
Instruction

VCU update

Translation of the document

Publisher

Designwerk Technologies AG

www.designwerk.comMember of the Volvo Group

Validity

This manual only applies to the units listed in the following table:

Type	Model	Version
E-LKW	LOW CAB	MK2
E-LKW	LOW CAB	MK3

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1 Safety regulations and information**1.1 Designwerk service portal**

The following documents are available on the Designwerk service portal for download:

	Safety instructions and warnings	DW_009BAISIH
	List of abbreviations	DW_009BAIAKV
	Designwerk Imprint	DW_009BAIIPM
	Determining which VCU-software to use	DW_DWC009ALTCUS

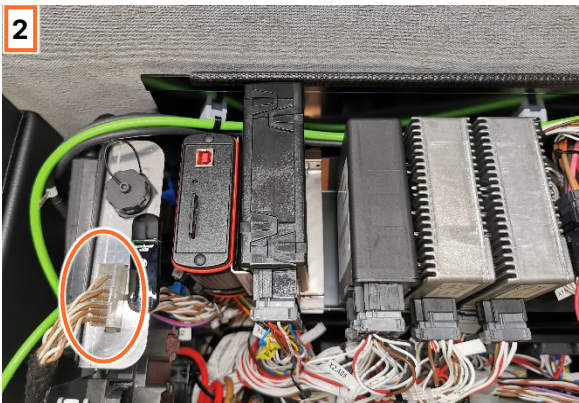
2 VCU update

2.1 Required materials



A	PCAN dongle	B	Verbindungskabel zur CAN-Schnittstelle der TTC
	PC with the current PCAN dongle driver		

2.2 Establishing a connection



1	LV-fuse box	2	CAN connected to interface
3	Ignition lock with positions		

2.3 Establishing a CAN-connection



The update described in this document may only be carried out by instructed partner garages.

Prerequisites for the download



- To download the software, the vehicle, device, etc. must be in a safe state, as the controls will be disabled!
- No HV may be connected during the download!
- The ignition must be turned to position 0 and then to position 2 (3).

1 Plug the connection cable into the CAN interface of the E-Truck (2). It is located in the LV fuse box (1) behind the driver's seat, see figure on the left with cover and figure on the right without cover.

2 Connect the PCAN dongle to the PC and to CAN 0 of the connection cable.

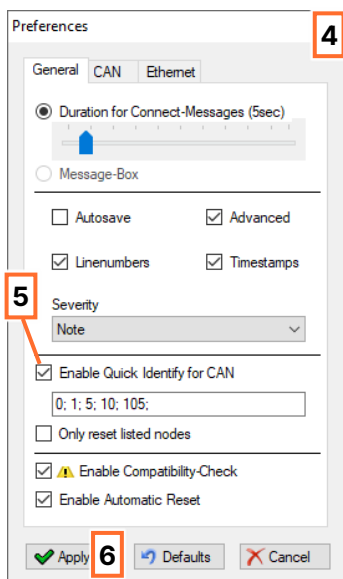
3 Make sure that the CAN connection is not being used by other software (close other gateways, programs, etc.).

4 Supply the TTC with voltage (ignition in position 2).

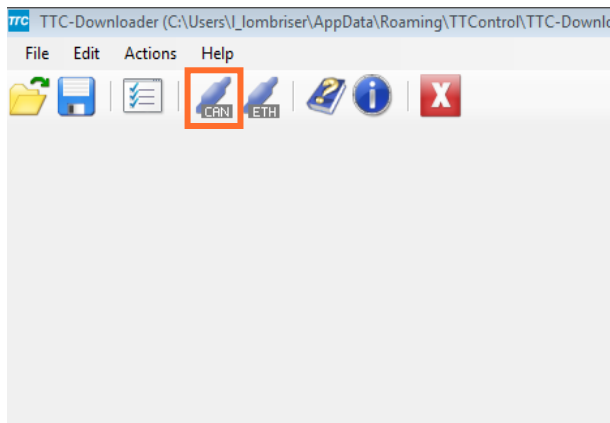
2.4 Updating

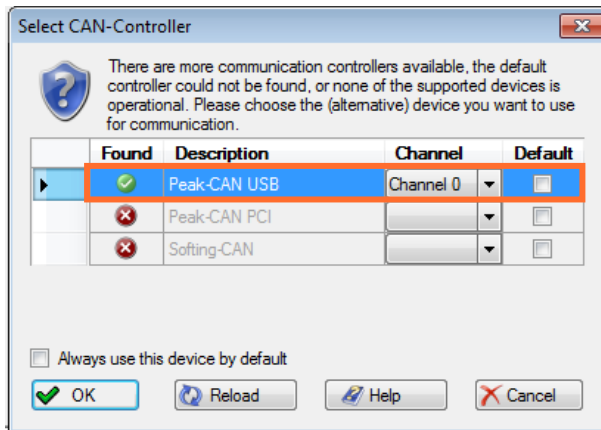
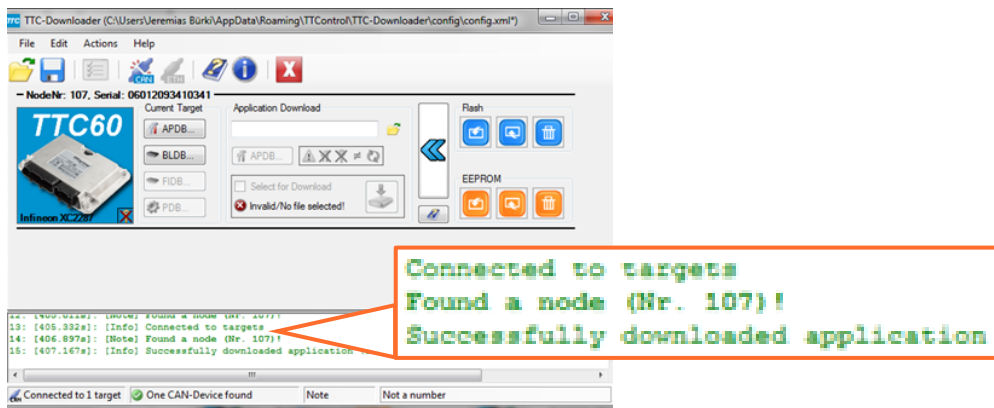
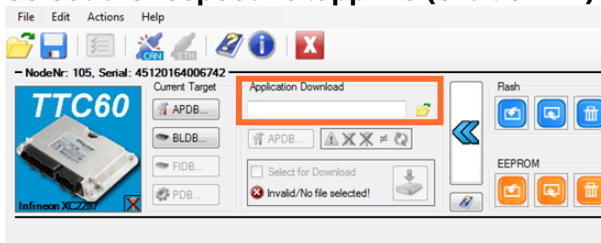
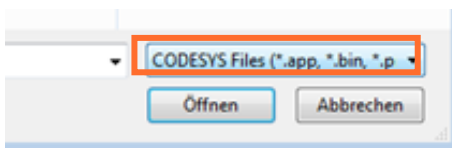
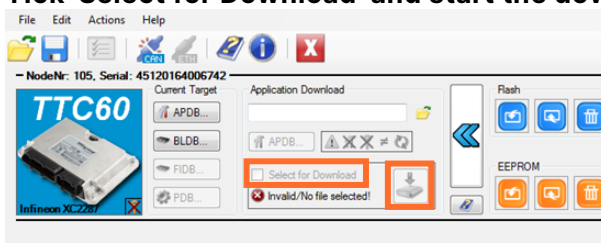
5 Start the TTC-Downloader.

6 Settings TTC-Downloader → Edit → Preferences (4) → uncheck 'Enable Quick Identify for CAN' (5) → Confirm with 'Apply' (6).

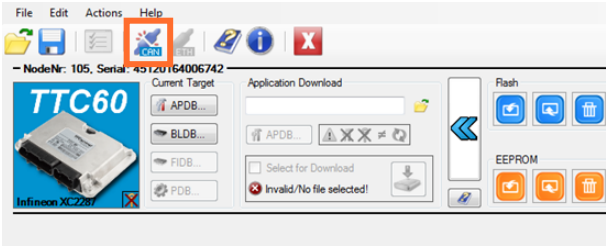


7 Search CAN.



8 Select 'Peak-CAN USB'.**9 Wait until TTC is found or perform a power cycle, if necessary. If the search was successful, this will be confirmed in the text field.****10 Select the respective .app file (e-truck V2) or .bin file (e-truck 26t).****11 To locate the file you will need to change from .hex to .bin or .app.****12 Tick 'Select for Download' and start the download.****13 Once the download has been successfully completed, 'Successfully downloaded application' will appear.**

14 The update is now complete. The CAN connection can now be disconnected.

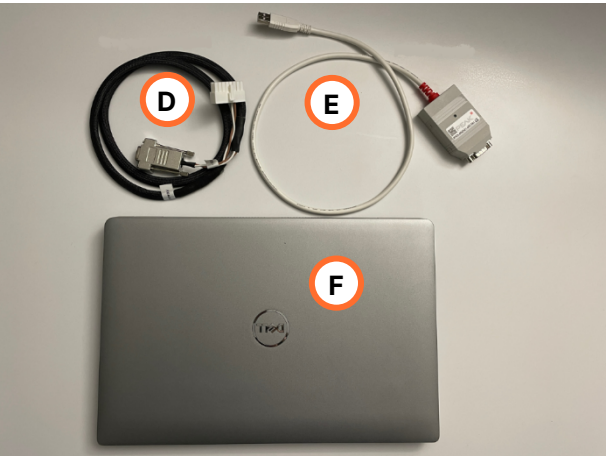


15 The diagnostic cable can be removed.

16 Once restarted, the e-truck is ready for operation again.

3 Updating the gateway

3.1 Material needed



D	LowCab Gateway programming cable or diagnosis cable	E	PCAN dongle
F	Laptop		

A diagnostic cable can also be used instead of the programming cable

- For the diagnostic cable the "BB1" D-Sub connector can be used.

3.2 Installing the software tool

1 Install “MRS Developers Studio”. The installation file is provided by the Designwerk Aftersales department

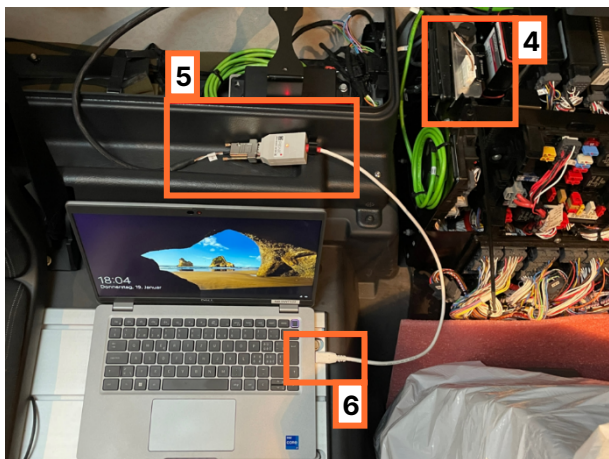
- No license is needed.

2 Update the system to the latest revision of the gateway firmware

- The latest revision is provided by the Designwerk Aftersales department.

3 The PCAN-dongle driver must be up-to-date.

3.3 Wiring



4	Programming cable at CBD-board	5	PCAN-dongle at programming cable
6	PCAN-dongle at laptop		

4 Unplug the corresponding gateway (chassis or powertrain) at the CBD board.

5 Connect the programming cable to the unplugged connector (4).

6 Connect the PCAN dongle to the programming cable (5).

7 Connect the PCAN dongle to the laptop (6).

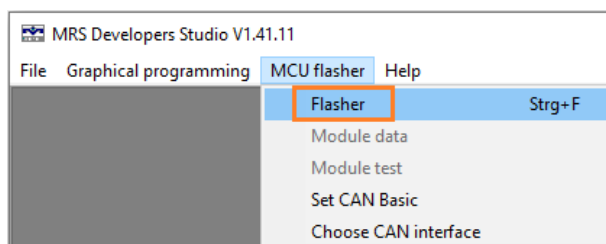
8 Switch on the ignition on the vehicle (3) so that the gateways are supplied with voltage.

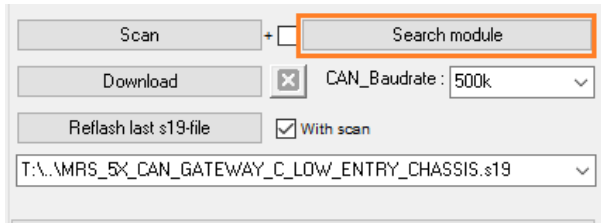
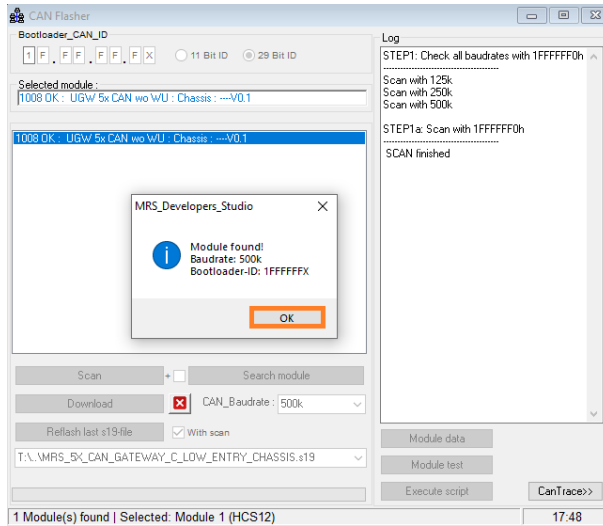
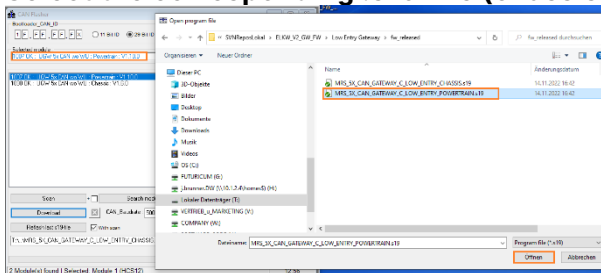
3.4 Update

1 Close all programmes accessing the PCAN dongle.

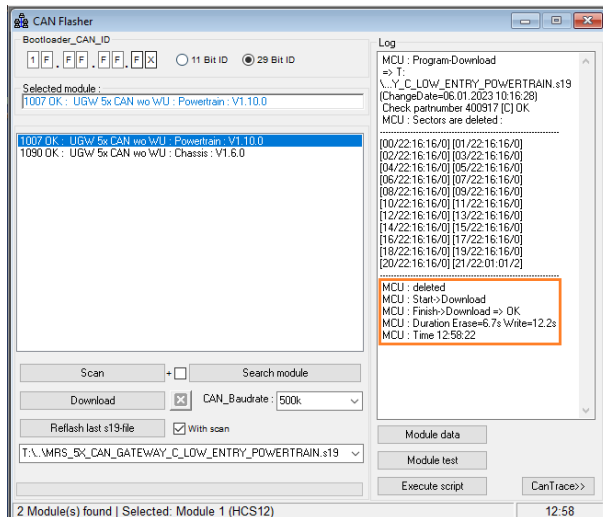
2 Open «MRS Developers Studio».

3 «MCU Flasher» → Open «Flasher».



3 Click «Search module».**4 After a successful search, confirm with OK.****5 Select the corresponding gateway and click «Download».****6 Select the corresponding .s19 File (chassis or powertrain) and click «Open».**

7 The download starts automatically. After a successful download a corresponding message is displayed.



8 If “Finish->Download=> OK” is not displayed, repeat the procedure. Now the gateway was successfully programmed.

9 Repeat the procedure for the second gateway.

10 After a successful update of the gateways disconnect the wiring described in chapter 3.3 and reconnect the gateway to the CBD board.
