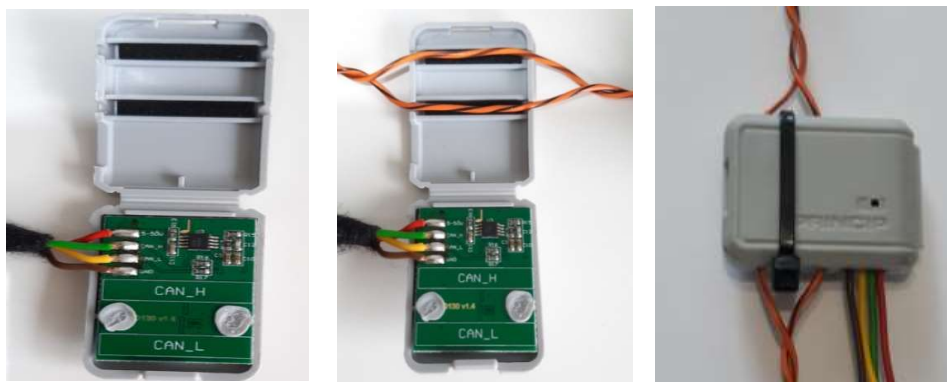
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8. Installation of EW OBU with no extension FMS connector or FMS connector does not active CAN-BUS

It is necessary to note that this connection is not standard and we install only at the express request of the customer.

The contactless CAN reader must be connected to the EW OBU cable harness. The contactless CAN reader is used to connect the CAN-BUS in the vehicle. The CAN-BUS wires must be inserted into the slots at the top of the reader (CAN_L - upper groove, CAN_H - lower groove), click and secure with a cable tie, see below. For CAN-BUS connection points according to the vehicle type see – 9.

Connection points on specific trucks with no extension FMS connector. (if necessary, for more detailed instructions see *Web diagnostics – Service Manuals EVA OBU - Basic instructions and connection points on individual trucks.pptx*)



Next, the EW OBU cable harness must be connected to the tachograph using connectors C,D and a cable to the tachograph. For more information on connecting the tachograph, see - 6. **Connection EW OBU to tachograph**

After connecting the CAN-BUS of the vehicle and the tachograph, connect the EW OBU cable harness to the power points in the vehicle via a 2A fuse. Then connect the EW OBU, configure and test via Web diagnostics see 10. **The Diagnostics of EW OBU**

Connecting the EW OBU cable harness:

EW OBU cable harness		Contactless CAN reader	Tachograph	
Signal	Colour	Signal	Connector "D"	Connector "C"
PWR_IN	RED	RED		
GND	BLACK	BROWN		
Infoline D8	VIOLET		Position 8	
CAN0_L	WHITE/ORANGE	BROWN/ORANGE		
CAN0_H	ORANGE	ORANGE		
CAN1_L	WHITE/BLUE			Position 7
CAN1_H	BLUE			Position 5

9. Connection points on specific trucks with no extension FMS connector

 <h1>DAF</h1>		
Connection without FMS connector		
Where to find:		Comment
Power supply	In fuse box.	31 GND (-), 30 PWR (+), 15 IGN (+)
CAN-BUS	In fuse box connect via CAN-Sniffer.	CAN_Low = YELLOW CAN_High = BLUE
CAN TACHO	Connect directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO D8		Infoline, reading AETR = connector „D“ pin D8

 <h1>MAN</h1>		
Connection without FMS connector		
Where to find:		Comment
Power supply	We find connection points on the back of the fuse box with metric screws M10 a M8.	M8 = 31 GND (-), M10 = 30 PWR (+), 15 IGN (+)
CAN-BUS	In fuse box connect via CAN-Sniffer.	CAN_Low = BLUE/WHITE CAN_High = BLUE/RED
CAN TACHO	Connect directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO D8		Infoline, reading AETR = connector „D“ pin D8

 <h1>SCANIA</h1>		
Connection without FMS connector		
Where to find:		Comment
Power supply	We find connection points on the back of the fuse box.	31 GND (-), 30 PWR (+), 15 IGN (+)
CAN-BUS	In fuse box connect via CAN-Sniffer.	CAN_Low = WHITE CAN_High = YELLOW
CAN TACHO	Connect directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO AETR D8		Infoline, reading AETR = connector „D“ pin D8



MERCEDES-BENZ

Connection without FMS connector		
Where to find:		Comment
Power supply	Under the fuse box, we find connectors where we can connect. White connector X18 = 31 GND (-). Grey connector X17 = left side 30 PWR (+), right side 15 IGN (+).	31 GND (-), 30 PWR (+), 15 IGN (+)
CAN-BUS	In fuse box connect via CAN-Sniffer.	CAN_Low = YELLOW or GREEN CAN_High = BLUE
CAN TACHO	Connect directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO AETR D8		Infoline, reading AETR = connector „D“ pin D8



VOLVO TRUCKS


Connection without FMS connector		
Where to find:		Comment
Power supply	From the right side of the fuse box, we find a switchgear where we can connect.	31 GND (-), 30 PWR (+), 15 IGN (+)
CAN-BUS	In fuse box connect via CAN-Sniffer.	CAN_Low = GREEN CAN_High = YELLOW
CAN TACHO	Connect directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO AETR D8		Infoline, reading AETR = connector „D“ pin D8



RENAULT TRUCKS

Connection without FMS connector		
Where to find:		Comment
Power supply	There is a gray CB8 connector (30 PWR, 15 IGN) on the back of the fuse box.	31 GND (-), 30 PWR (+), 15 IGN (+)
CAN BUS	In fuse box connect via CAN-Sniffer.	CAN_Low = GREEN CAN_High = YELLOW
CAN TACHO	Connect directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO AETR D8		Infoline, reading AETR = connector „D“ pin D8

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 <h1>IVECO</h1>		
Connection without FMS connector		
Where to find:		Comment
Power Supply	We find connection points on the back of the fuse box.	31 GND (-), 30 PWR (+), 15 IGN (+)
CAN BUS	In fuse box connect via CAN-Sniffer.	CAN_Low = GREEN CAN_High = WHITE
CAN TACHO	Connect directly to the tachograph.	CAN_High = connector „C“ pin C5 CAN_Low = connector „C“ pin C7
TACHO AETR D8		Infoline, reading AETR = connector „D“ pin D8

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10.The Diagnostics of EW OBU

Diagnostics is required to configure the EW OBU and to check the functions of the EW OBU. **It must be done after each installation.**

Diagnostics is available via the web interface diag.princip.cz for registered users with assigned credentials (username and password).



The login form is located on a light gray background. It features a blue button labeled "New user" at the top left. Below it, the "Username" label is followed by a white input field containing the placeholder text "Username". Underneath, the "Password" label is followed by a white input field containing the placeholder text "Password". At the bottom left of the form is a blue button labeled "Log in".

NEW (NOTE REGISTERED) USER

New user without an account (without credentials) must register using a registration form (click the button **"New user"** on the main screen to open the form).



The registration form is located on a light gray background. It features a blue button labeled "New user" at the top left. Below it, the "Name:" label is followed by a white input field. Underneath, the "Surname:" label is followed by a white input field. Below that, the "E-mail:" label is followed by a white input field. Then, the "Phone number:" label is followed by a white input field. Finally, the "Company name:" label is followed by a white input field. At the bottom left of the form is a blue button labeled "Register".

Recommended: Diagnostics is available in English version only => if started in Google Chrome you can use automatical translation to your native language using the icone in the right part of the URL.



The screenshot shows a web browser window with the address bar displaying the URL "https://krang.princip.cz/mamut/diagnostika/units?unit=S856#&unit_cd=". The page title is "Diagnostics update". Below the title, there is a search bar with the placeholder text "search for unit..." and a "Search" button. Below the search bar, there is a "CD code" input field. The user's email address "a@eurowag.com" is visible in the top right corner of the page.

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GENERAL RULES

After successful login the homepage with following options will appear:

- „**Search for unit...**“: enter Serial Number (S/N) of the EW OBU (in format e.g.: S850A0xxxx) and press the button **“Search”**
- „**CD code**“: will be displayed on the unit display by holding the up button or in the MENU under the last item.
- „**Update**“: is used for page update
- „**Service manuals**“: to press the button will open storage with all available instructions and schemes for installing all types of units including EW OBU
- „**Diagnosed units**“: to press the link will display history of previously diagnosed EW OBU (if available)

Diagnosics
update

Search for unit...

Search

CD code

admin ▾

Contact: diag@princip.cz, +420 735 762 681

Service Manuals

Diagnosed units

TEST INSTRUCTIONS

For successful completion of all selected and started tests it is extremely important to read and follow all test instructions stated in the header of each test!

Key on
(before 2 hours)

Select test type and follow the instructions

- OBU connected to the cigarette lighter (Accelerometer):
 - press "Run the test" button to confirm selected value.
- KL15 (voltage behind ignition on):
 - switch the key on and run the test.
- OBU connected to the tachograph (selected type):
 - the unit will be configured
 - "Key on" test and OBU connection to the tachograph will be evaluated based on engine speed
 - connect the unit to the selected tachograph type
 - switch the key on and press "Run the test" button

Run the test

Select test type ▾

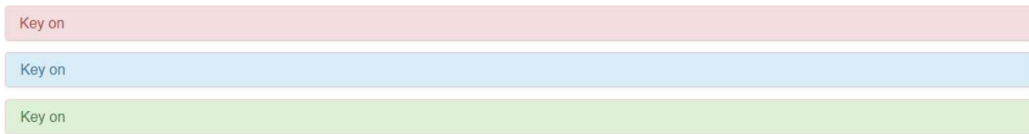
Cancel

THREE-COLOR RULE

Test status/result by color:

- **RED**: test failed (or mandatory test if the test has not been run yet)
- **BLUE**: test in progress (necessary **update** or **reload** page until the test is completed)
- **GREEN**: test/configuration successfully completed

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Important: to see current data you must constantly update Diagnostics.

=> click „update“ or „reload“ button!

Diagnostics
update

Search

lang@princip.cz ▾

Key on
(before 9 minutes)

Abort the test

Waiting for connection with the unit, reload the page

LIST OF AVAILABLE CONFIGURATION/TEST OPTIONS

Diagnostics
update

Search

admin ▾

Contact: diag@princip.cz, +420 735 762 681

Service Manuals

Diagnosed units

v1.6

DESCRIPTION OF INDIVIDUAL TESTS OR CONFIGURATIONS

„Green“ and „red“ rules described in the text below apply equally to all tests.

KEY ON

The “Key on” test (based on selected type of connection) is used as:

- standalone check of communication with the EW OBU
- standalone check of the voltage behind the key, the GPS signal and the still power supply
- combination of simple “Key on” test and configuration + check the data reading from Info line D8 on the VDO/Continental or Stoneridge tachograph

Brief description of expected behaviour based on selected type of connection is described in the text below.

EW OBU connected to the cigarette lighter (Accelerometer)

Button “Run the test” starts EW OBU communication test. Selected value “OBU connected to the cigarette lighter (Accelerometer)” is saved for further processing.

The screenshot shows a web interface with a 'Run the test' button and a dropdown menu set to 'OBU connected to the cigarette lighter (Accelerometer)'. Below the buttons is a 'Cancel' button. At the bottom, a green status bar displays the text: 'TEST - OK - 2019-06-26 15:39:05 - admin'.

KL15 (voltage behind ignition on)

The basic EW OBU test includes check of:

- the still power supply “KL30”,
- the voltage behind the key “KL15”,
- the GPS signal.

The screenshot shows the 'Run the test' interface with the dropdown set to 'KL15 (voltage behind ignition on)'. Below the buttons is a 'Cancel' button. A green status bar at the bottom displays: 'TEST - OK - 2019-06-26 09:52:59 - admin'. Below this, a table shows test results:

Key on test	key on
GPS	GPS position measured, number of satellites: 9
S	OK GPS=9 u=3 A=2.2.2 APN=princip cz(-) alive=3h aux=nmea id=(-) SN=5 FW=7.1.2.12 vwd10/0ff 158 2251000m MIL=0 service-km -d

Test completed successfully

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Run the test

KL15 (voltage behind ignition on) ▼

Cancel

TEST - ERROR - 2019-07-08 12:33:29 - admin

Key on test	Key off
-------------	---------

KL15 - test failed (it is necessary to check the voltage KL30, KL15 and GPS signal)

EW OBU connected to the tachograph (D8 – Stoneridge or D8 – VDO/Continental)

Test is used to:

- configure the unit,
- check of data reading from Info line D8, AETR (connector D, position 8) on the selected tachograph type; within this test the “**Key on**” test is executed and evaluated (during this test, the key is activated by the engine speed - the vehicle must be started)

Key on (EW OBU connected to the tachograph)

Run the test

OBU connected to the tachograph (D8 - Stoneridge) ▼

Cancel

TEST - OK - 2019-07-02 11:10:58 - admin

Key on test	key on
GPS	GPS position measured, number of satellites: 9
S	OK GPS=9 u=3 A=2,2,2,2 APN=princip.cz(-) alive=3h aux=nmea id=(-) SN=5 4(3 FW=7.1.2.12 vwd10/off: 15l 2261000m MIL=0 service-km --d
DTCO UAR	function verified

Test completed successfully

Run the test

OBU connected to the tachograph (D8 - VDO/Continental) ▼

Cancel

TEST - ERROR - 2019-06-26 20:26:22 - : @eurowag.com

Key on test	key off
GPS	GPS position measured, number of satellites: 20
S	OFF GPS=20 u=1 A=0,0,0,0 APN=princip.cz(-) alive=0m aux=sh uar=dtco(5h) aux2=sh id=uar(-) SN=S8 iA 9 FW=7.1.3.5 fms/off: total=81411100ml
DTCO UAR	function verified

Test failed (it is necessary to check the voltage KL30, D8 connection, engine running and GPS signal)

v1.6

The „Key off“

The basic EW OBU test that checks the voltage behind the key.

Key off
(before 1 minute)

- Switch the key off

Run the test

Cancel

TEST - OK - 2019-06-26 20:12:48 - z i@ei .om

Key off test key off

S OFF GPS=20 u=1 A=0,0,0,0 APN=princip.cz(-) alive=0m aux=sh uar=dtco(5h) aux2=sh id=uar(-) SN=St A FW=7.1.3.5 fms/off: total=81411100ml

Test completed successfully

Key off
(before 10 seconds)

- Switch the key off

Run the test

Cancel

TEST - ERROR - 2019-06-18 11:16:10 - z a@eurowag.com

Key off test key on

S OK GPS=16 u=3 A=0,0,0,0 APN=princip.cz(-) alive=0m aux=sh uar=dtco(0s) aux2=sh id=uar(1) SN=S856A 2 FW=7.1.3.5 fms/off: 96% total=76403137ml 323615605m 1779rpm 96C 24400kg

The test failed (make sure the engine is off and try again, it may take a while for the key to fall off)

Test „CANO“

The „CANO“ test configures and tests reading of connected CAN-BUS or tachograph data – proper connection type must be selected for succesful testing:

- **FMS** test type: only FMS data are available on CAN BUS - tachograph is not connected;
 - **FMS + Tachograph download** test type: FMS data and tachograph data should be available on CAN BUS;
- If the tachograph data is not available, connect the tachograph to the second CAN interface (CAN1), select and run following test „tachograph download from CAN1“.

v1.6

CAN0

Select test type and follow the instructions

* the unit will be configured

- switch the key on

Run the test

Select test type

Select test type

FMS

FMS + Tachograph download

CAN0
(before 2 hours)

Select test type and follow the instructions

* the unit will be configured

- switch the key on

Run the test

FMS

Cancel

TEST - OK - 2019-06-26 09:58:48 - admin

Key on test	key on
testcan for fms, can 0	Ok set 320 kBd, active
pti	fuel_type 8 obd.c0 dist 1449 km obd.c0 vel 2 km/h gps

Test completed successfully

CAN0 – FMS + Tachograph download

Run the test

FMS + Tachograph download test

Cancel

TEST - OK - 2019-07-31 07:45:13 - i

Key on test	key on
DTC	Tachograph detected, download will be working
pti	fuel_L 63.1 % fms.c0 sa39 tot_L 12451 095 l fms.c0 sa0 dist 45324.105 km fms.c0 sa238 vel 66.88 km/h fms.c0 sa39 rpm 1018 rim fms.c0 sa0 load 83 fms.c0 sa0 drvst.driving/short_break card 1/0 uar iddrv.st login key (430 - 2 test.CZ (1002 - 002** type fco src uar cc:active fms.c0 sa39 enghrs 715 95 h fms.c0 sa0 vehhrs 257.8 h fms.c0 sa39 to_service 238 days 53675 km fms.c0 sa39 sumfuel_L 12391.204588 l fms.c0 sa0 brake 0 % acc 0 % weight_sum 0 l (?+?) fms.c0 sa39 weight_gross 241 fms.c0 sa11

Test completed successfully

Key on test	key on
DTC	Interface is not working, no CAN line traffic detected.
pti	Fuel oriand len not found, or invalidated values detected (INV):

priv_arc	none
fuel	5.14 km/h gpm
priv	0

The test failed (no data is read from the CAN BUS, check the connection)

DTC	FMS detected, tachograph did not respond – to enable tachograph download make the connection directly to the tachograph via CAN1
-----	----------------------------------------------------------------------------------------------------------------------------------

The test failed (on the CAN line data only from the FMS, to download the tachograph it is necessary to connect the second CAN directly to the tachograph)

v1.6

Test „TACHOGRAPH DOWNLOAD FROM CAN1“

The „tachograph download from CAN1“ test is used to test tachograph download connected via CAN1.

tachograph download from CAN1

(before 2 hours)

- switch the key on

Run the test

Cancel

TEST - OK - 2019-06-26 16:38:31 - admin

Key on testkey on

DTC

Tachograph detected, download will be working

Test completed successfully

tachograph download from CAN1

(2019-05-29)

- switch the key on

Run the test

Cancel

TEST - ERROR - 2019-05-20 18:27:13 - z i@eu xm

Key on testkey on

DTC

Interface is not working, no CAN line traffic detected.

Test failed (it is necessary to check connection, if everything is OK, the tachograph does not support remote archiving or does not active communication over the CAN line)



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