



Recall Information Bulletin

No: C10136 **Issued:** 3/25/2026

Corrected: 4/24/2026

NHTSA No: 26V126

Transport Canada No: 2026-132

SUBJECT:

Safety Recall C10136 – HV System 0% State of Charge While Stationary

MODELS:

FEC7K (E16L/E16M), FEC9K (E18L/E18M), FECXK (E18)

VEHICLES INVOLVED:

Certain 2024-2025 model year FEC7K, FEC9K and FECXK trucks.

A list of vehicles your Dealership has sold that require this Recall can be found on the “Open Campaigns” list supplied by MFTA. Some individual vehicles described above may not need the Recall as the repairs may have already been performed. Always check the VIN inquiry on Falcon to verify that the VIN requires this Safety Recall.

Important note: It is a violation of Federal law for a dealer to deliver a new or used motor vehicle covered by this Recall Information Bulletin, under a sale or lease, until the Safety Recall has been completed.

OWNER NOTIFICATION:

Owners of affected vehicles will be notified by mail.

CONDITION:

Mitsubishi Fuso Truck of America, Inc. has decided that a defect, which relates to motor vehicle safety, exists in the vehicle control unit (VCU) on certain 2024 and 2025 model year FEC7K (E16L/E16M), FEC9K (E18L/E18M) and FECXK (E18) RIZON trucks. While the vehicle is stationary, the State of Charge (SoC) incorrectly displays 0%, even when the vehicle is charged. The cause is an Electrical Control Unit transmitting error frames to the Vehicle Control Unit resulting in an error where the SoC is incorrectly displayed. In the worst case, the vehicle will remain at a standstill and cannot be driven, increasing the risk of a crash. The error can be temporarily resolved by performing an Ignition Switch On/Off cycle, which recovers the vehicle and results in correct SoC display.

MODIFICATION:

The Battery Management System (BMS) and DC-Box (DCB) software will be reprogrammed with software correcting the direct charging box sequential counter error.

PARTS PROCUREMENT:

N/A

RECALL CLAIM SUBMITTAL:

Upon completion of a recall or field fix repair, a warranty claim must be submitted to Rizon US through the DealerPro system or manually through our interim process. It is important to use the appropriate claim type, e.g. Recall or Field Fix and Recall/Field Fix number. The claim will be processed by Rizon and reimbursement will be completed using the reimbursement schedule used for your standard warranty claims. If you need support submitting a claim or have general claim questions, please contact Rizon US Warranty Department at rizonwarranty@rizontruck.us.

Campaign Reimbursement					
Campaign Number	Models	Allowances		Labor Description	Repair Parts
C1013610	FEC7K, FEC9K, FECXK	Labor Time	0.4 hour	Inspection only	N/A
C1013620	FEC7K, FEC9K, FECXK	Labor Time	2.1 hours	Reprogram BMS and DCB software – Size S, 1 Battery	N/A
C1013630	FEC7K, FEC9K, FECXK	Labor Time	3.1 hours	Reprogram BMS and DCB software – Size M, 2 Batteries	N/A
C1013640	FEC7K, FEC9K, FECXK	Labor Time	4.1 hours	Reprogram BMS and DCB software – Size L, 3 Batteries	N/A
C1013650	FEC7K, FEC9K, FECXK	Labor Time	1.1 hours	Reprogram DCB software Only	N/A

REPAIR PROCEDURE:

1. Park the vehicle on a flat, level surface, turn off the engine and chock the wheels.

CAUTION!

Do not remove the wheel chocks until all modification work has been completed.

2. Reprogram the BMS and/or DCB using instructions found in the Modification Procedure on the next page.

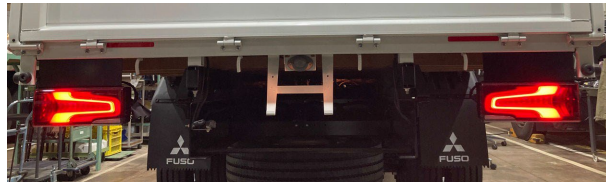
MODIFICATION PROCEDURE

Notes:

- Ensure that the DTD/XENTRY software is updated to the newest release.
- Check for any diagnosis trouble codes (DTC) before reprogramming the truck's software. Any DTCs must be remedied before reprogramming.
- Confirm a secure connection between the DTD interface, the PC and the vehicle.
- While the software is being rewritten, the headlights and taillights will turn on and the 12V vehicle battery will lose power. Please be sure to supply power to the 12V vehicle battery during software reprogramming.
- Before reprogramming, download the corresponding vehicle's ECU file from the Field Rewrite Network (FRN) (Refer to FD operation manual F6-010: FRN).
- It is necessary to copy the downloaded FRN file to a USB drive and load it onto the XENTRY laptop (see FD Instruction Manual F2-070: Copy from USB memory).
- After reprogramming, upload the FRN file to the FRN server (refer to FD Instruction Manual F6-010: FRN (Field Rewrite Network)).

Important

While rewriting the software, the following vehicle behavior will occur, so please proceed with caution. Exterior lamps (head lamps, tail lamps) will turn on.



eCANTER 23MODEL BMS Software Update Procedure

Revision	Date		
G	26. 12. 2025	Date	Content
-	2025/4/21	New	
A	2025/7/17	Software update procedure reviewed	
B	2025/7/17	Mistake correction	
C	2025/7/28	Added Response Recovery on Error Screen Control unit 'BMS02TF01- Battery management system 1 (A103a) is in bootloader mode'. • “Control unit-specific data could not be read out.”	
D	2025/7/31	<ul style="list-style-type: none"> • Review the corresponding DTD version and add-on content • Correction & review of work instruction texts • Correction and addition of the corresponding dialogue box when displayed under “Operation 14. 	
E	2025/8/21	<ul style="list-style-type: none"> • Review the corresponding DTD versions and add-ons • Added Mail Add-On installation instructions to IV • V recovery procedure modified (Recovery from hidden Adaptations tab, not from bootloader mode) • Chapter number changed (VII⇒VI, VIII⇒VII) • VI recovery procedure modified (BMS reset method changed from battery removal/installation to fuse removal/installation) • Diagnosis IDs during VI recovery procedures added to each VII procedure 	
F	2025/10/03	<ul style="list-style-type: none"> • Add AddOn No. to the corresponding DTD version and add-on • BMS Rewrite Work Summary (BMS1~3) screen transition updated 	
G	2025/12/26	<ul style="list-style-type: none"> • Review the corresponding DTD versions and add-ons • Review of recovery procedure III. (5) (Changes due to the phenomenon in DTD07/2025) 	

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- I. Target Vehicles
eCANTER 23MODEL
- II. CORRESPONDING DTD VERSION AND ADD-ON: – Please be sure to use the combination of the following fault diagnosis software version and add-ons for this operation.

Daimler Truck Diagnostics (from DTD) version	AddOn no.
07/2025	33944, 34420,34794
10/2025	34434,34819
Later versions	No need to verify the AddOn number.

III. Note

Caution

- When connecting the DTD to a vehicle, make sure that the vehicle's ignition is OFF before connecting it.
- During software updates, please avoid applying any impact to the PC, XD-VCI, connection cables, and the vehicle. The BMS software has a large amount of data, and even a slight impact can result in a failed rewrite.
- Always charge the 12 V battery during a software update (The voltage of the 12 V battery must not fall below 12 V)

- Before starting work, make sure that the required add-ons are installed for each DTD version.
- All diagnostic trouble codes must be erased before starting work.

— Caution in case of DTD and BMS communication failure —

- If a DTD and BMS communication failure occurs, check the message displayed and perform a recovery operation, referring to one of the following:
 - V. Recovery procedure if the “Control unit 'BMS02TF01- Battery management system 1 (A103a) is in bootloader mode” screen display does not show the Adaptations tab
 - s-VI. Recovery Procedure if the version screen is not displayed when communication with BMS is initiated

IV. PREPARATION

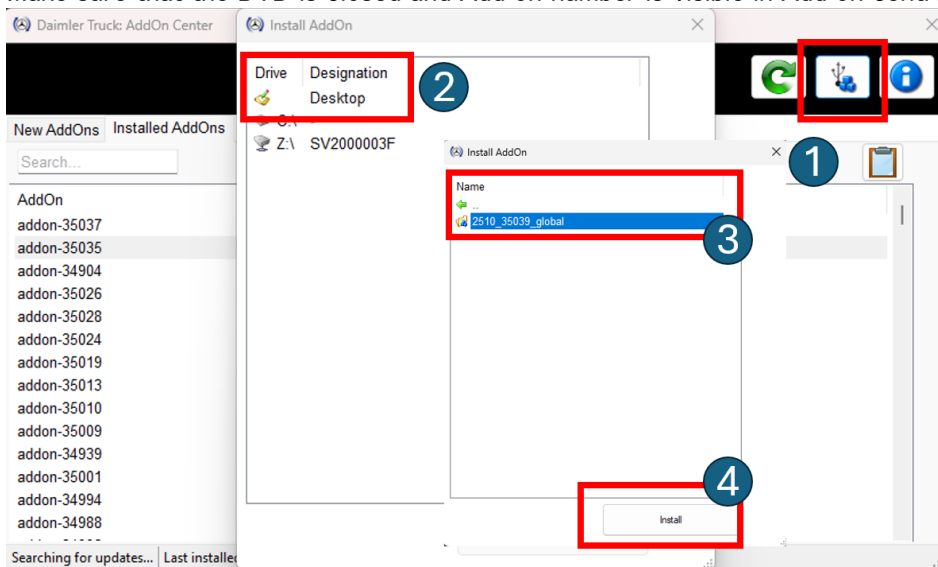
During operations, communication issues between DTD and BMS may occur due to transient failures, which can hinder progress. In such cases, the Adaptation tab may become hidden. In this case, Please reach out to your Market manager for getting the mail Add-on to get the adaptation tab back on DTD.

Please install the following mail Add-on in preparation for when the Adaptation tab is hidden.

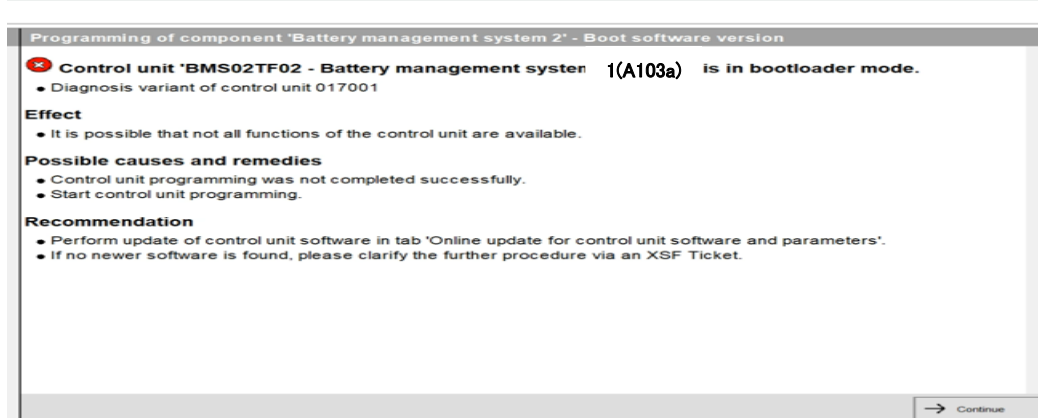
1	In the AddOn Centre, check whether the add-on no listed under “II. Compatible DTD versions and add-ons” is installed
2	Reach out to the Market manager for mail Add-On

[Mail Add-on installation instructions]

1. Please get the mail Add-on file from Market Managers
2. Close the DTD and Open Add-On center or Update center and place the unzipped mail Add-On on desktop.
3. Upload the Add-On file in Add-On center or Update center.
4. Make sure that the DTD is closed and Add on number is visible in Add on centre.



- V. Recovery procedure if the “Control unit 'BMS02TF01– Battery management system 1 (A103a) is in bootloader mode.” screen does not show the adaptation tab
 When this screen appears, follow these instructions to install the mail Add-on.

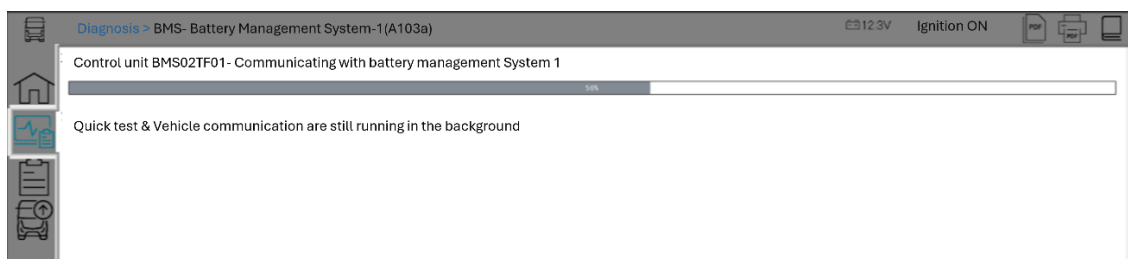


Caution

IV. Preparation in advance: – Even if you have installed the mail Add-On, there are cases where this screen (the 'Adaptation' tab does not appear in bootloader mode) may still occur. This may be due to reasons such as the mail ADD-ON being removed due to the installation of a separate add-on. If so, please reinstall this Mail Add_on with the DTD closed.

1	Identify any of the work BMS1, 2, or 3 where communication issues have occurred (remember when re-writing)
2	Disconnect DTD from vehicle and switch off key
3	Exit DTD
4	Install pre-prepared Mail Add-On
5	Reconnect DTD to vehicle
6	Resume rewriting of BMS with communication failure (BMS1 if BMS1, BMS2 if BMS2, BMS3 if BMS3)

- VI. Recovery procedure if the version screen is not displayed when communication with the BMS is initiated
 If no communication with the BMS is established and the version screen is not displayed, Follow this procedure to perform a hard reset of the BMS ECU.

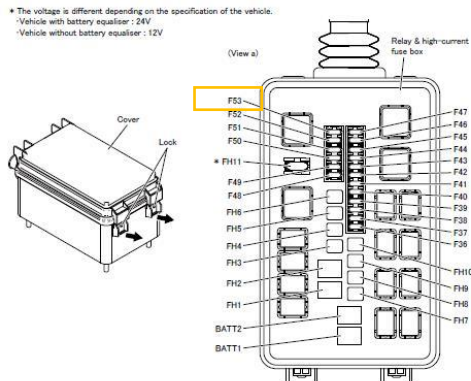


Caution

- When reinstalling the disconnected high-current fuse F53 (10 A), the key must be switched ON within 10 seconds. Therefore, always work with at least two people at the same time.

1	Identify any of the work BMS1,2,3 where there was a communication failure (remember when re-writing)
2	Disconnect DTD from vehicle and switch off key
3	Disconnect high-current fuse F53 (10 A) (see picture below)
4	WAIT 1 MINUTE (FOR HARDWARE RESET OF BMS ECU)
5	Reconnect the disconnected high-current fuse F53 (10 A) (Two people are required to work on the system as it must be switched on within 10 seconds)
6	Key ON within 10 seconds (If more than 10 seconds pass, the BMS will be in a state where it cannot be written to again.)
7	Reboot DTD PC and reconnect to vehicle
8	Resume BMS Rewrite Operation with Communication Failure (BMS1 if BMS1, BMS2 if BMS2, BMS3 if BMS3)
9	If the same error screen appears again Repeat the work from step 2

Location of high-current fuse F53 (10 A) to be removed (excerpt from maintenance instructions)



Fuse No.	Main load	Capacity
BATT1	ASAM	140A
BATT2	ASAM	100A
FH1	Fuse box (PDM) B5 to B8	80A
FH2	Cooling fan	60A
FH3	Fuse box (PDM) B38 to B40, B48	60A
FH4	Fuse box (PDM) B14, B18, B23, B24	60A
FH5	Fuse box (PDM) B54 to B56, B62 to B64	60A
FH6	EPB ECU	50A
FH7	EPB ECU	50A
FH8	Hydraulic unit (ABS)	50A
FH9	Electric vacuum pump 1	50A
FH10	Electric vacuum pump 2	50A
FH11	Fuse box (PDM) B49 to B51	40A
F36	VCU, KL15 VTL relay, JOINT(KL15V)	20A
F37	aDM	10A
F38	AVAS ECU, DC/DC converter	10A
F39	PTC heater (HVH), PTC heater (HVAC)	20A
F40	Condenser fan motor	20A
F41	Hydraulic unit (ABS)	30A
F42	Electric parking lock (EPL) actuator	30A
F43	-	-
F44	Water pump (Motor)	20A
F45	-	-
F46	-	-
F47	-	-
F48	Window heater	20A
F49	Window heater	20A
F50	Window heater	20A
F51	Seat heater	10A
F52	High voltage battery, DCB, OBC, DC/DC converter, VCU	15A
F53	High voltage battery, DCB, OBC	10A

VII. BMS Rewrite Work Summary (BMS1~3)

The BMS software update performs two types of software update operations:

- Boot software (boot software)
- Application software (operating software)

The basic procedure is as follows:

Repeat for as many BMS as necessary (1x S battery, 2x M battery, 3x L battery).

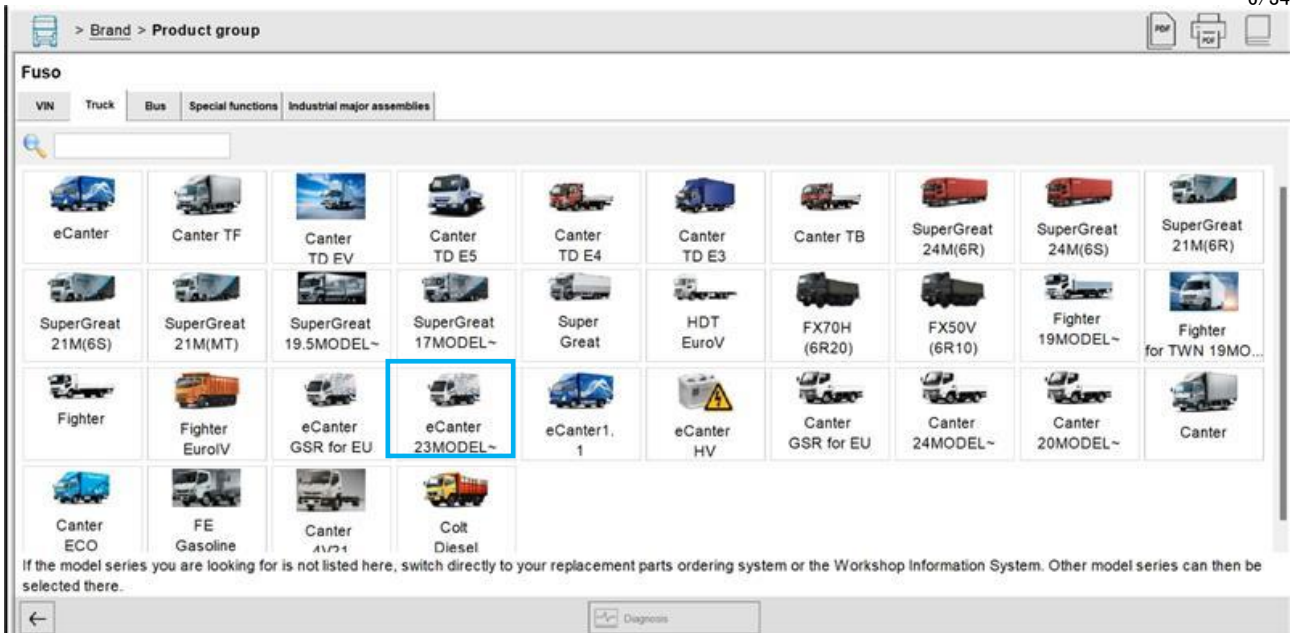
In case of communication issues, refer to the items mentioned in the previous section to recover before proceeding with the work again.

- Recovery procedure when "DTD and BMS have stopped communicating (bootloader mode screen)" occurs
- Recovery procedure when "Unable to read control unit specific data" occurs

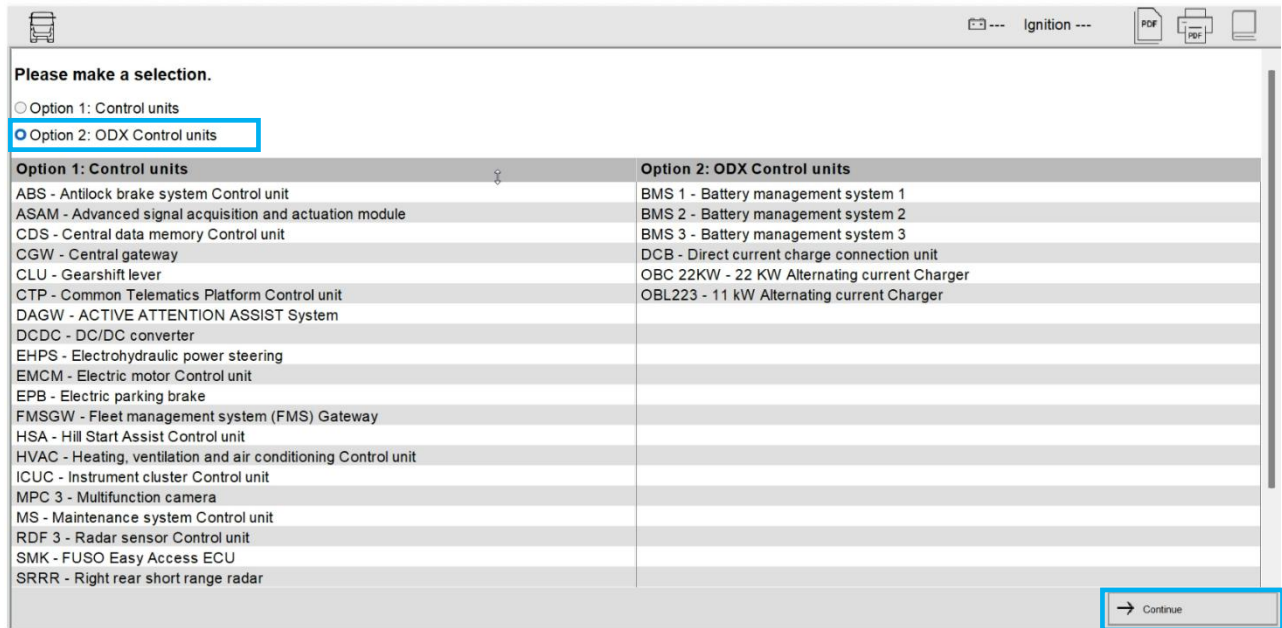
(Diagnosis identifier = software version)

BMS Software Update Workflow

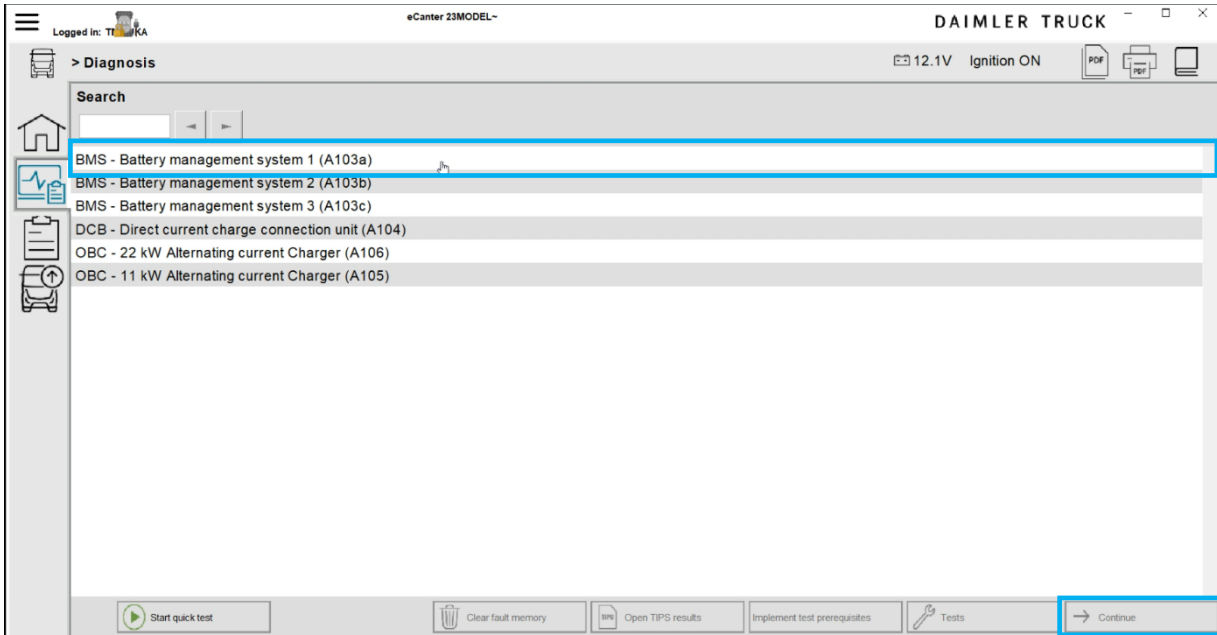
	Work Overview	Comments
1	Start of Work	
2	Confirm diagnosis identifier (before work) Diagnosis ID: 000701	During the recovery process of VI, the diagnosis ID shows 017001
3	New programming (boot)	
4	Diagnosis – Confirmation of Identification (After Work) Diagnosis Identification: 017001 Was the rewriting completed successfully?	If no 3. Perform “Reprogramming (boot)” again
5	New programming (app)	
6	Diagnosis – Confirmation of Incident (After Work) Diagnosis ID: 000801 Was the rewriting performed successfully?	If no 5. Perform “Reprogramming (app)” again
7	Check diagnostic codes and erase if necessary (Respond as described)	



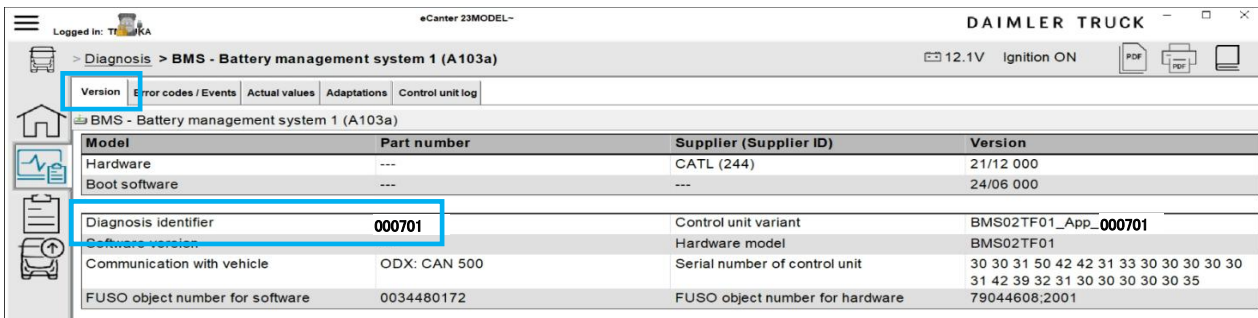
1. Select "eCANTER 23MODEL ~"



2. SELECT "METHOD 2: ODX Control units" ⇒ "Continue"



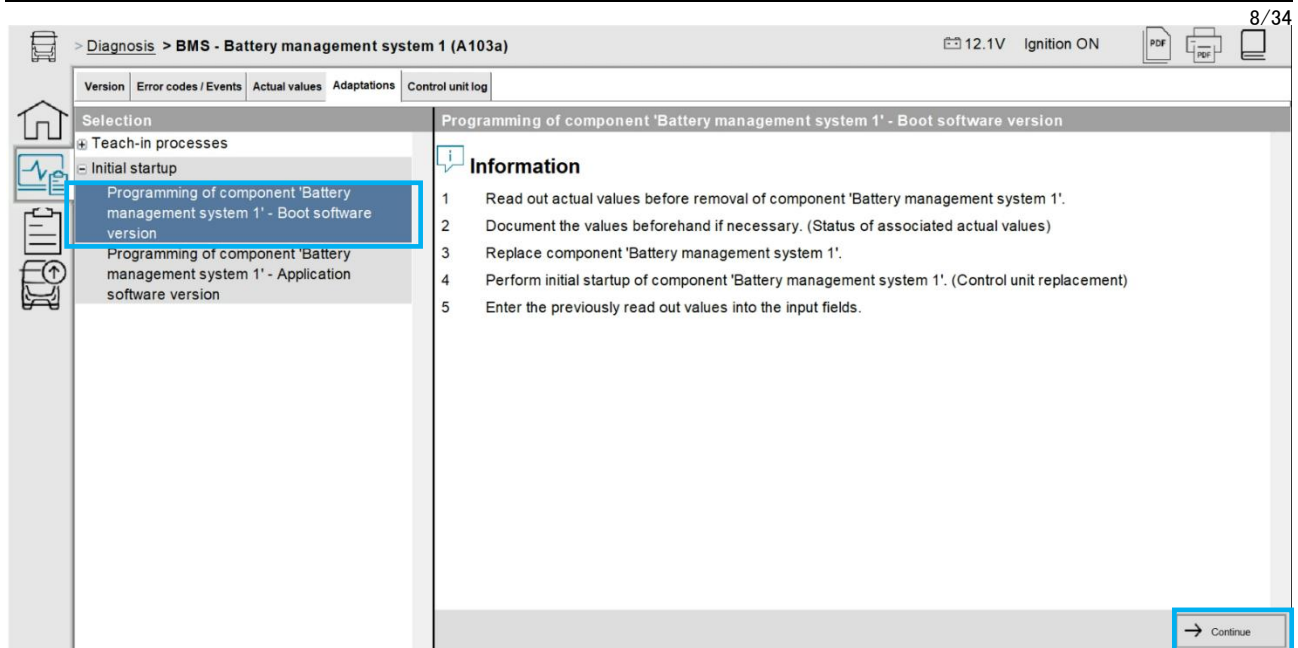
3. Select "BMS battery management system 1 (A103a)" ⇒ "Continue"



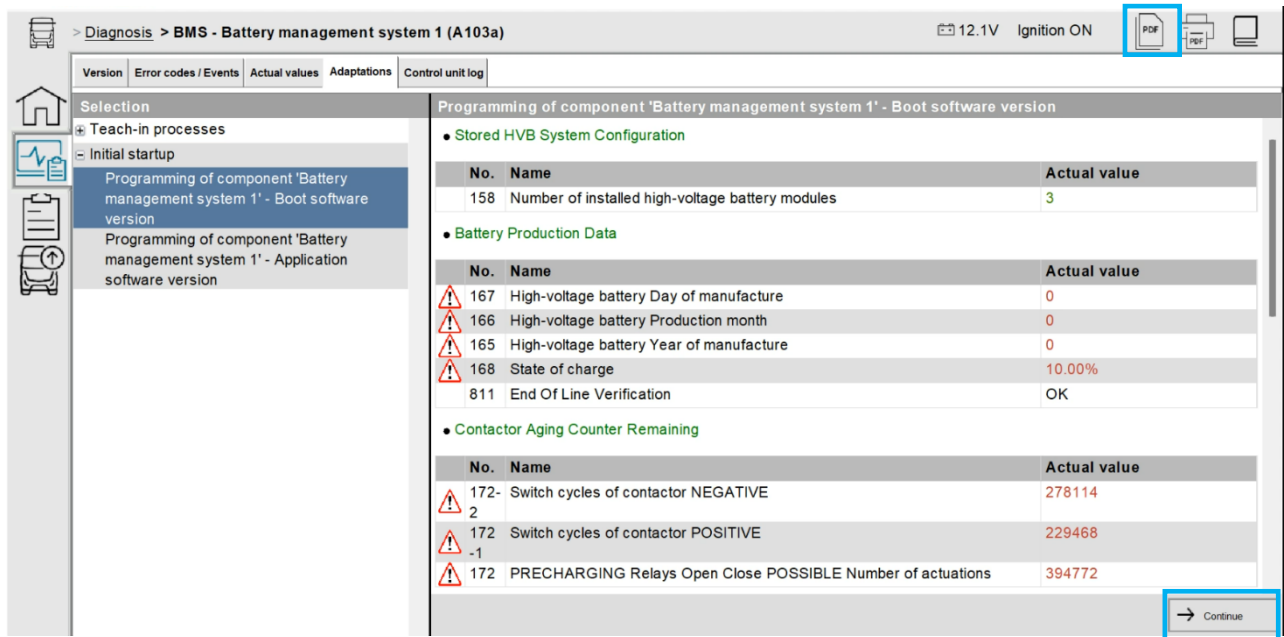
4. In the version screen, make sure that the diagnosis ID is "000701".
 (Ultimately, this diagnosis ID will be changed to "000801" as a result of this work.)
 To carry out the programming, select the Adaptations tab.

*During the recovery process of VI, "017001" is displayed in the diagnosis ID.

eCANTER 23MODEL BMS Software Update Procedure



5. Select "Programming of component 'Battery management system 1'–Boot software version" ⇒ "Continue"



6. Save actual values as PDF ⇒ "Continue"

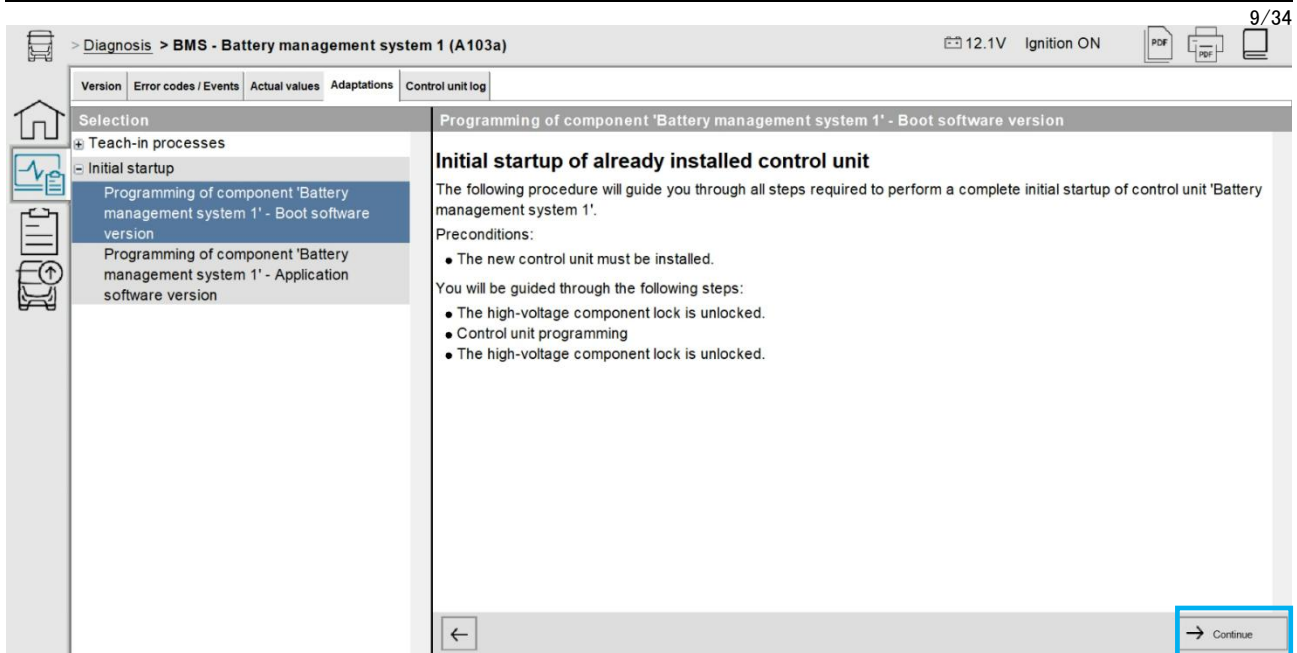
Suggestion: This screen will be used to compare the actual values when programming the application software at a later time. Shooting with a smartphone or similar will make the update process smoother.

Actual values to be compared

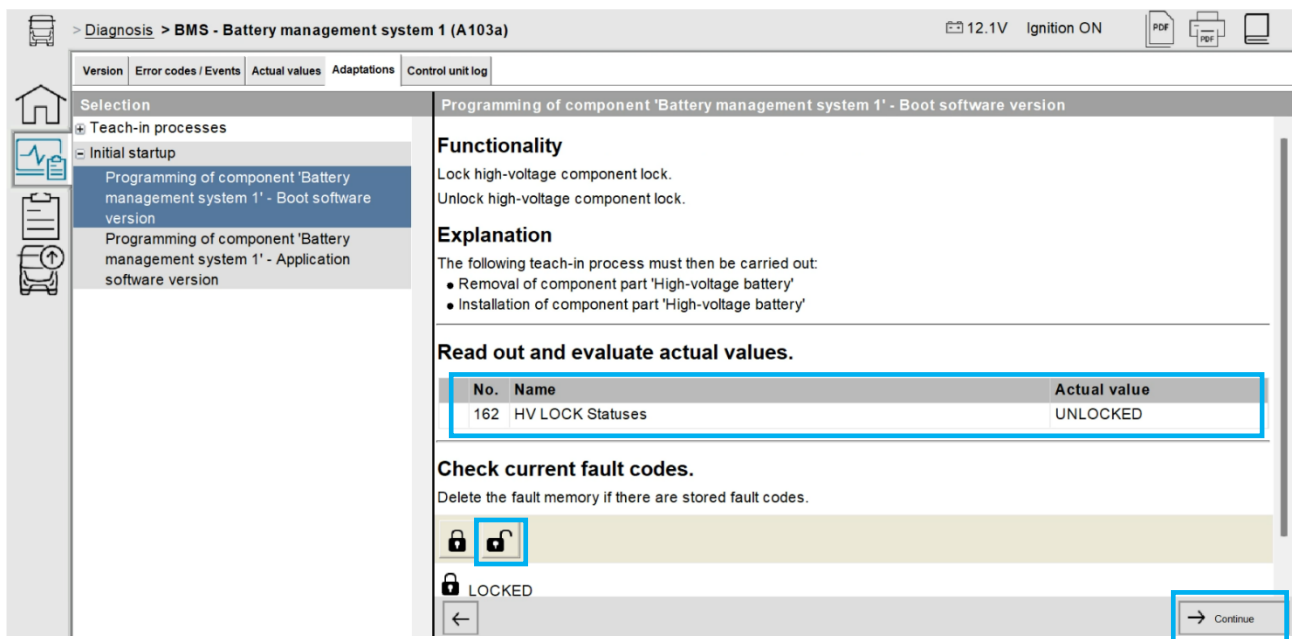
158: Number of installed high-voltage battery modules

168: State of charge

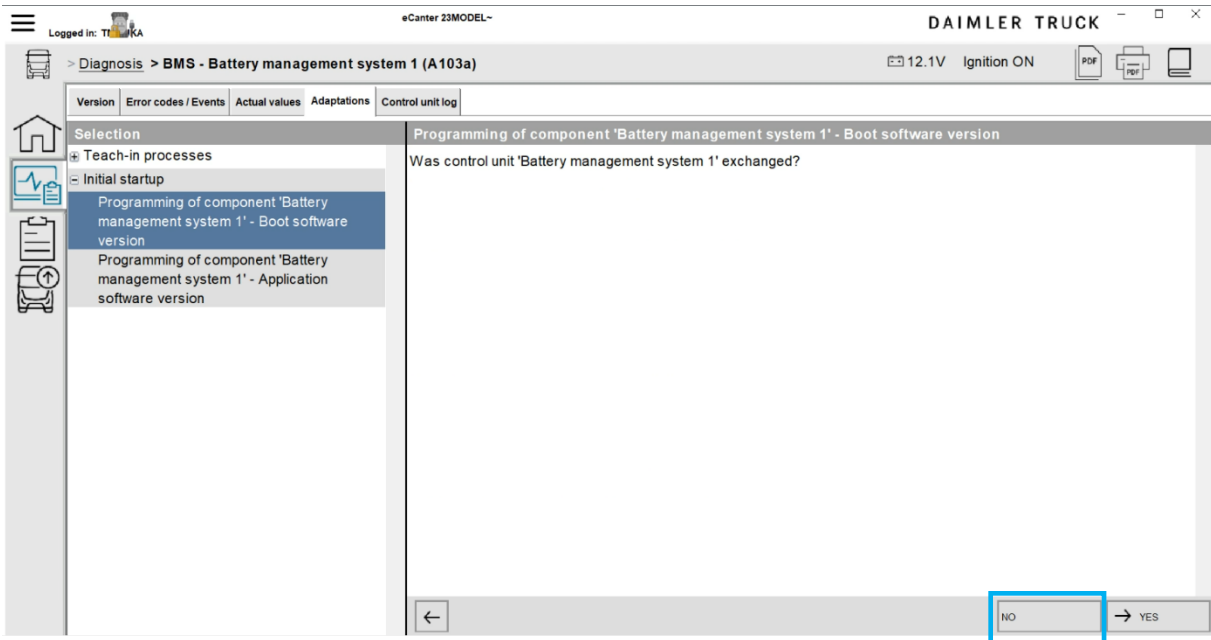
220: Ageing state 1



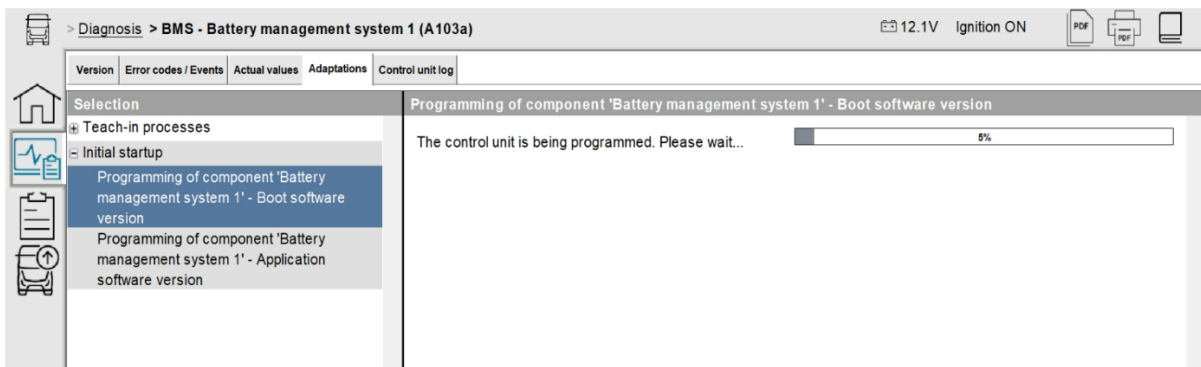
7. Review the display and press “Continue”



8. Check whether the actual value for the HV lock status is set to “Unlocked” ⇒ “Continue”
 *For “Locked”, click on the unlock symbol ⇒ “Continue”



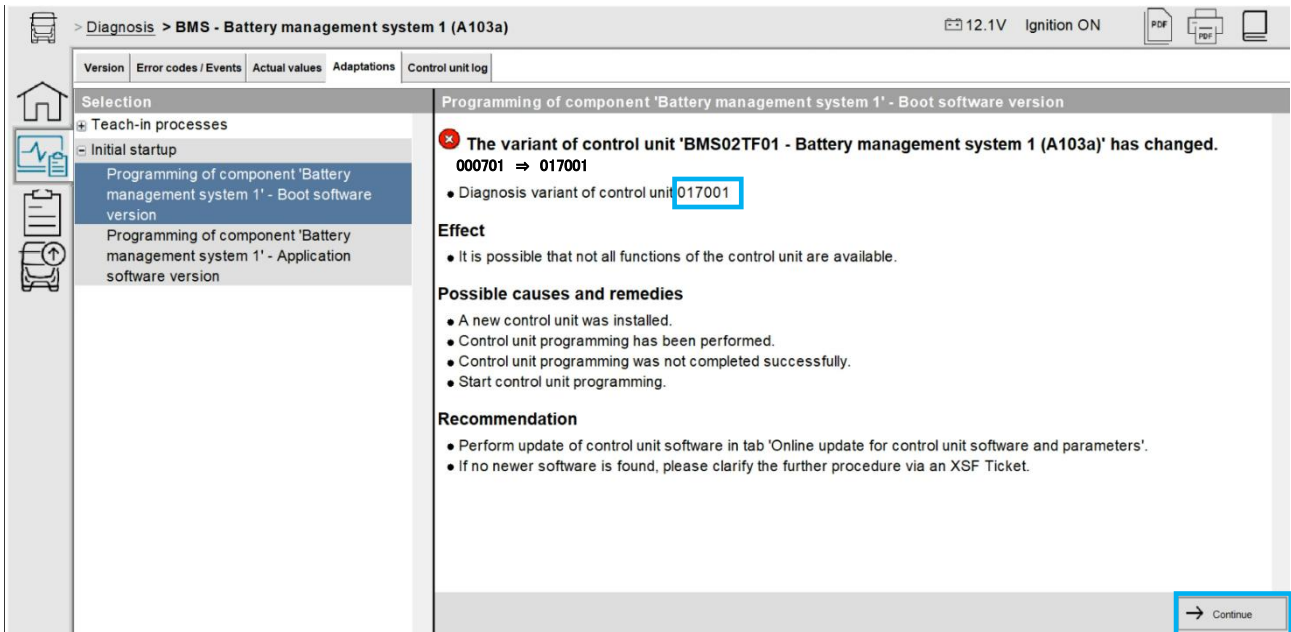
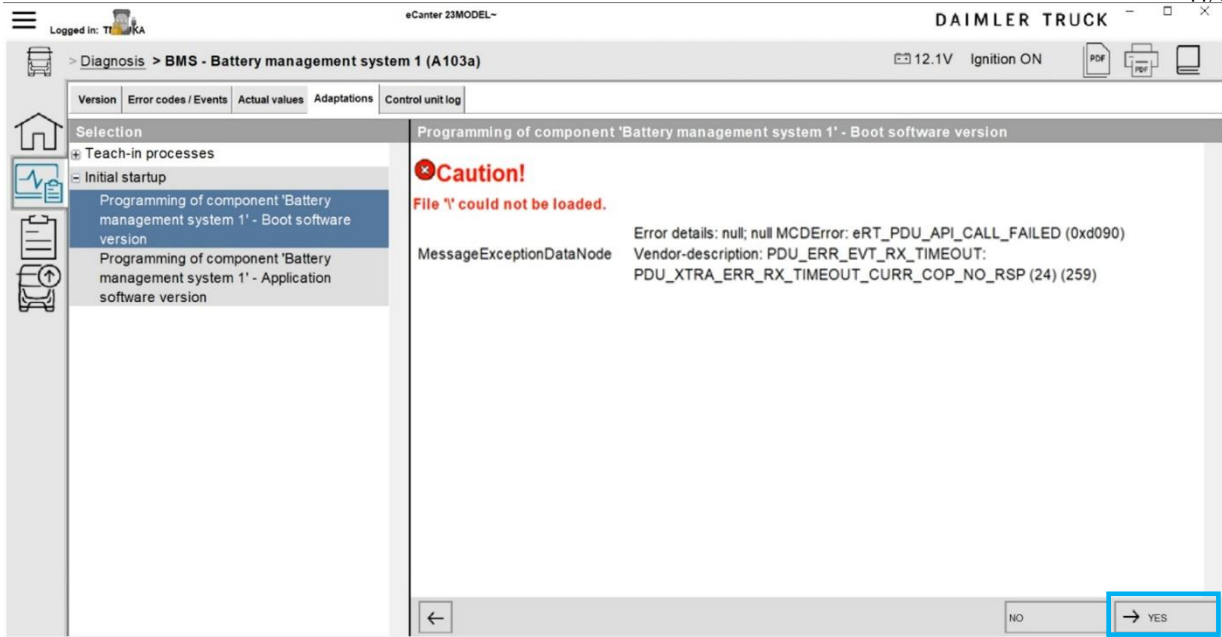
9. Select "No



10. Wait for the screen to change because it is being programmed (approximately 2~3 minutes).

Note:

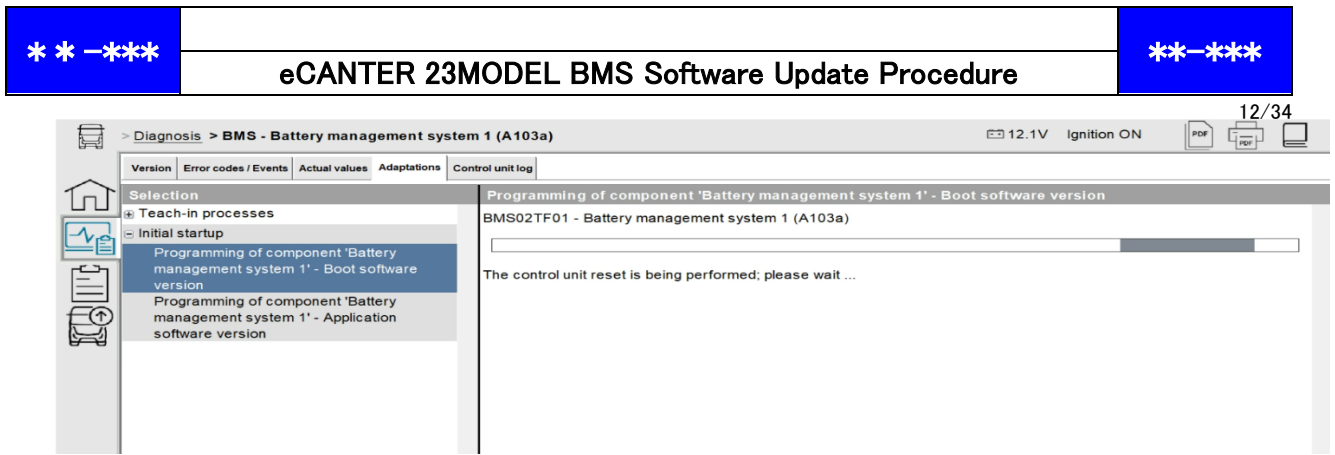
If the following error message appears, press "Continue" and then select "Programming – Application software version of component 'Battery management system 1'" (do not write) and then select "Programming – Boot software version of component 'Battery management system 1'" under 5 again to rewrite the boot software.



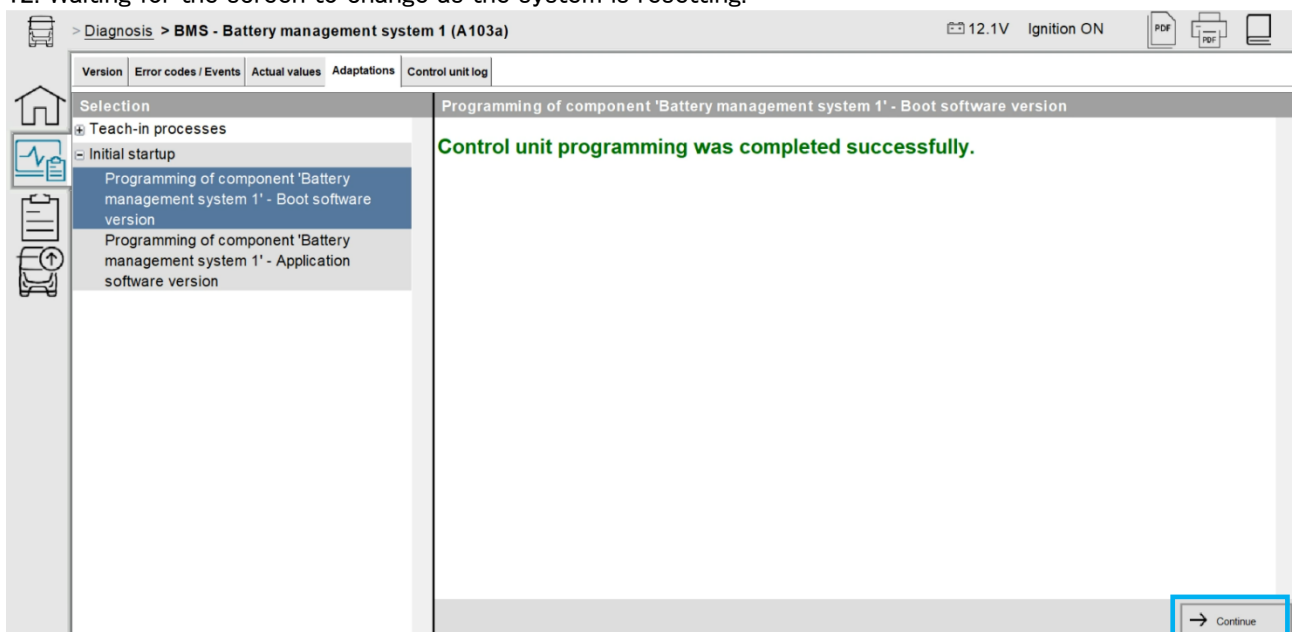
11.

When the conversion is complete, a screen appears informing you that the diagnosis variant has been changed. Click on “Continue”.

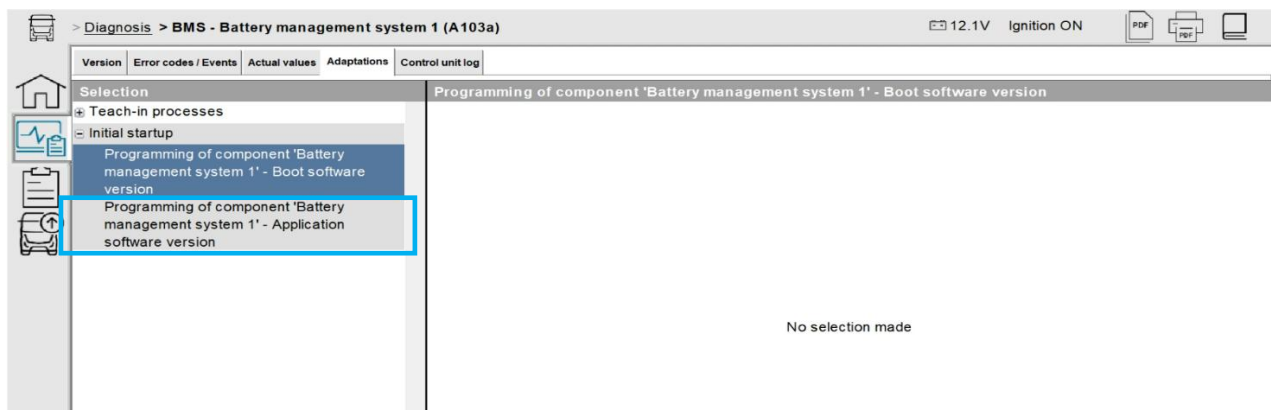
⌘During the recovery procedure of VI (even during recovery), the screen may not be displayed. It may also not be displayed during recovery.



12. Waiting for the screen to change as the system is resetting.



12. "Continue"



13. The work for new programming (boot) is completed. Select "Programming of component 'Battery management system 1'–Application software version.

The screenshot shows the diagnostic software interface for the BMS - Battery management system 1 (A103a). The top navigation bar includes 'Diagnosis > BMS - Battery management system 1 (A103a)', '12.1V', and 'Ignition ON'. The left sidebar contains a 'Selection' menu with options: 'Teach-in processes', 'Initial startup', 'Programming of component 'Battery management system 1' - Boot software version', and 'Programming of component 'Battery management system 1' - Application software version'. The main content area is titled 'Programming of component 'Battery management system 1' - Application software version' and contains an 'Information' section with a list of five steps:

- 1 Read out actual values before removal of component 'Battery management system 1'.
- 2 Document the values beforehand if necessary. (Status of associated actual values)
- 3 Replace component 'Battery management system 1'.
- 4 Perform initial startup of component 'Battery management system 1'. (Control unit replacement)
- 5 Enter the previously read out values into the input fields.

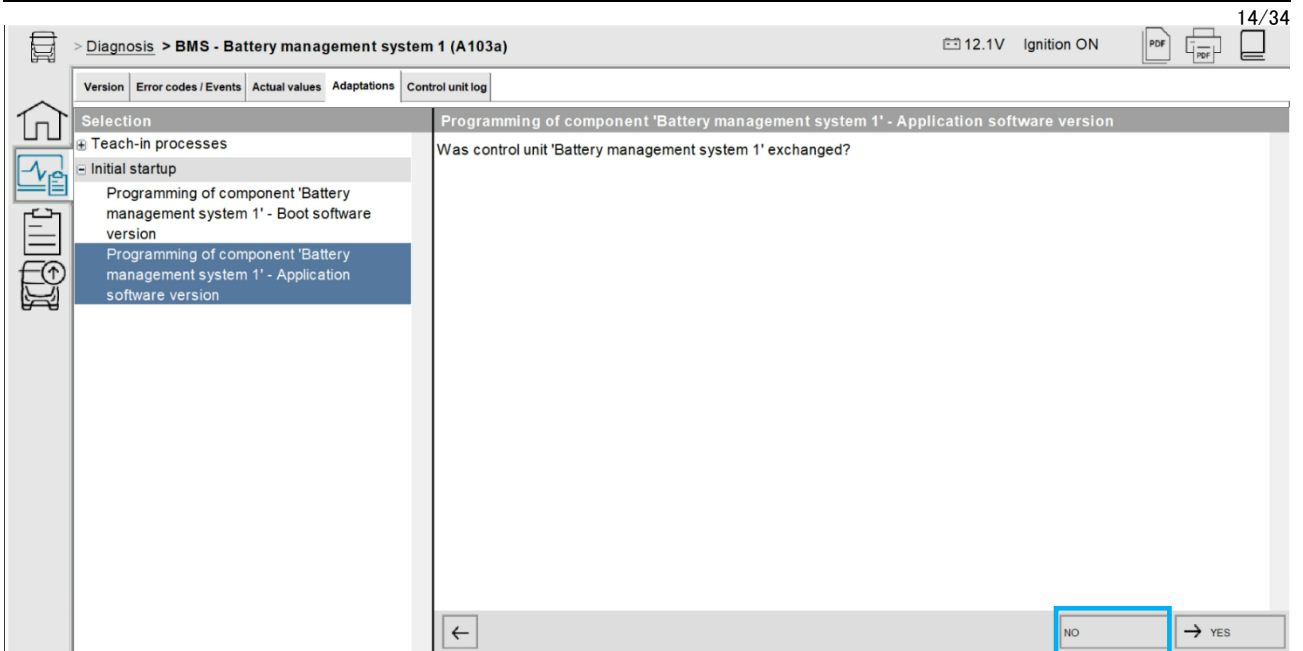
A 'Continue' button with a right-pointing arrow is located at the bottom right of the main content area.

14. "Continue"

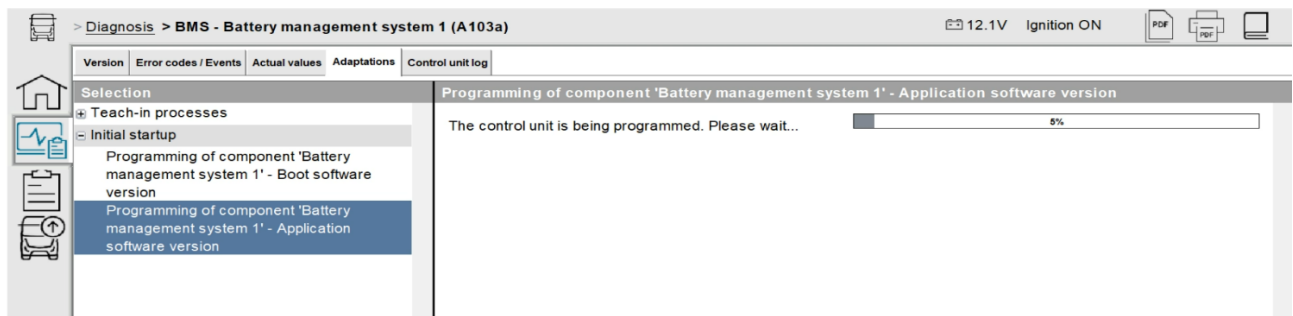
The screenshot shows the diagnostic software interface for the BMS - Battery management system 1 (A103a). The top navigation bar includes 'Diagnosis > BMS - Battery management system 1 (A103a)', '12.1V', and 'Ignition ON'. The left sidebar contains a 'Selection' menu with options: 'Teach-in processes', 'Initial startup', 'Programming of component 'Battery management system 1' - Boot software version', and 'Programming of component 'Battery management system 1' - Application software version'. The main content area is titled 'Programming of component 'Battery management system 1' - Application software version' and contains an 'Initial startup of already installed control unit' section. The text reads: 'The following procedure will guide you through all steps required to perform a complete initial startup of control unit 'Battery management system 1'. Preconditions: • The new control unit must be installed. You will be guided through the following steps: • The high-voltage component lock is unlocked. • Control unit programming • The high-voltage component lock is unlocked.' A 'Continue' button with a right-pointing arrow is located at the bottom right of the main content area.

15. "Continue"

eCANTER 23MODEL BMS Software Update Procedure

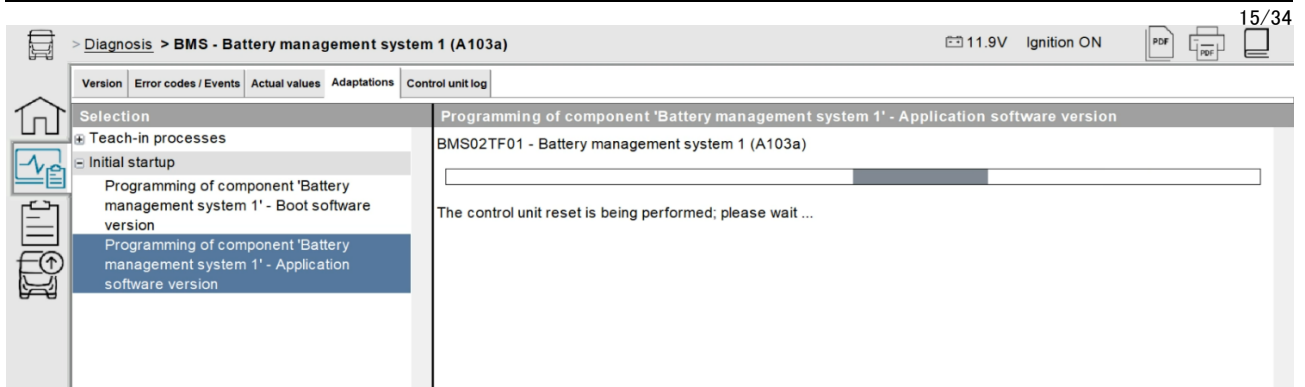


16. Select "No"

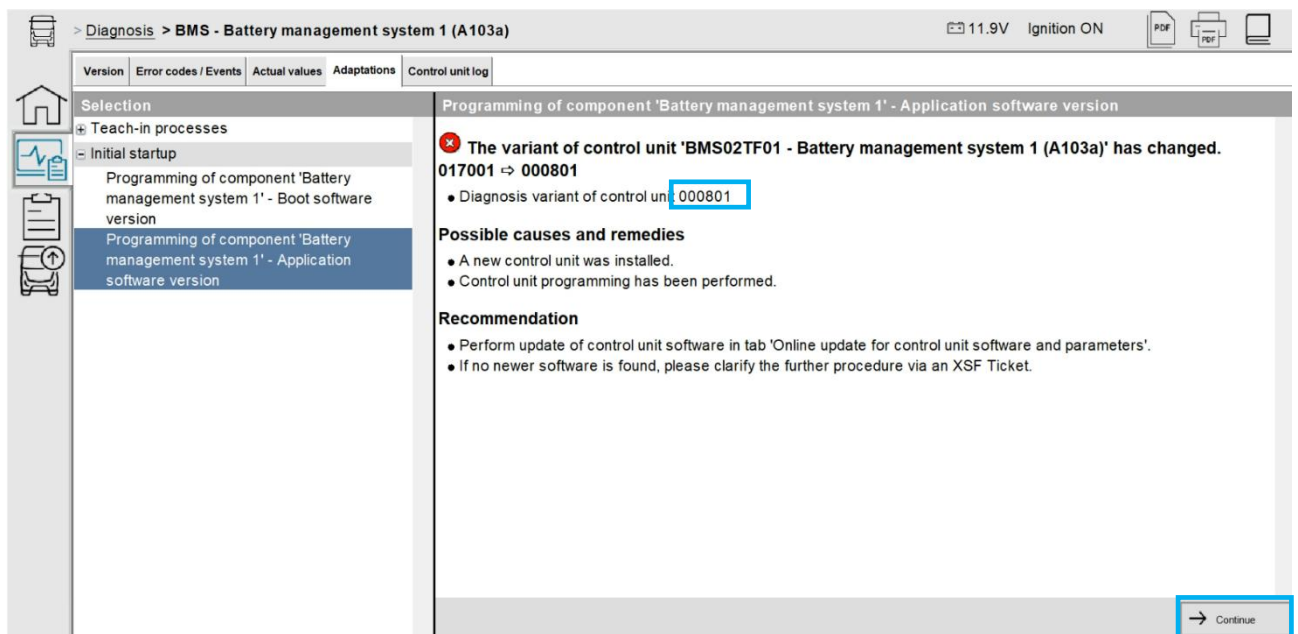


17. Programming: waiting

eCANTER 23MODEL BMS Software Update Procedure



18. Resetting: Waiting (Approximately 30 to 40 minutes)



19. Ensure that the diagnosis variant of the control unit is 000801⇒“Continue”
 *This screen may not be displayed.

****--***** **eCANTER 23MODEL BMS Software Update Procedure** *****--*****

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> Diagnosis > BMS - Battery management system 1 (A103a) 11.9V Ignition ON

Version | Error codes / Events | Actual values | Adaptations | Control unit log

Selection

- Teach-in processes
 - Initial startup
 - Programming of component 'Battery management system 1' - Boot software version
 - Programming of component 'Battery management system 1' - Application software version**

Programming of component 'Battery management system 1' - Application software version

Control unit programming was completed successfully.

→ Continue

20. "Continue"

> Diagnosis > BMS - Battery management system 1 (A103a) 11.9V Ignition ON

Version | Error codes / Events | Actual values | Adaptations | Control unit log

Selection

- Teach-in processes
 - Initial startup
 - Programming of component 'Battery management system 1' - Boot software version
 - Programming of component 'Battery management system 1' - Application software version**

Programming of component 'Battery management system 1' - Application software version

- The high-voltage component lock must be unlocked.

← → Continue

21. "Continue"

> Diagnosis > BMS - Battery management system 1 (A103a) 11.9V Ignition ON

Version Error codes / Events Actual values Adaptations Control unit log

Selection

- Teach-in processes
 - Initial startup
 - Programming of component 'Battery management system 1' - Boot software version
 - Programming of component 'Battery management system 1' - Application software version

Programming of component 'Battery management system 1' - Application software version

Functionality
 Lock high-voltage component lock.
 Unlock high-voltage component lock.

Explanation
 The following teach-in process must then be carried out:
 • Removal of component part 'High-voltage battery'
 • Installation of component part 'High-voltage battery'

Read out and evaluate actual values.

No.	Name	Actual value
162	HV LOCK Statuses	UNLOCKED

Check current fault codes.
 Delete the fault memory if there are stored fault codes.

LOCKED

Continue

22. Check whether the actual value for the HV lock status is set to "UNLOCKED" ⇒ "Continue"
 *For "LOCKED", click on the unlock symbol ⇒ "Continue"

> Diagnosis > BMS - Battery management system 1 (A103a) 11.9V Ignition ON

Version Error codes / Events Actual values Adaptations Control unit log

Selection

- Teach-in processes
 - Initial startup
 - Programming of component 'Battery management system 1' - Boot software version
 - Programming of component 'Battery management system 1' - Application software version

Programming of component 'Battery management system 1' - Application software version

The values were successfully written.

Continue

23. "Continue"

eCANTER 23MODEL BMS Software Update Procedure

The screenshot shows the 'Actual values' tab for the 'Battery management system 1 (A103a)'. The main area displays three data sections:

- Stored HVB System Configuration:**

No.	Name	Actual value
158	Number of installed high-voltage battery modules	3
- Battery Production Data:**

No.	Name	Actual value
167	High-voltage battery Day of manufacture	0
166	High-voltage battery Production month	0
165	High-voltage battery Year of manufacture	0
168	State of charge	10.00%
811	End Of Line Verification	OK
- Contactor Aging Counter Remaining:**

No.	Name	Actual value
172-2	Switch cycles of contactor NEGATIVE	278114
172-1	Switch cycles of contactor POSITIVE	229468
172	PRECHARGING Relays Open Close POSSIBLE Number of actuations	394772

A 'Continue' button is visible at the bottom right of the data area.

24. Save actual values as PDF ⇒ “Continue”

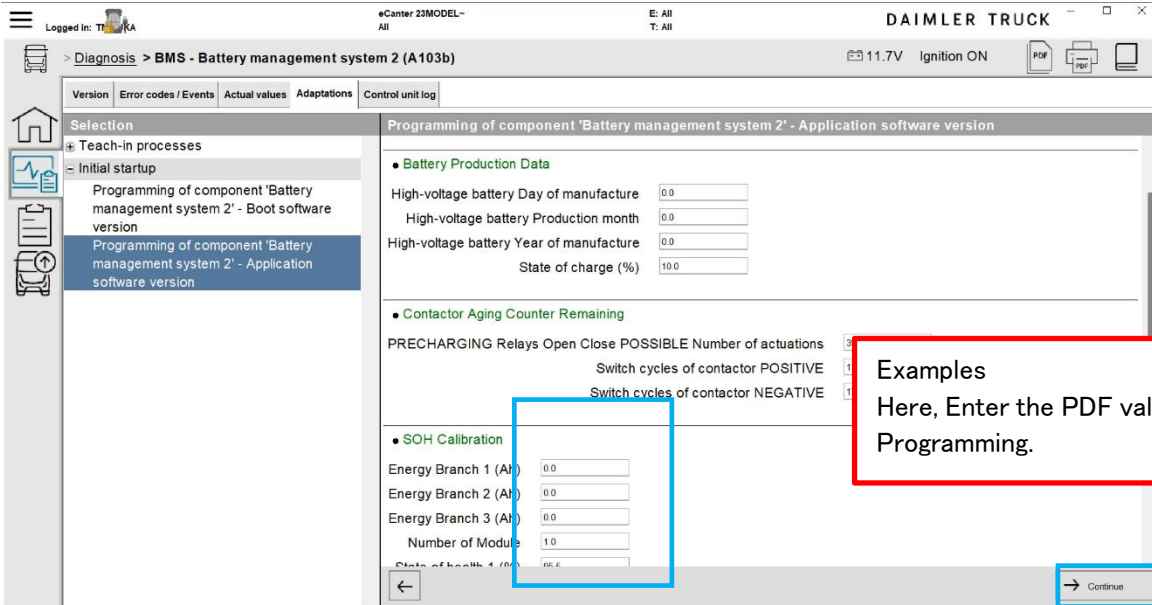
- Compare the following actual values using the PDF saved before programming or the photos taken.
 - 158: Number of installed high-voltage battery modules
 - 168: State of charge
 - 220: Ageing state 1

The screenshot shows the same diagnostic software interface, but the main area now displays the question: "Are the actual values OK?". At the bottom right, there are two buttons: "NO" and "YES". The "YES" button is highlighted with a blue box.

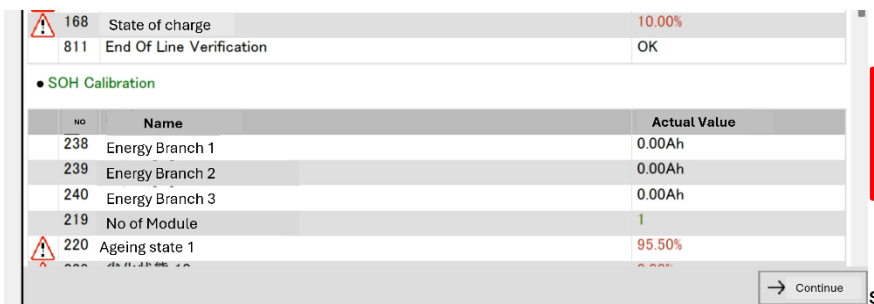
25. Check actual values before and after Software update (PDF), If No differences ⇒ “YES”

Note: Before and after programming, the charge level and degradation level 1 (%) may fluctuate slightly. If the difference is ± 0.1 , please select “Yes” as like there is no difference. If the difference is greater than ± 0.1 , enter the value below and select “Continue.”

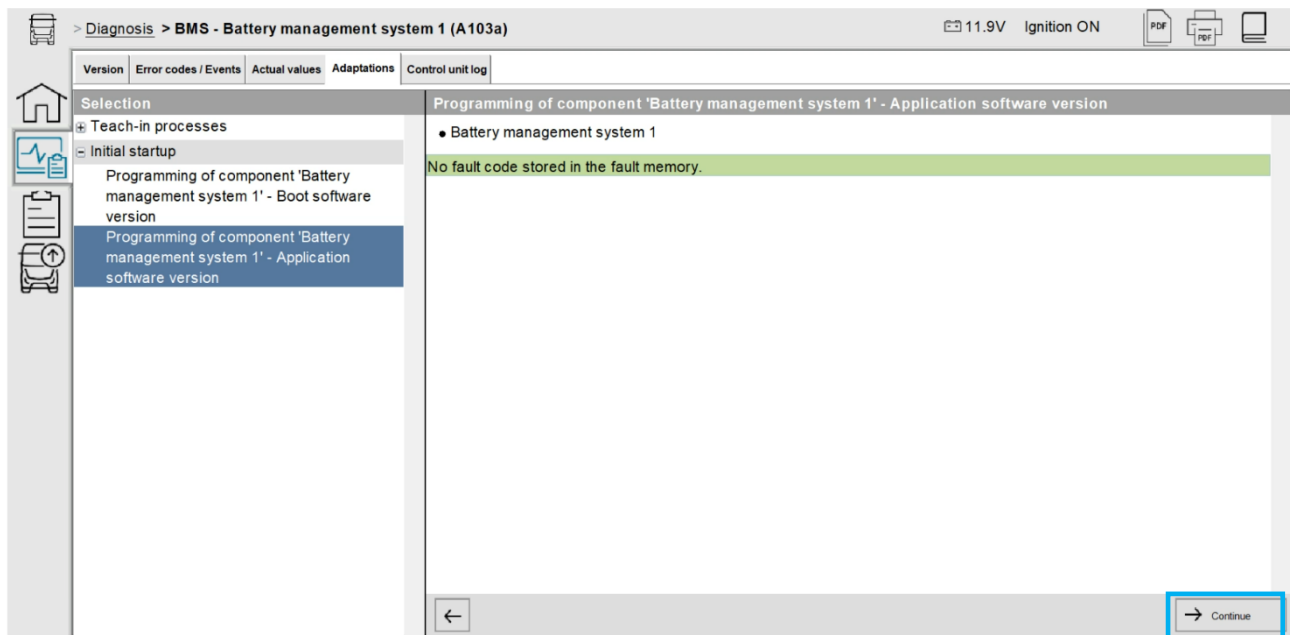
* Even if the displayed PDF after input differs by ± 0.1 , as mentioned above, treat it as it there is no difference and continue.



Examples
Here, Enter the PDF values from before Programming.



In PDF after input 0.1 value misalignment may there. It is neglectable & press continue.

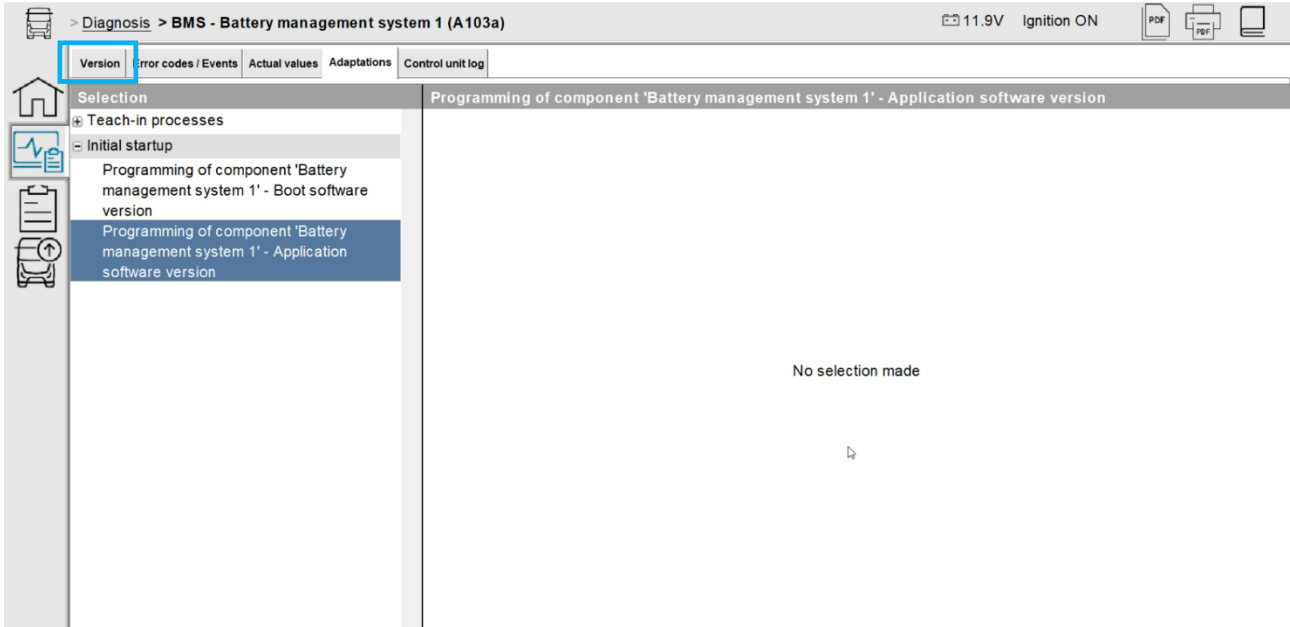


26. If any Error codes present, Then Erase fault code ⇒ 'Continue'

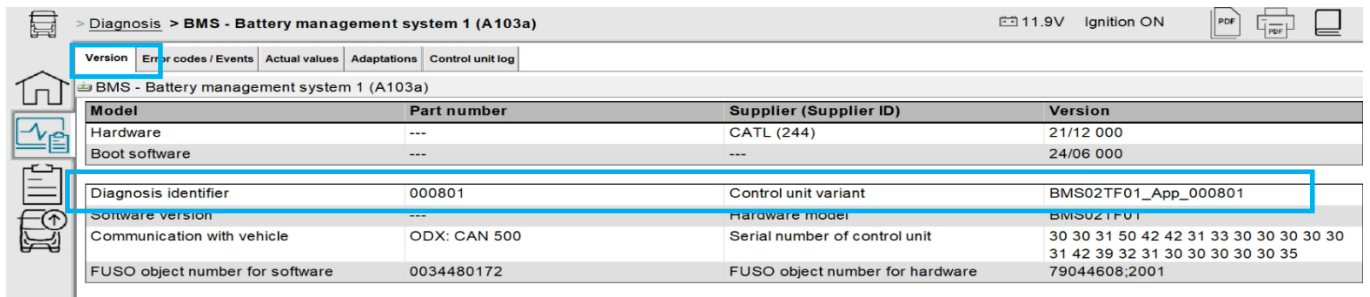
Note:- Check the status of the fault code, and if it is a 'stored Fault,' press 'Continue' to clear it.

If there is a current fault 'Number of installed high-voltage battery modules error,' proceed with the steps from 29 onward (because the number of high-voltage batteries installed in the vehicle differs from what the ECU recognizes).

For other current value errors, follow the troubleshooting procedures in the service manual.



27. Select Version



28. Ensure that the diagnosis ID and control unit variant is 000801.

Select ⇒ "Adaptations"

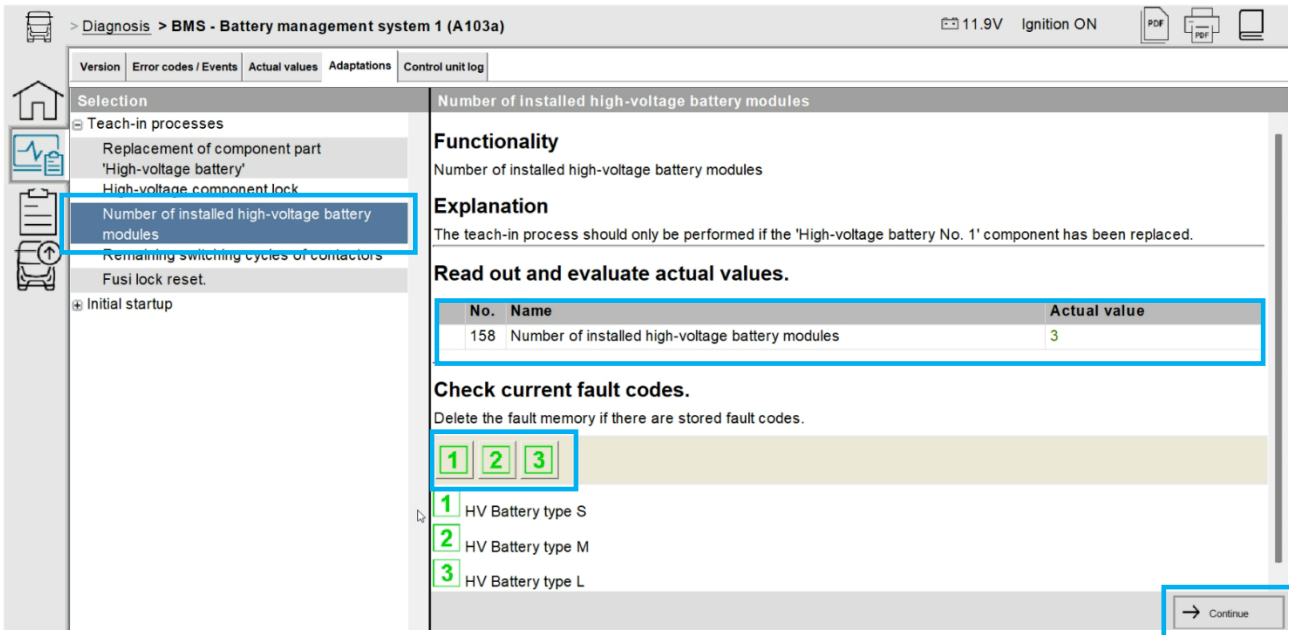
*The following EV system faults are displayed on the vehicle's meter, so turn the key OFF ⇒ key ON again and make sure that it is off.



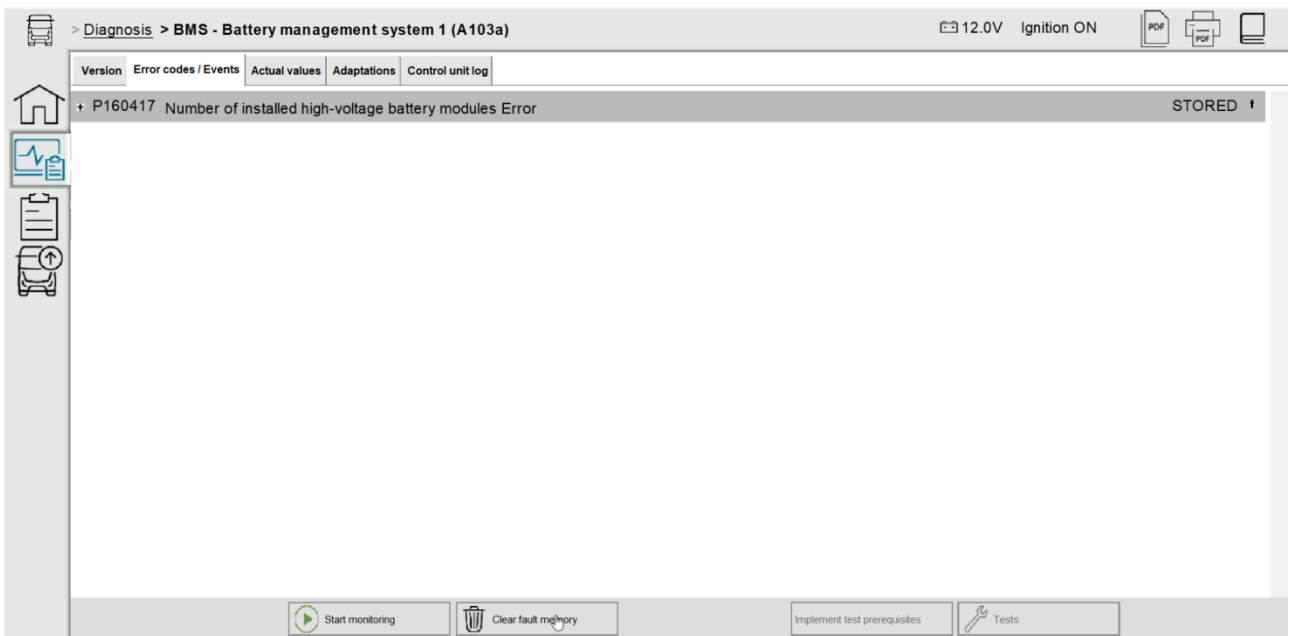
The BMS1 rewrite operation is complete.

AFTER 30, YOU DO NOT NEED TO CARRY OUT ANY FURTHER WORK AND CONTINUE WITH THE SOFTWARE UPDATE FOR THE BMS2.

The software update for the BMS1 (eCANTER with battery size S) is now complete. Continue with BMS2 and 3 (about the same as BMS 1).



29. Check whether the “Number of installed high–voltage battery modules” matches the actual vehicle.
If different, select the number of modules in the actual vehicle and if the actual value display changes ⇒ “Continue”.
Note:–Wait until the selected number of batteries is displayed in the Actual Value



30. Check fault code for 'stored value' and clear fault code.

eCANTER 23MODEL BMS Software Update Procedure

22/34

> Diagnosis > BMS - Battery management system 1 (A103a) 11.9V Ignition ON

Version | Error codes / Events | Actual values | Adaptations | Control unit log

BMS - Battery management system 1 (A103a)

Model	Part number	Supplier (Supplier ID)	Version
Hardware	---	CATL (244)	21/12 000
Boot software	---	---	24/06 000

Diagnosis identifier	000801	Control unit variant	BMS02TF01_App_000801
Software version	---	Hardware model	BMS02TF01
Communication with vehicle	ODX: CAN 500	Serial number of control unit	30 30 31 50 42 42 31 33 30 30 30 30 30 31 42 39 32 31 30 30 30 30 30 35
FUSO object number for software	0034480172	FUSO object number for hardware	79044608;2001

31. Ensure that the diagnosis ID and control unit variant is 000801.

*The following EV system faults are displayed on the vehicle's meter, so turn the key OFF ⇒ key ON again and make sure that it is off.



The BMS1 rewrite operation is complete.

32. Then perform a software update for BMS2,3 (BMS2 and BMS3 work in the same way

The following is an example of BMS2.

> Diagnosis 12.2V Ignition ON

Search

BMS - Battery management system 1 (A103a)

BMS - Battery management system 2 (A103b)

BMS - Battery management system 3 (A103c)

DCB - Direct current charge connection unit (A104)

OBC - 22 kW Alternating current Charger (A106)

OBC - 11 kW Alternating current Charger (A105)

Start quick test | Clear fault memory | Open TIPS results | Implement test prerequisites | Tests | **Continue**

33. "Select BMS battery management system 2 (A103b)⇒"Continue"

eCANTER 23MODEL BMS Software Update Procedure

> Diagnosis > BMS - Battery management system 2 (A103b) 12.1V Ignition ON

Version | Error codes / Events | Actual values | Adaptations | Control unit log

BMS - Battery management system 2 (A103b)

Model	Part number	Supplier (Supplier ID)	Version
Hardware	---	CATL (244)	21/12 000
Boot software	---	---	24/06 000

Diagnosis identifier	000701	Control unit variant	BMS02TF02_App_000701
Software version	---	Hardware model	BMS02TF02
Communication with vehicle	ODX: CAN 500	Serial number of control unit	30 30 31 50 42 42 31 33 30 30 30 30 30 31 42 38 48 31 30 30 30 30 31 31
FUSO object number for hardware	79044608:2001	FUSO object number for software	0034480172

34. On the version screen, confirm that the diagnosis ID is "000701." (By performing this operation, the diagnosis ID will ultimately be changed to "000801."). Select "Adaptations"

> Diagnosis > BMS - Battery management system 2 (A103b) 12.1V Ignition ON

Version | Error codes / Events | Actual values | Adaptations | Control unit log

Selection

- Teach-in processes
 - Initial startup
 - Programming of component 'Battery management system 2' - Boot software version
 - Programming of component 'Battery management system 2' - Application software version

Programming of component 'Battery management system 2' - Boot software version

Information

- 1 Read out actual values before removal of component 'Battery management system 2'.
- 2 Document the values beforehand if necessary. (Status of associated actual values)
- 3 Replace component 'Battery management system 2'.
- 4 Perform initial startup of component 'Battery management system 2'. (Control unit replacement)
- 5 Enter the previously read out values into the input fields.

Continue

35. Programming of component 'Battery management system 2'-Boot software version
Select => "Continue"

> Diagnosis > BMS - Battery management system 2 (A103b) 12.1V Ignition ON

Version | Error codes / Events | Actual values | Adaptations | Control unit log

Selection

- Teach-in processes
 - Initial startup
 - Programming of component 'Battery management system 2' - Boot software version
 - Programming of component 'Battery management system 2' - Application software version

Programming of component 'Battery management system 2' - Boot software version

Stored HVB System Configuration

No.	Name	Actual value
158	Number of installed high-voltage battery modules	0

Battery Production Data

No.	Name	Actual value
167	High-voltage battery Day of manufacture	0
166	High-voltage battery Production month	0
165	High-voltage battery Year of manufacture	0
168	State of charge	10.00%
811	End Of Line Verification	OK

Contactor Aging Counter Remaining

No.	Name	Actual value
172	PRECHARGING Relays Open Close POSSIBLE Number of actuations	394802
-1	Switch cycles of contactor POSITIVE	176988
-2	Switch cycles of contactor NEGATIVE	178617

Continue

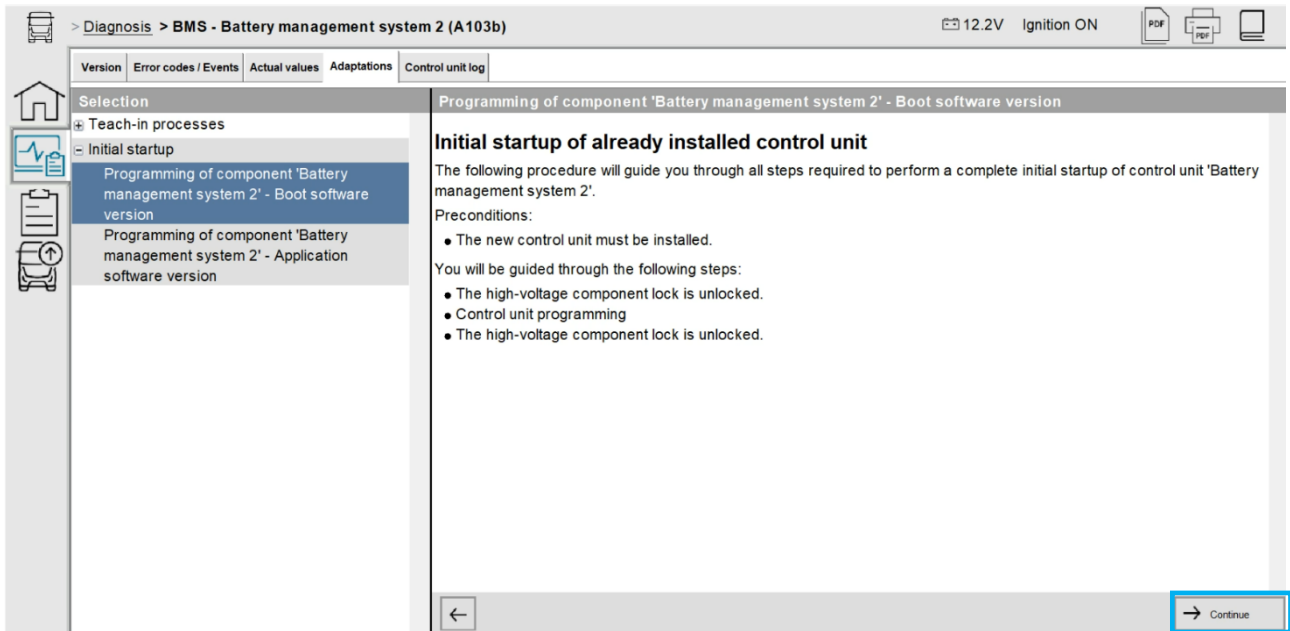
36. Save actual values as PDF⇒“Continue”

Suggestion: This screen will be used to compare the actual values during a later application software update. Shooting with a smartphone or similar will make the update process smoother.

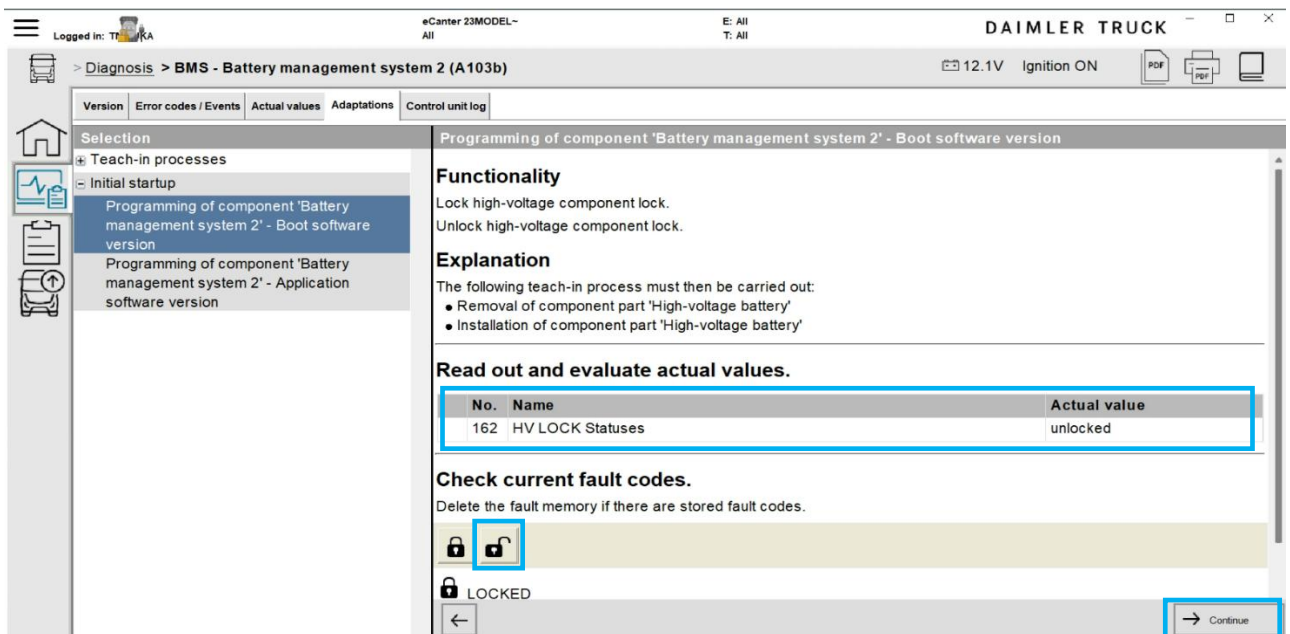
Actual values to be compared

168: State of charge

220: Ageing state 1

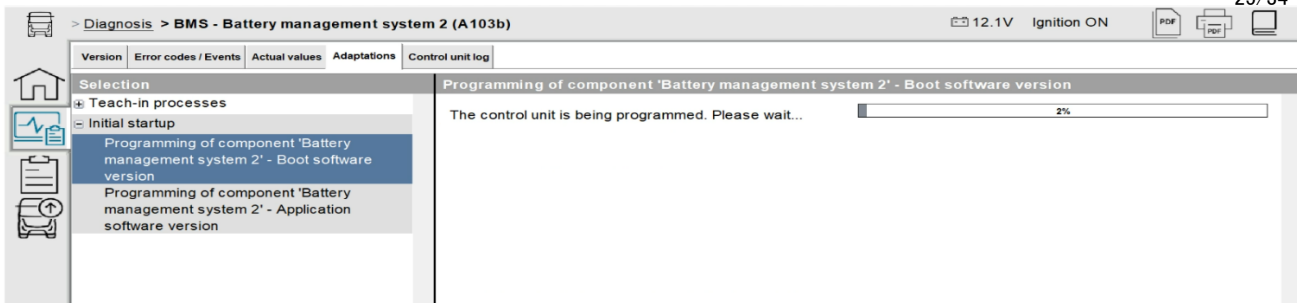


37. “Continue”

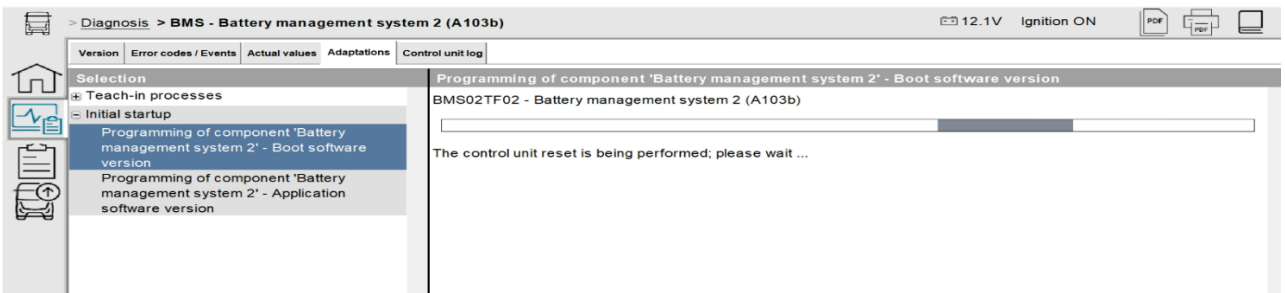


38. Check that the actual value for the HV lock state is set to “unlocked”⇒“Continue”
 *If “locked”, click on the unlock symbol⇒“Continue”

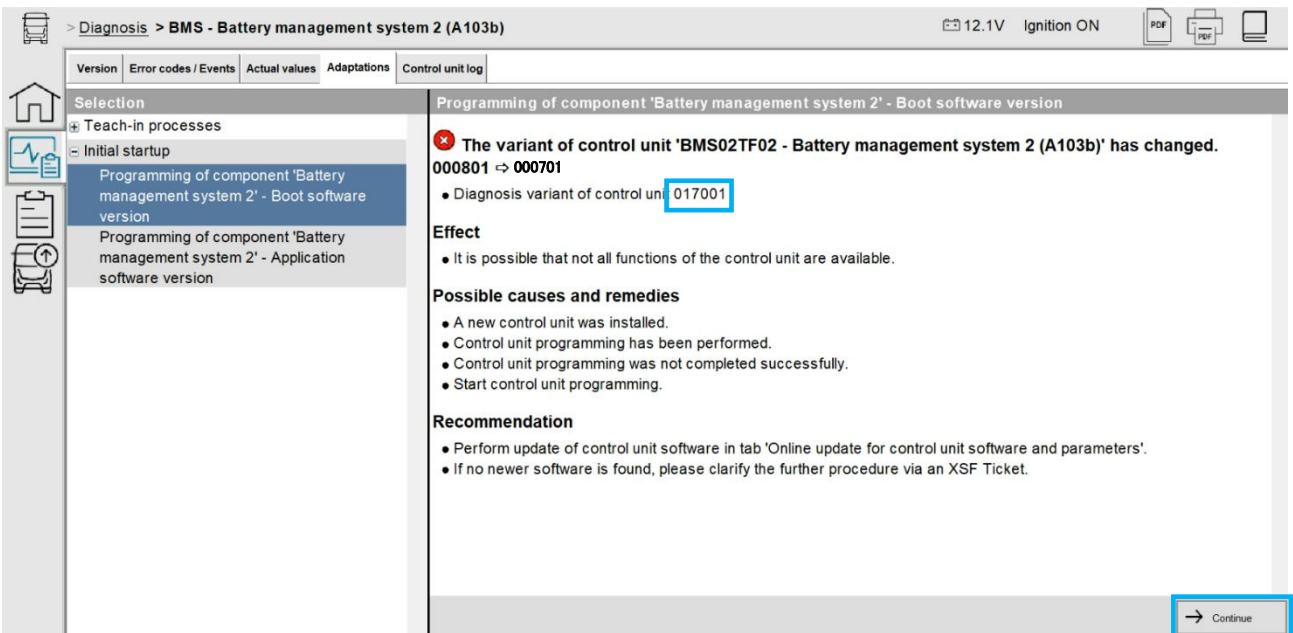
eCANTER 23MODEL BMS Software Update Procedure



39. Programming: waiting

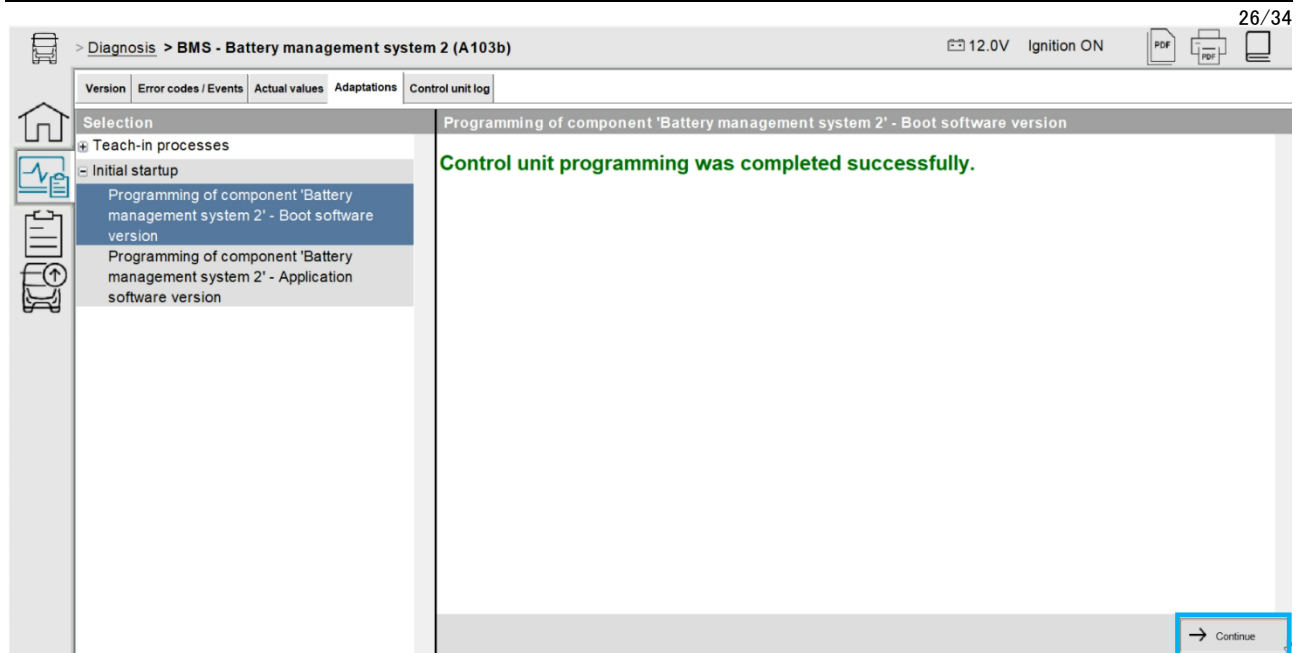


40. Resetting: Waiting

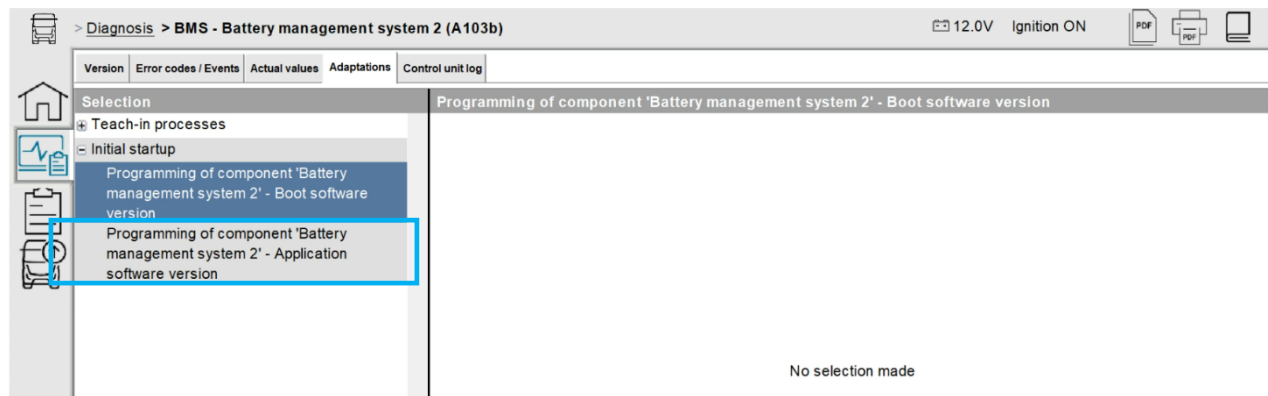


41. Confirm that "Diagnosis variant of control unit" is set to 017001 ⇒ "Continue"

*This screen may not be displayed.



42. "Continue"



43. Select "Programming of component 'Battery management system 2'–Application software version.

27/34

> Diagnosis > BMS - Battery management system 2 (A103b) 12.1V Ignition ON

Version Error codes / Events Actual values Adaptations Control unit log

Selection

- + Teach-in processes
- Initial startup
 - Programming of component 'Battery management system 2' - Boot software version
 - Programming of component 'Battery management system 2' - Application software version**

Information

- 1 Read out actual values before removal of component 'Battery management system 2'.
- 2 Document the values beforehand if necessary. (Status of associated actual values)
- 3 Replace component 'Battery management system 2'.
- 4 Perform initial startup of component 'Battery management system 2'. (Control unit replacement)
- 5 Enter the previously read out values into the input fields.

→ Continue

44. "Continue"

> Diagnosis > BMS - Battery management system 2 (A103b) 12.0V Ignition ON

Version Error codes / Events Actual values Adaptations Control unit log

Selection

- + Teach-in processes
- Initial startup
 - Programming of component 'Battery management system 2' - Boot software version
 - Programming of component 'Battery management system 2' - Application software version**

Initial startup of already installed control unit

The following procedure will guide you through all steps required to perform a complete initial startup of control unit 'Battery management system 2'.

Preconditions:

- The new control unit must be installed.

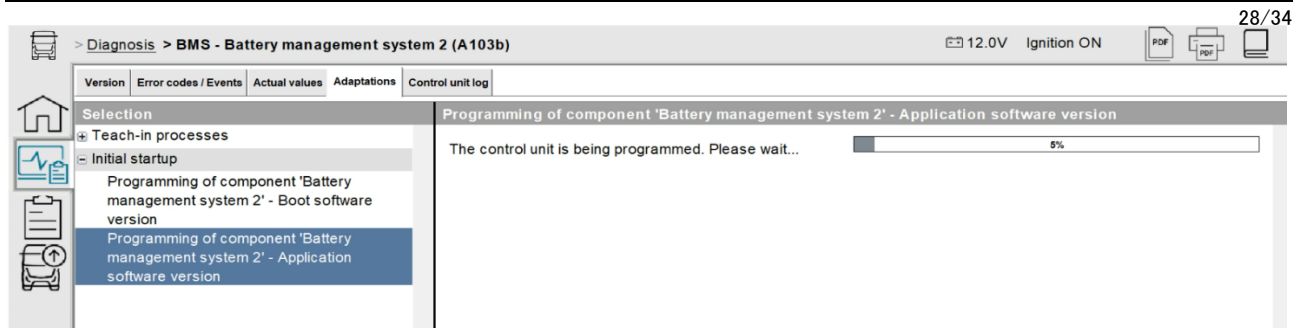
You will be guided through the following steps:

- The high-voltage component lock is unlocked.
- Control unit programming
- The high-voltage component lock is unlocked.

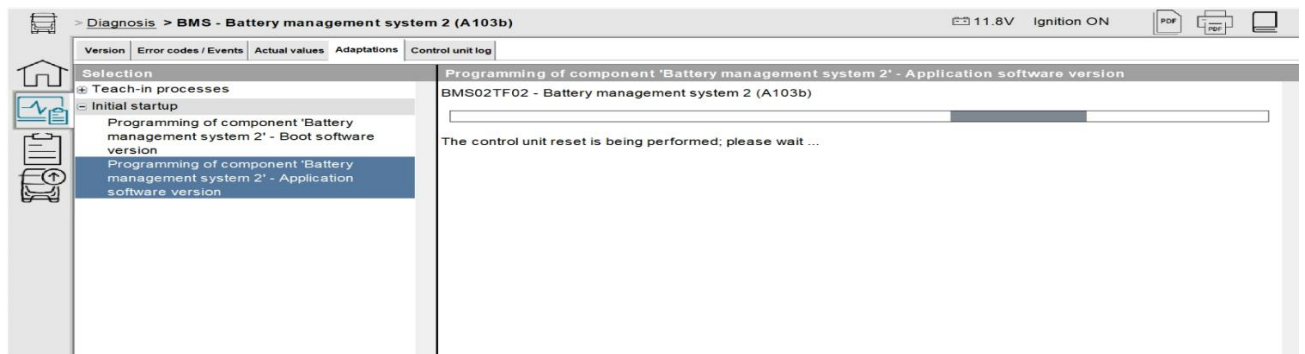
← → Continue

45. "Continue"

eCANTER 23MODEL BMS Software Update Procedure

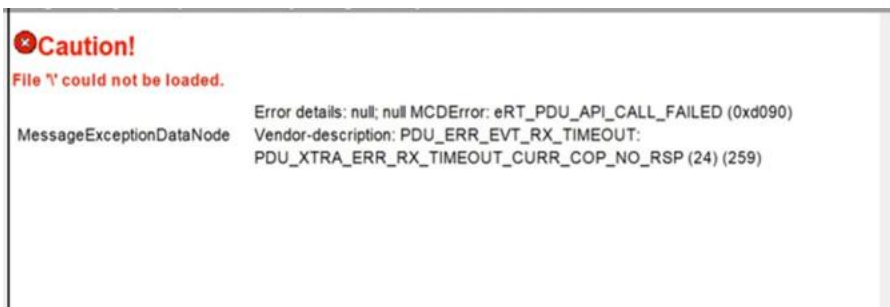


46. Programming: waiting



47. Resetting: Waiting

Note: If the following error message appears, press “Continue” and then select “Programming – boot software version of component 'Battery management system 2'” (do not write) and then select “– application software release of component part 'Rechargeable battery management system 2'” again to rewrite the application software.



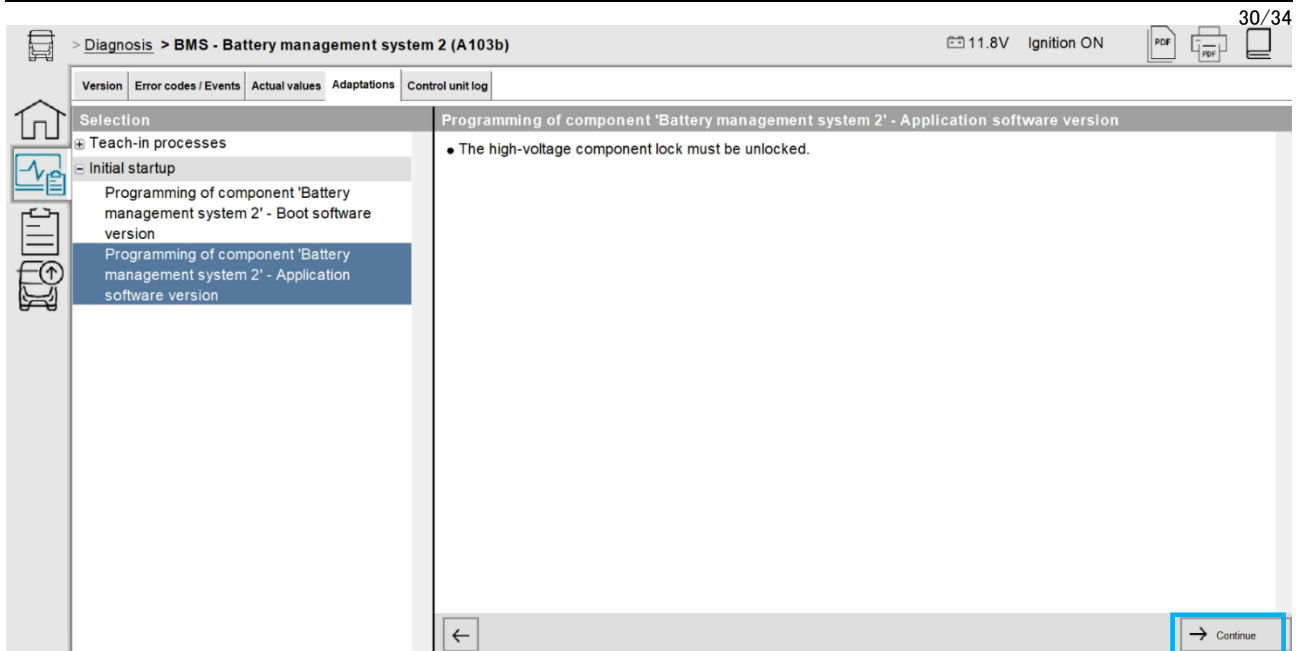
eCANTER 23MODEL BMS Software Update Procedure

The screenshot shows the diagnostic software interface for the BMS - Battery management system 2 (A103b). The top bar indicates a voltage of 11.8V and Ignition ON. The left sidebar shows a navigation menu with options like 'Teach-in processes' and 'Initial startup'. The main area is titled 'Programming of component 'Battery management system 2' - Application software version'. A red error message states: 'The variant of control unit 'BMS02TF02 - Battery management system 2 (A103b)' has changed. 017001 ⇒ 000801'. Below this, it lists 'Possible causes and remedies' and 'Recommendation'. A 'Continue' button is visible at the bottom right.

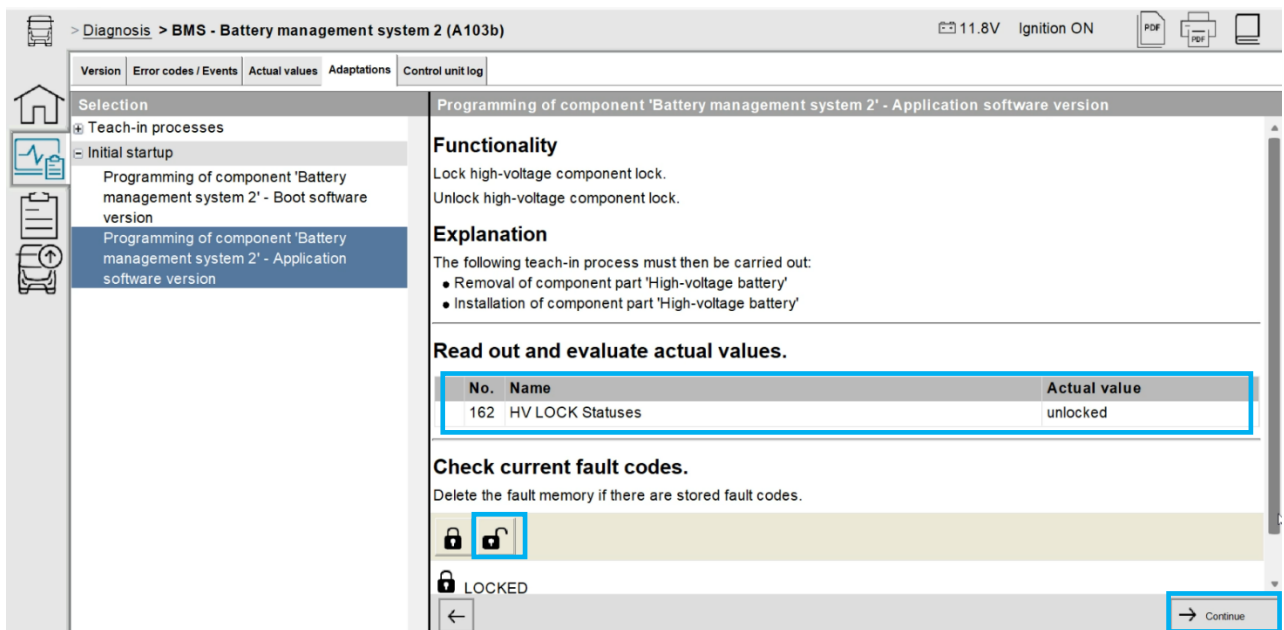
48. Ensure that the diagnosis variant of the control unit is 000801⇒“Continue”
*This screen may not be displayed

The screenshot shows the same diagnostic software interface as above, but now displaying a green message: 'Control unit programming was completed successfully.' The 'Continue' button at the bottom right is still present.

49. “Continue”



50. "Continue"



51. Check that the actual value for the HV lock state is set to "unlocked" ⇒ "Continue"
 *If "locked", click on the unlock symbol ⇒ "Continue"

The following screen may appear after "Continue".
 From the PDF saved in 6 or from the screen that was photographed,
 check 220: Degradation state 1 and if the same, press "Continue"
 Otherwise change the number and press 'Continue'

31/34

> Diagnosis > **BMS - Battery management system 2 (A103b)** 11.8V Ignition ON

Version Error codes / Events Actual values Adaptations Control unit log

Selection

- Teach-in processes
 - Initial startup
 - Programming of component 'Battery management system 2' - Boot software version
 - Programming of component 'Battery management system 2' - Application software version**

Programming of component 'Battery management system 2' - Application software version

Enter your Data

- SOH Calibration
 - Degradation state 1 (%)

[Continue](#)

> Diagnosis > **BMS - Battery management system 2 (A103b)** 11.8V Ignition ON

Version Error codes / Events Actual values Adaptations Control unit log

Selection

- Teach-in processes
 - Initial startup
 - Programming of component 'Battery management system 2' - Boot software version
 - Programming of component 'Battery management system 2' - Application software version**

Programming of component 'Battery management system 2' - Application software version

The values were successfully written.

[Continue](#)

52. "Continue"

eCANTER 23MODEL BMS Software Update Procedure

DAIMLER TRUCK 32/34

Logged in: T...KA eCANTER 23MODEL- All E: All T: All

> Diagnosis > BMS - Battery management system 2 (A103b) 11.8V Ignition ON

Version Error codes / Events Actual values Adaptations Control unit log

Selection

- Teach-in processes
- Initial startup
 - Programming of component 'Battery management system 2' - Boot software version
 - Programming of component 'Battery management system 2' - Application software version

Programming of component 'Battery management system 2' - Application software version

• Stored HVB System Configuration

No.	Name	Actual value
158	Number of installed high-voltage battery modules	0

• Battery Production Data

No.	Name	Actual value
167	High-voltage battery Day of manufacture	0
166	High-voltage battery Production month	0
165	High-voltage battery Year of manufacture	0
168	State of charge	10.00%
811	End Of Line Verification	OK

• Contactor Aging Counter Remaining

No.	Name	Actual value
172	PRECHARGING Relays Open Close POSSIBLE Number of actuations	394802
172	Switch cycles of contactor POSITIVE	176988
-1		
172	Switch cycles of contactor NEGATIVE	178617
-2		

→ Continue

53. Save actual values as PDF ⇒ "Continue"

Note:-Compare the following actual values with the PDF before the update saved in 6 or with the photos taken.

168: State of charge

220: Ageing state 1

> Diagnosis > BMS - Battery management system 2 (A103b) 11.8V Ignition ON

Version Error codes / Events Actual values Adaptations Control unit log

Selection

- Teach-in processes
- Initial startup
 - Programming of component 'Battery management system 2' - Boot software version
 - Programming of component 'Battery management system 2' - Application software version

Programming of component 'Battery management system 2' - Application software version

Are the actual values OK?

← NO → YES

54. Check actual values before and after Software update (PDF), If No differences ⇒ "YES"

Note: Before and after programming, the charge level (%) and degradation level 1 (%) may fluctuate slightly. If the difference is ± 0.1 , please select "Yes" as if there is no difference. If the difference is greater than ± 0.1 , enter the value below and select "Continue." * Even if the displayed PDF after input differs by ± 0.1 , as mentioned above, treat it as if there is no difference and continue as is.

eCANTER 23MODEL BMS Software Update Procedure

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> Diagnosis > BMS - Battery management system 2 (A103b) 11.8V Ignition ON

Version	Error codes / Events	Actual values	Adaptations	Control unit log
Selection				
+ Teach-in processes				
- Initial startup				
Programming of component 'Battery management system 2' - Boot software version				
Programming of component 'Battery management system 2' - Application software version				
Programming of component 'Battery management system 2' - Application software version				
● Battery management system 2				
● Press button 'Continue' to continue to erase the fault codes.				
+ P160004 There is an internal communication error in control unit 'Battery management system'. STORED f				
+ U011502 The internal communication of the control unit has a malfunction. STORED f				
+ U011500 Internal communication error STORED f				
+ P160060 Analog Crash signal INVALID STORED f				

[←](#) [→ Continue](#)

55. Erase fault code 'Continue'

If the fault code is 'Current and stored values', the fault code must be processed after completing the transcription.

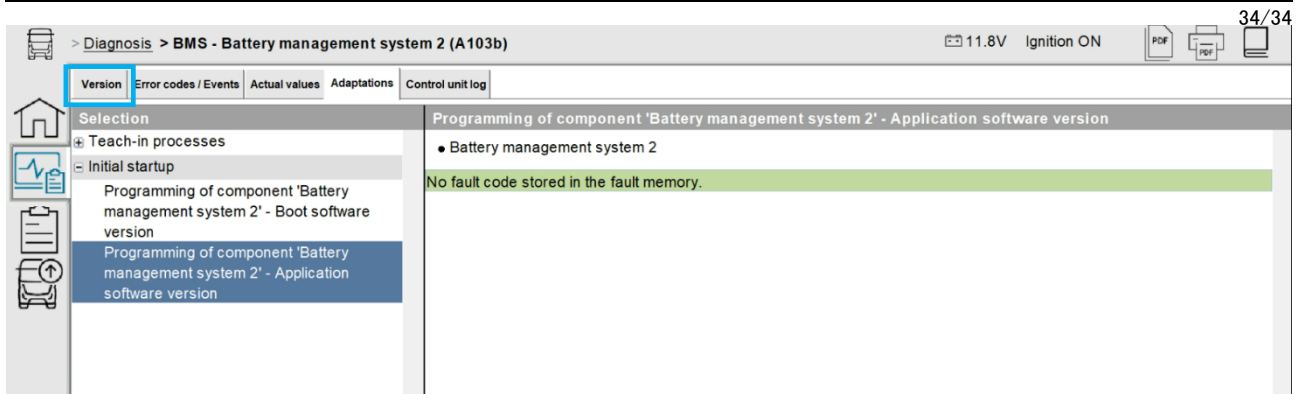
> Diagnosis > BMS - Battery management system 2 (A103b) 11.8V Ignition ON

Version	Error codes / Events	Actual values	Adaptations	Control unit log
Selection				
+ Teach-in processes				
- Initial startup				
Programming of component 'Battery management system 2' - Boot software version				
Programming of component 'Battery management system 2' - Application software version				
Programming of component 'Battery management system 2' - Application software version				
● Battery management system 2				
No fault code stored in the fault memory.				

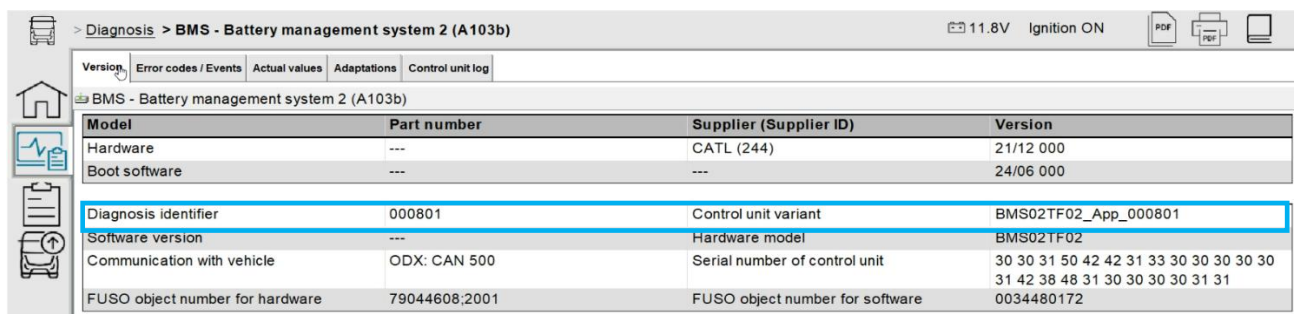
[←](#) [→ Continue](#)

56. "Continue"

eCANTER 23MODEL BMS Software Update Procedure



57. Select Version



58. Ensure that the diagnosis ID and control unit variant is 000801.

*The following EV system faults are displayed on the vehicle's meter, so press the key OFF ⇒ key ON again and make sure that it is off.



The BMS2 rewrite operation is complete.

The software update for the BMS2 (eCANTER with battery size M) is now complete.
 For vehicles with BMS3 (eCANTER with battery size L), continue to work in the same way as for BMS2)

E-Canter DCB ECU Reprogramming Procedure

Revision	Date	Content
-	2025/4/9	New creation
F	2025/10/16	<ul style="list-style-type: none"> Chapter title and caution shared with BMS. Updated the corresponding DTD version and add-ons. (The add-ons included this time will reduce errors during rewriting.) Contact DHD deleted. (For issues related to this matter, please contact QM.)
G	2025/11/26	<ul style="list-style-type: none"> Review the corresponding DTD versions and add-ons Review and add recovery procedures Review the DCB software update procedure

1. Target vehicle

eCANTER 23MODEL

2. Corresponding DTD versions and add-ons

This work must be performed in combination with the following diagnostic software versions and add-ons.



Daimler Truck Diagnostics (from DTD) version	AddOn no.
07/2025	34494, 34794
10/2025	34495, 34819

3. **Caution:**

- a. When connecting the DTD to the vehicle, make sure that the vehicle's ignition is turned off before connecting.
- b. During software updates, avoid impact to the PC, XD-VCI, connection cables, or vehicle. The software contains large amounts of data, and even minor impact can cause the update to fail.
- c. Always charge the 12 V battery during a software update.
(Make sure the voltage of the 12 V battery must not fall below 12 V)
- d. Before starting work, make sure that the necessary add-ons are installed for each DTD version.
- e. All diagnostic codes must be erased before starting work.
If a DTD and DCB communication failure occurs, confirm the message displayed and perform recovery actions as described below.
 - (4) RECOVERY PROCEDURE IF THE ADAPTATION TAB IS NOT DISPLAYED WHEN COMMUNICATING WITH DCB

E-Canter DCB ECU Reprogramming Procedure

- PRE-PREPARATION <DTD07/2025 ONLY>

DURING THE WORK, A COMMUNICATION FAULT BETWEEN DTD AND DCB CAN CAUSE THE WORK TO STOP DUE TO TRANSIENT FAULTS, ETC.

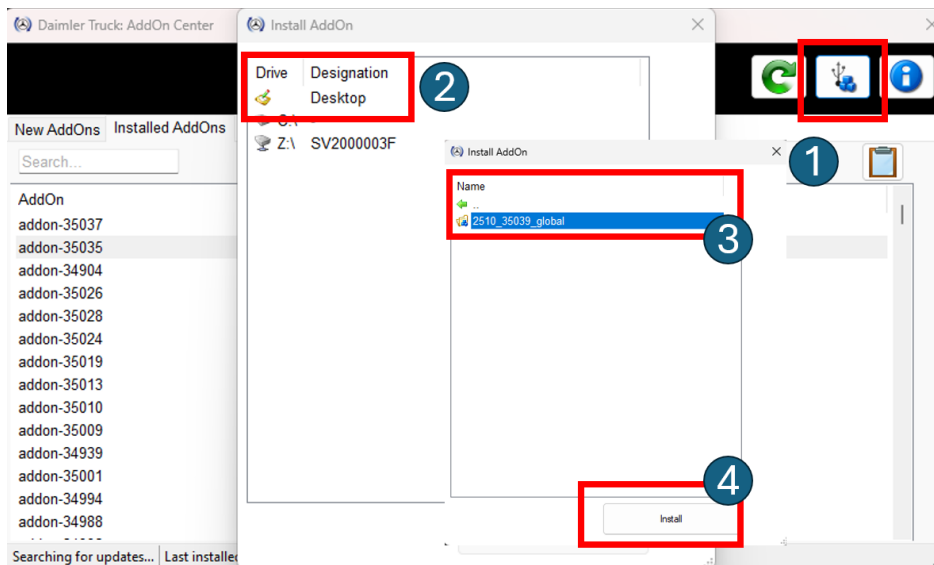
The Adaptations tab may be hidden, but you can rectify the problem by installing a mail add-on from Market Managers. Please install the following mail add-on when the Matching tab is hidden:



1	In the AddOn Center, select "2. Corresponding DTD versions and add-ons" ensure AddOn No. is installed
2	Reach out to the Market manager for mail Add-On

[Mail Add-on installation instructions]

1. Please get the mail Add-on file from Market Managers.
2. Close the DTD and Open Add-On center or Update center and place the unzipped mail Add-On on desktop.
3. Upload the Add-On file in Add-On center or Update center.
4. Make sure that the DTD is closed and Add on number is visible in Add on centre.



E-Canter DCB ECU Reprogramming Procedure

4. **Recovery Procedure If the Adaptations Tab is Not Displayed During Communication with the DCB**
When this screen appears, follow these instructions to install the mail Add-On.



Caution

- EVEN IF YOU HAVE ALREADY INSTALLED A MAIL ADD_ON FROM OR MARKET MANAGERS, YOU MAY STILL SEE THIS SCREEN (NO ADAPTATION TAB WHEN COMMUNICATING WITH THE DCB). THIS MAY BE BECAUSE THE MAIL ADD_ON HAS DISAPPEARED DUE TO THE INSTALLATION OF A SEPARATE ADD-ON**
If so, please reinstall this mail add-on with the DTD closed.

1	Disconnect DTD from vehicle and switch off key
2	Exit DTD
3	Install pre-prepared mail Add-On
4	Reconnect DTD to vehicle
5	Resume DCB Rewrite

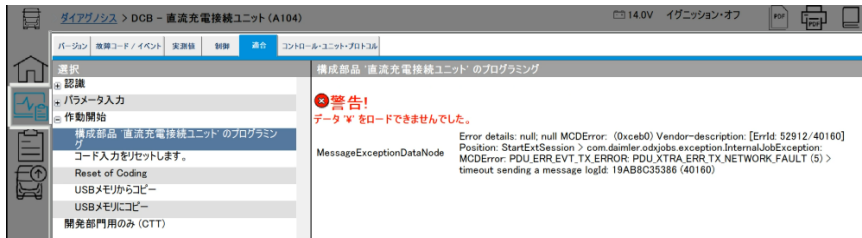
5. **Recovery Procedure for Failed DCB Software Rewrite**

If any error occurs in the software rewriting of the DCB, follow this procedure to reset the DCB ecu.
Perform a hardware reset.

(Main Error Screen)



E-Canter DCB ECU Reprogramming Procedure

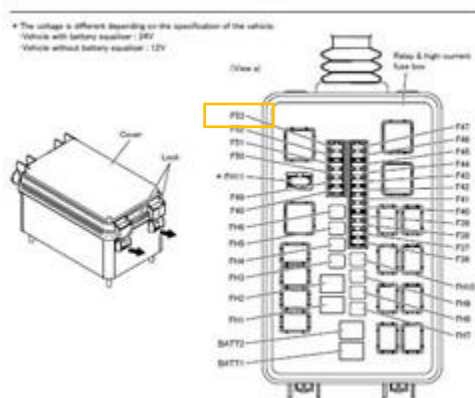


Caution

- **When reinstalling the disconnected high-current fuse F53 (10 A), the key must be switched ON within 10 seconds.**
Therefore, always work with at least two people at the same time.

1	Disconnect DTD from vehicle and switch off key
2	Disconnect high-current fuse F53 (10 A) (see picture below)
3	WAIT 1 MINUTE (FOR HARDWARE RESET OF DCB ECU)
4	Reconnect the disconnected high-current fuse F53 (10 A) (Two people are required to work on the system as it must be switched on within 10 seconds)
5	Key ON within 10 seconds (DCB cannot write again after more than 10 seconds)
6	Restart DTD PC and reconnect to vehicle
7	Resume DCB rewriting operation, refer to the Software Update Procedure after Rewrite Failure in Section 4(2)(b)
8	If the same error screen appears again Repeat the work from step 1.

Location of high-current fuse F53 (10 A) to be removed (excerpt from maintenance Manual)

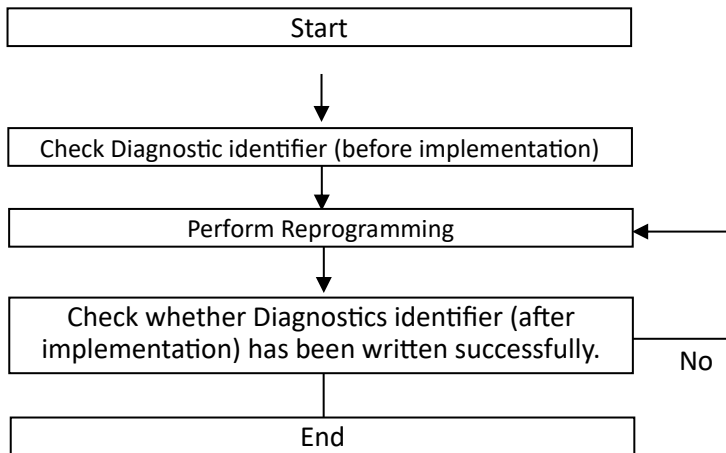


Fuse No.	Main load	Capacity
BATT1	ASAM	140A
BATT2	ASAM	100A
FH1	Fuse box (PDM) B5 to B8	30A
FH2	Cooling fan	30A
FH3	Fuse box (PDM) B38 to B40, B48	60A
FH4	Fuse box (PDM) B14, B16, B23, B24	60A
FH5	Fuse box (PDM) B54 to B56, B62 to B64	60A
FH6	EPB ECU	30A
FH7	EPB ECU	30A
FH8	Hydraulic unit (ABS)	30A
FH9	Electric vacuum pump 1	30A
FH10	Electric vacuum pump 2	30A
FH11	Fuse box (PDM) B69 to B81	45A
F26	VOU, KL15 VTL relay, JOINT(KL15V)	20A
F37	aDM	10A
F38	AVAS ECU, DC/DC converter	10A
F39	PTC heater (HVBI)	20A
F40	PTC heater (HVAC)	20A
F40	Condenser fan motor	20A
F41	Hydraulic unit (ABS)	30A
F42	Electric parking lock (EPL) actuator	30A
F43	-	-
F44	Water pump (Motor)	20A
F45	-	-
F46	-	-
F47	-	-
F48	Window heater	20A
F49	Window heater	20A
F50	Window heater	20A
F51	Seat heater	10A
F52	High voltage battery, DOB, OBC, DC/DC converter, VOU	10A
F53	High voltage battery, DCB, OBC	10A

E-Canter DCB ECU Reprogramming Procedure

- DCB SW Reprogramming Overview

The ECU software can be reprogrammed from the "Initial start-up" - "Reprogramming" screen of the corresponding ECU.



S.NO	Software Part Number	Type	Remarks
1	0009033074	Current	Before Flash Version
2	0009034675	New	After Flash Version

DCB SOFTWARE UPDATE PROCEDURE

(a) Normal software update procedure

***For work after a rewriting failure, follow the (b) Software update procedure.**

E-Canter DCB ECU Reprogramming Procedure

> Brand > Product group

Fuso

VIN **Truck** Busses Special functions Industrial major assemblies

If the model series you are looking for is not listed here, switch directly to your replacement parts ordering system or the Workshop Information System. Other model series can then be selected there.

XENTRY Diagnosis

1. Select “eCANTER 23MODEL”.

eCanter 23MODEL~

DAIMLER TRUCK

Please make a selection

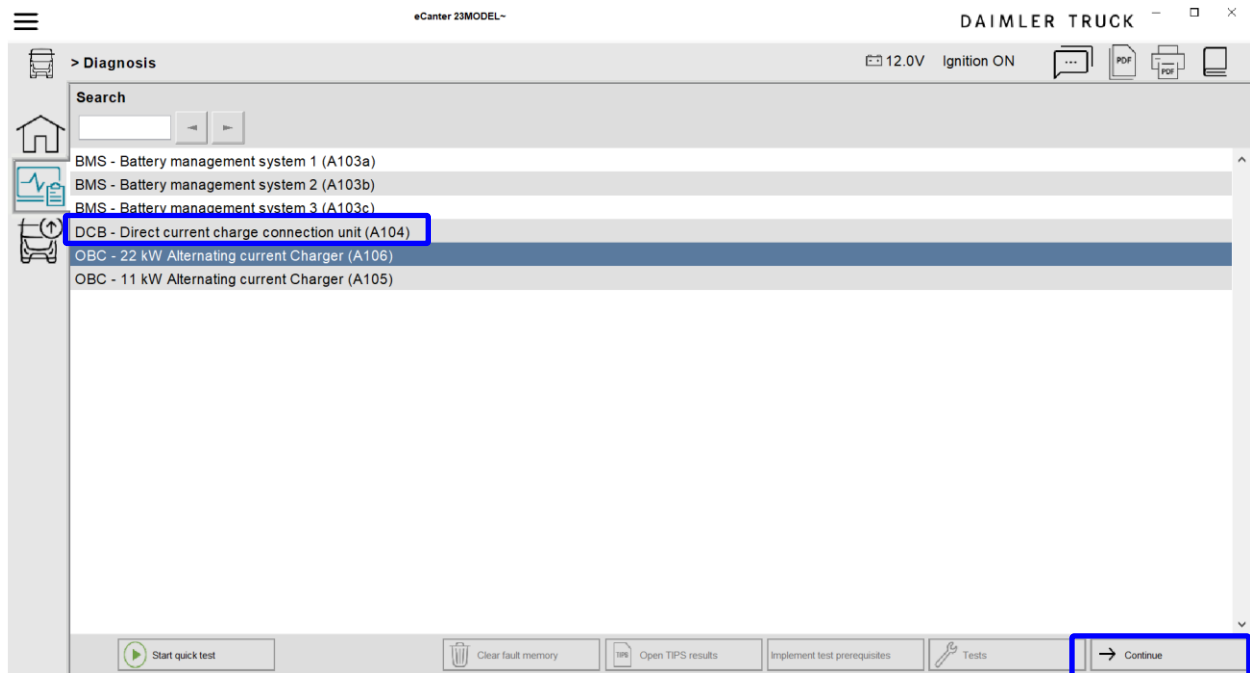
Options **Option 2: ODX Control units**

Option 1: Control units	Option 2: ODX Control units
ABS - Antilock brake system Control unit	BMS 1 - Battery management system 1
ASAM - Advanced signal acquisition and actuation module	BMS 2 - Battery management system 2
CDS - Central data memory Control unit	BMS 3 - Battery management system 3
CGW - Central gateway	DCB - Direct current charge connection unit
CLU - Gearshift lever	OBC 22KW - 22 KW Alternating current Charger
CTP - Common Telematics Platform Control unit	OBL223 - 11 kW Alternating current Charger
DAGW - ACTIVE ATTENTION ASSIST System	
DCDC - DC/DC converter	
EHPS - Electrohydraulic power steering	
EMCM - Electric motor Control unit	
EPB - Electric parking brake	
FMSGW - Fleet management system (FMS) Gateway	
HSA - Hill Start Assist Control unit	
HVAC - Heating, ventilation and air conditioning Control unit	
ICUC - Instrument cluster Control unit	
MPC - Multifunction camera	
MS - Maintenance system Control unit	
RDF - Radar sensor Control unit	
SMK - FUSO Easy Access ECU	
SRR - Short range radar	
SRS - Supplemental restraint system	
VCU - Vehicle Control unit	

→ Continue

2. Since this is a DCB (ODX-type ECU Click Option 2
3. Click “Continue” button.

E-Canter DCB ECU Reprogramming Procedure



4. Click DCB ECU
5. Click continue.

- DCB Diagnosis Identity Confirmation

Check the current software number in the DCB version tab. If you already have a new software department number, No further work is required.

Old and New	Software PN	Software version
Old	0009033074	—
New	0009034675	21.42.39

E-Canter DCB ECU Reprogramming Procedure

> Diagnosis > DCB - Direct current charge connection unit (A104)

Version | Error codes / Events | Actual values | Actuators | Adaptations | Control unit log

DCB - Direct current charge connection unit (A104)

Model	Part number	Supplier (Supplier ID)	Version
Hardware	---	Delta Energy Systems (170)	20/32 000
Boot software	---	---	20/29 020

Diagnosis Identifier	003010	Control unit variant	DCB223_Rel23Ar2_Star2
Software version	---	Hardware model	DCB223
Communication with vehicle	ODX: CAN 500	Serial number of control unit	32 32 30 35 30 39 30 30 37 34
Current VIN	FEC9K610001XXXXXX	FUSO object number for hardware	0009015612
FUSO object number for software	0009033074	FUSO object number for software	---

6. Check Software Part Number in Version screen

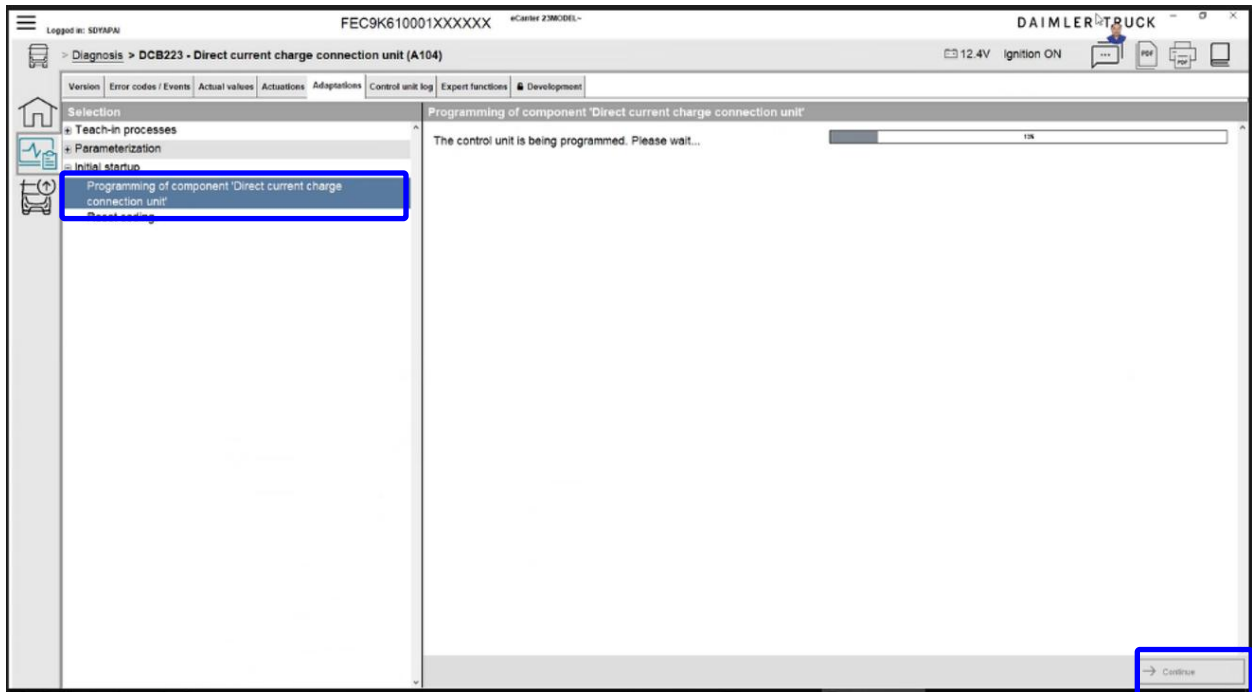
Logged in: YAKOMAT eCanter 23MODEL- DAIMLER TRUCK

> Diagnosis > DCB - Direct current charge connection unit (A104)

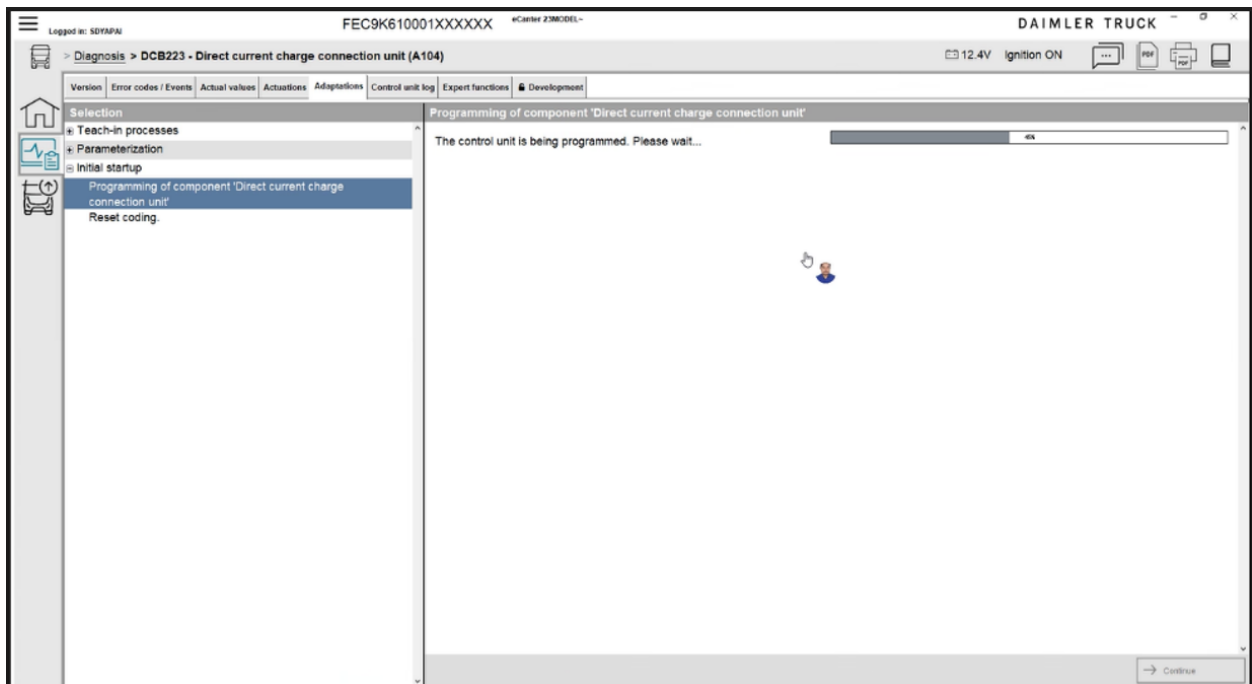
Version | Error codes / Events | Actual values | Actuators | Adaptations | Control unit log

7. Click Adaptation Tab

E-Canter DCB ECU Reprogramming Procedure

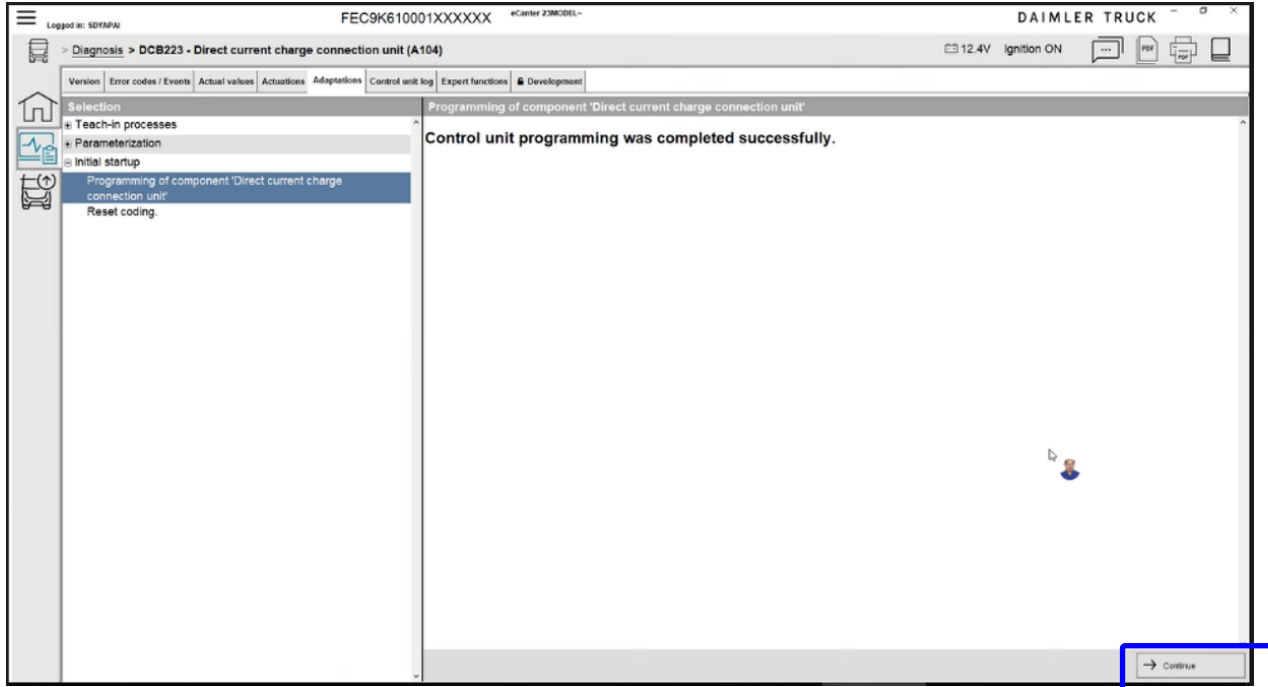


8. Click Programming of component 'Direct current change connection unit' (menu name may have changed due to update of DTD, but select one from the same place)
9. Then click "Continue"

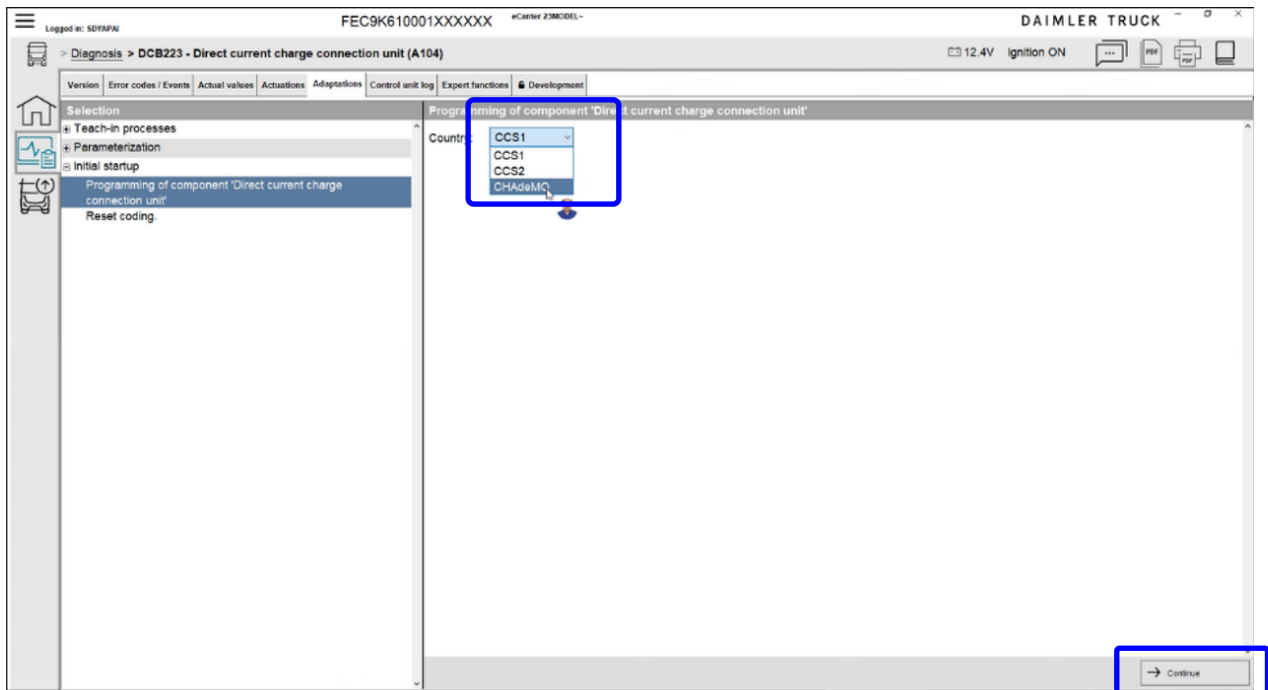


10. Reprogramming in progress. Wait for 100 % completion.

E-Canter DCB ECU Reprogramming Procedure



11. When this screen appears, the software rewrite is complete. Select “continue”

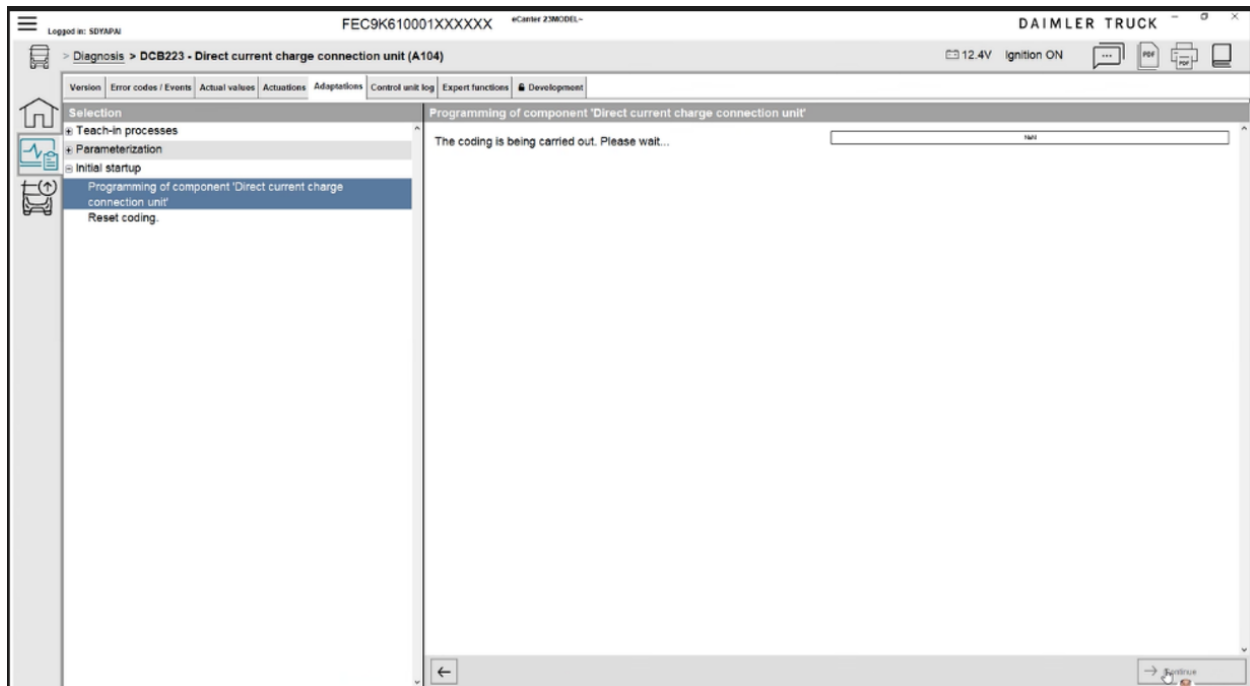


E-Canter DCB ECU Reprogramming Procedure

12. Select option as applicable country

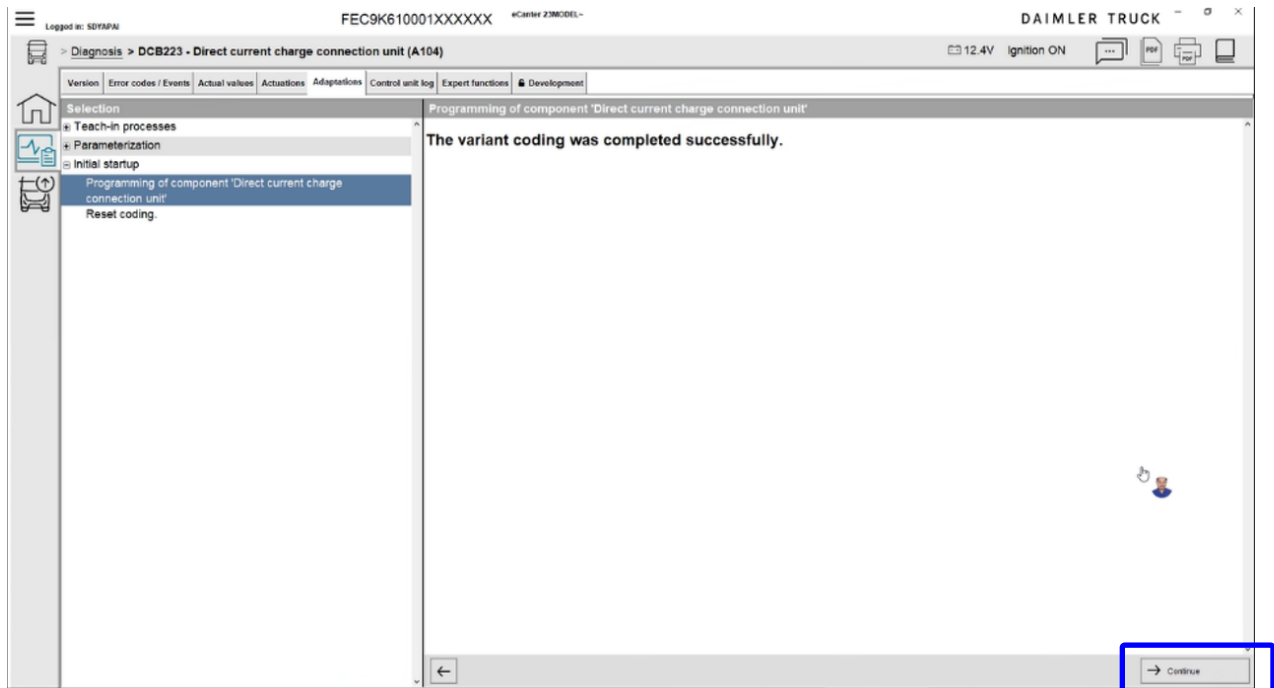
Option	Country
CCS1	USA
CCS2	Europe Other country without Japan and USA
CHAdEMO	Japan

13. Then click “continue”

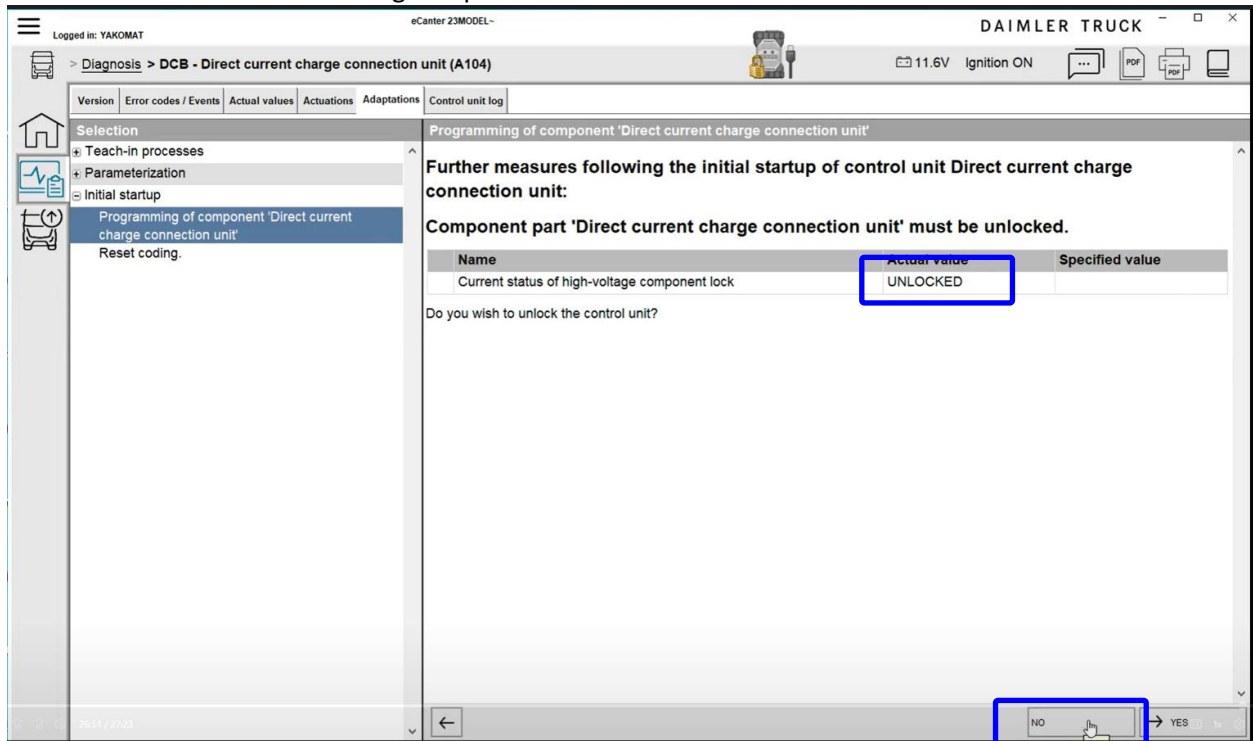


14. Parameter coding in progress

E-Canter DCB ECU Reprogramming Procedure



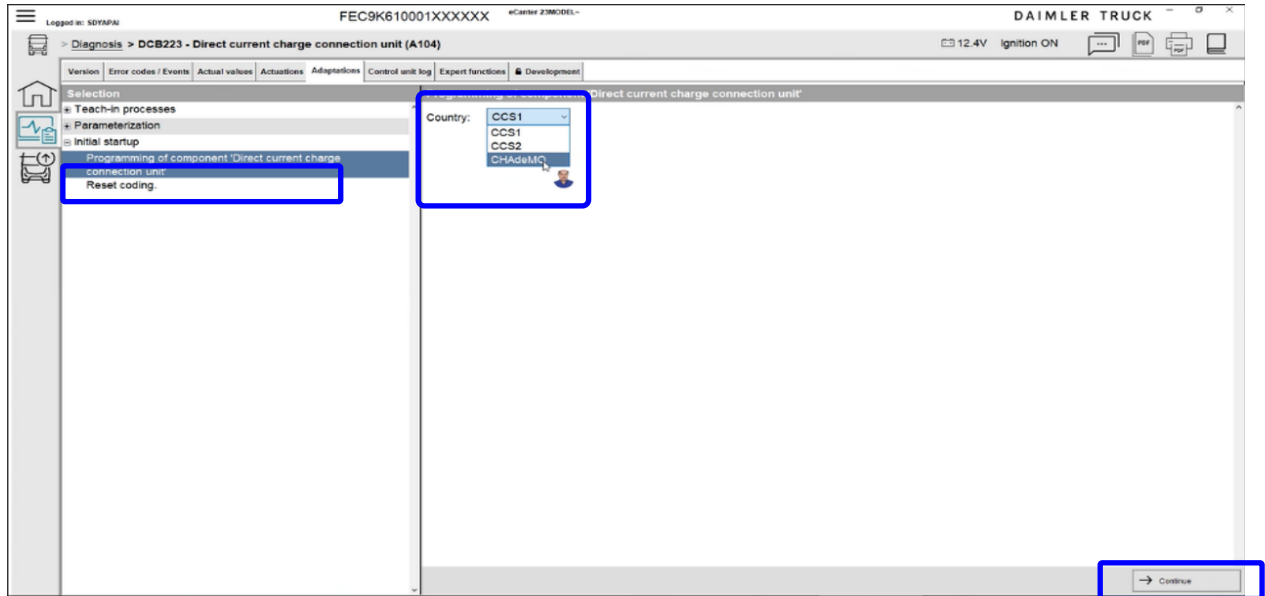
15. Confirm Variant coding completion and then click “continue”



16. Check Current status of High voltage Component lock “UNLOCKED” Status and then click “No”. If Current status is in “LOCKED state, then click “yes”.

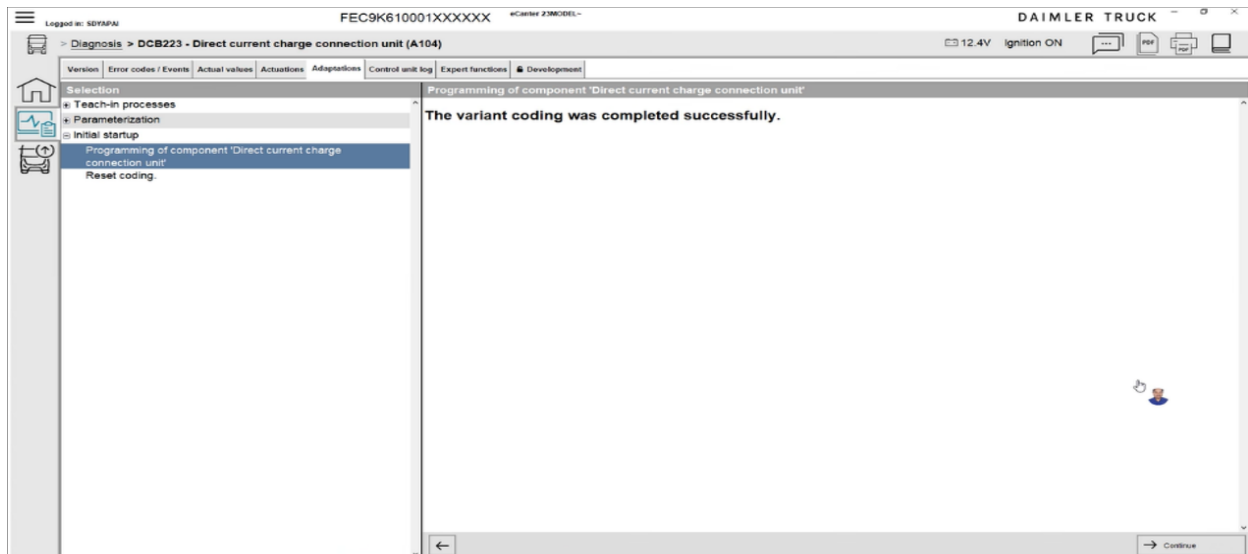
E-Canter DCB ECU Reprogramming Procedure

- Unlock: Select No
- Lock: Select Yes



17. Select "Reset of Coding" select country code accordingly from below, and select "continue"

- CCS1: NORTH AMERICA
- CCS2: EUROPE, OTHER COUNTRIES
- CHAdcMO: Japanese



18. Variant coding is completed .

E-Canter DCB ECU Reprogramming Procedure

> Diagnosis > DCB - Direct current charge connection unit (A104)

Version | Error codes / Events | Actual values | Actuators | Adaptations | Control unit log

DCB - Direct current charge connection unit (A104)

Model	Part number	Supplier (Supplier ID)	Version
Hardware	---	Delta Energy Systems (170)	20/32 000
Boot software	---	---	20/29 020

Diagnosis identifier	003010	Control unit variant	DCB223_Rel23Ar2_Star2
Software version	---	Hardware model	DCB223
Communication with vehicle	ODX: CAN 500	Serial number of control unit	32 32 30 35 30 39 30 30 37 34
Current VIN	FEC9K610001XXXXXX	FUSO object number for hardware	0009015612
FUSO object number for software	0009034675	FUSO object number for software	---

19. Select version tab for software part number check and confirm new Software Part Number.

S.NO	Software Part Number	Type	Remarks
1	0009033074	Current	Before Flash Version
2	0009034675	New	After Flash Version

Note: IF THE BATTERY LEVEL ON THE ICUC DISPLAY WAS 0% AFTER COMPLETION OF THE WORK, THE BATTERY DISPLAY RETURNS TO NORMAL BY PERFORMING A RUN-ON TIME OF 1 MINUTE WITH THE KEY OFF.

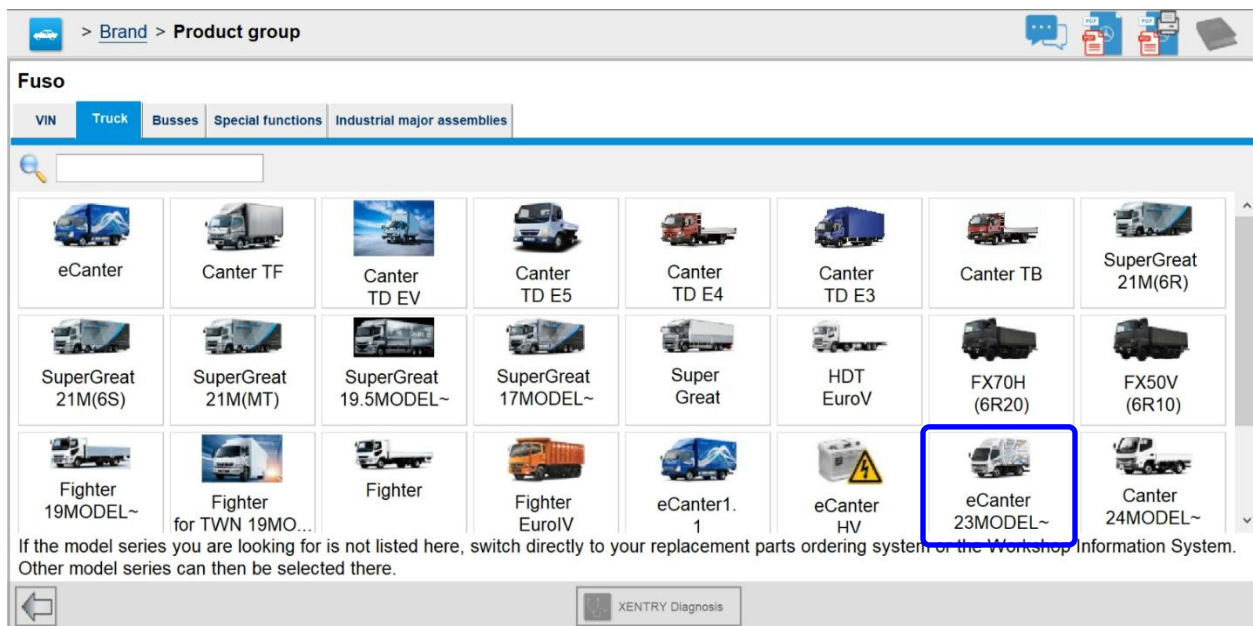


E-Canter DCB ECU Reprogramming Procedure

After completing the work, please convert the quick test results in the DTD to a PDF and send them to the inspector.

The normal software update procedure is now complete (work procedure after a write failure on the next page).

(b) Software update procedure after rewriting failure



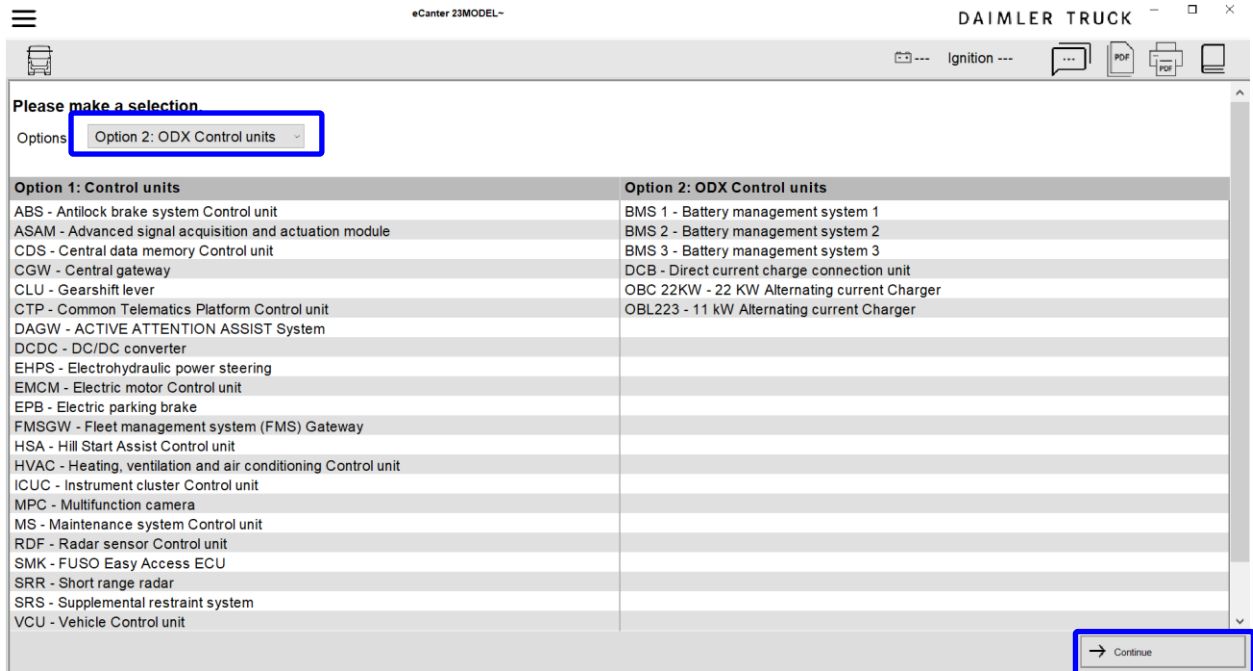
The screenshot shows the Fuso product selection interface. The breadcrumb navigation is "> Brand > Product group". The main heading is "Fuso". Below it, there are tabs for "VIN", "Truck", "Busses", "Special functions", and "Industrial major assemblies". The "Truck" tab is selected. A search bar is present. The main area displays a grid of vehicle models, each with a small image and a label. The models listed are:

eCanter	Canter TF	Canter TD EV	Canter TD E5	Canter TD E4	Canter TD E3	Canter TB	SuperGreat 21M(6R)
SuperGreat 21M(6S)	SuperGreat 21M(MT)	SuperGreat 19.5MODEL~	SuperGreat 17MODEL~	Super Great	HDT EuroV	FX70H (6R20)	FX50V (6R10)
Fighter 19MODEL~	Fighter for TWN 19MO...	Fighter	Fighter EuroIV	eCanter1. 1	eCanter HV	eCanter 23MODEL~	Canter 24MODEL~

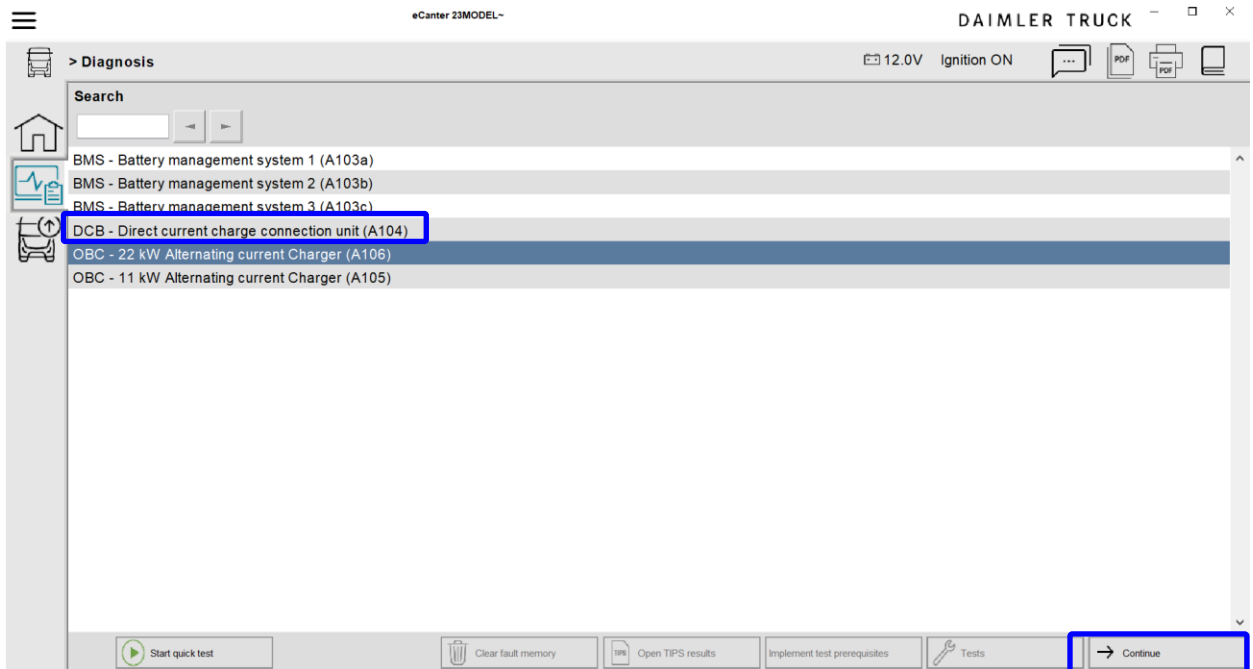
At the bottom of the grid, there is a note: "If the model series you are looking for is not listed here, switch directly to your replacement parts ordering system or the Workshop Information System. Other model series can then be selected there." Below the grid is a navigation bar with a back arrow and a "XENTRY Diagnosis" button.

1. Select "eCANTER 23MODEL".

E-Canter DCB ECU Reprogramming Procedure

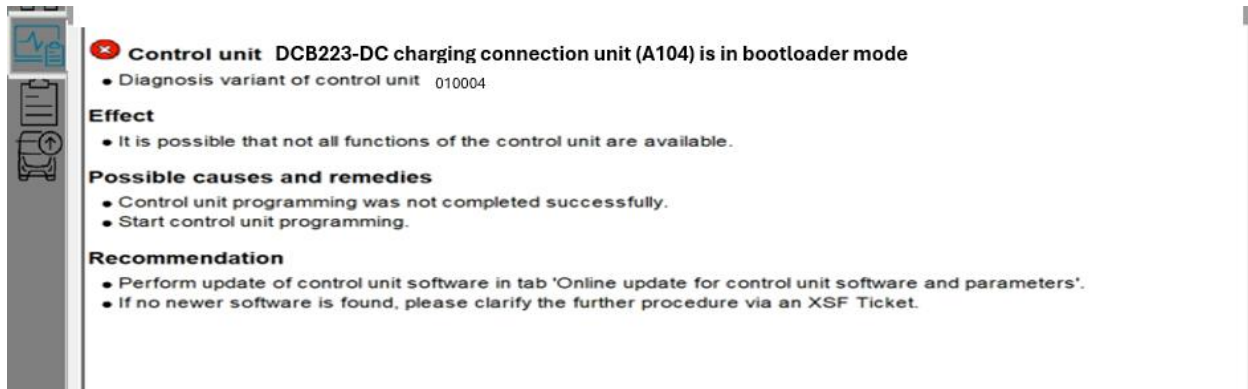


2. Click "Option 2: ODX Control units".
3. Click "Continue" button.



4. Click DCB ECU
5. Click continue.

E-Canter DCB ECU Reprogramming Procedure



Control unit DCB223-DC charging connection unit (A104) is in bootloader mode

- Diagnosis variant of control unit 010004

Effect

- It is possible that not all functions of the control unit are available.

Possible causes and remedies

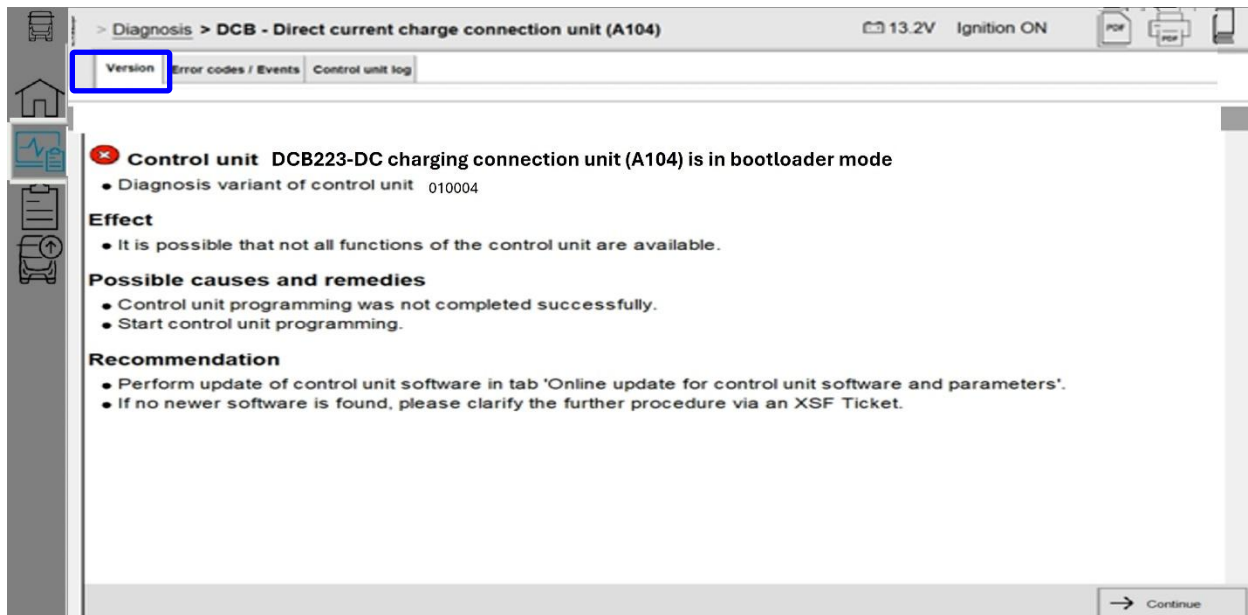
- Control unit programming was not completed successfully.
- Start control unit programming.

Recommendation

- Perform update of control unit software in tab 'Online update for control unit software and parameters'.
- If no newer software is found, please clarify the further procedure via an XSF Ticket.

6. Bootloader mode will be displayed in between, Select “continue”

Note: - *Do not unplug or plug fuses in this screen (without all tabs displayed at the top of the screen)



> Diagnosis > DCB - Direct current charge connection unit (A104) 13.2V Ignition ON

Version Error codes / Events Control unit log

Control unit DCB223-DC charging connection unit (A104) is in bootloader mode

- Diagnosis variant of control unit 010004

Effect

- It is possible that not all functions of the control unit are available.

Possible causes and remedies

- Control unit programming was not completed successfully.
- Start control unit programming.

Recommendation

- Perform update of control unit software in tab 'Online update for control unit software and parameters'.
- If no newer software is found, please clarify the further procedure via an XSF Ticket.

→ Continue

7. The version tab shows the bootloader mode. Remove high-Current fuse F53 (10A).Wait 60 seconds and reconnect to continue.

Note: - Do not switch off the ignition and restart the DTD on this screen

E-Canter DCB ECU Reprogramming Procedure

> Diagnosis > DCB - Direct current charge connection unit (A104) 10.0V Ignition ON

Version | Error codes / Events | Actual values | Actuators | **Adaptations** | Control unit log

DCB - Direct current charge connection unit (A104)

Model	Part number	Supplier (Supplier ID)	Version
Hardware	---	Delta Energy Systems (170)	20/32 000
Boot software	---	---	20/29 020

Diagnosis identifier	003010	Control unit variant	DCB223_Rel23Ar2_Star2
Software version	---	Hardware model	DCB223
Communication with vehicle	ODX: CAN 500	Serial number of control unit	32 32 30 35 30 39 30 30 37 34
Current VIN	FEC9K610001XXXXXX	FUSO object number for hardware	0009015612
FUSO object number for software	0009015612	FUSO object number for software	---

8. When the Version screen appears, select the “Adaptations” tab

> Diagnosis > DCB223 - Direct current charge connection unit (A104) 12.4V Ignition ON

Version | Error codes / Events | Actual values | Actuators | **Adaptations** | Control unit log | Expert functions | Development

Programming of component 'Battery management system 2' - Boot software version

Control unit DCB223-DC charging connection unit (A104) is in bootloader mode

- Diagnosis variant of control unit 010004

Effect

- It is possible that not all functions of the control unit are available.

Possible causes and remedies

- Control unit programming was not completed successfully.
- Start control unit programming.

Recommendation

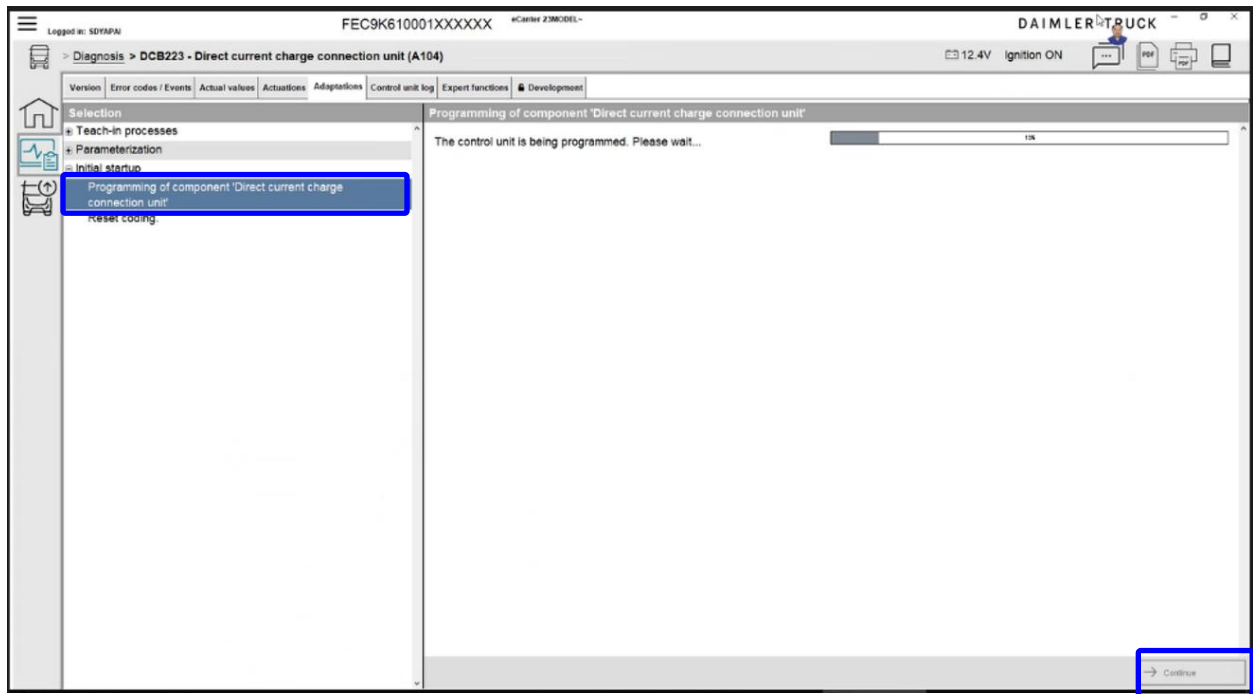
- Perform update of control unit software in tab 'Online update for control unit software and parameters'.
- If no newer software is found, please clarify the further procedure via an XSF Ticket.

→ Continue

9. The bootloader mode is displayed in the Adaptations tab. If the screen remains displayed, remove high-current fuse F53 (10A), Wait 60 seconds and reconnect to continue.

Note: – Do not switch off the ignition and restart the DTD on this screen

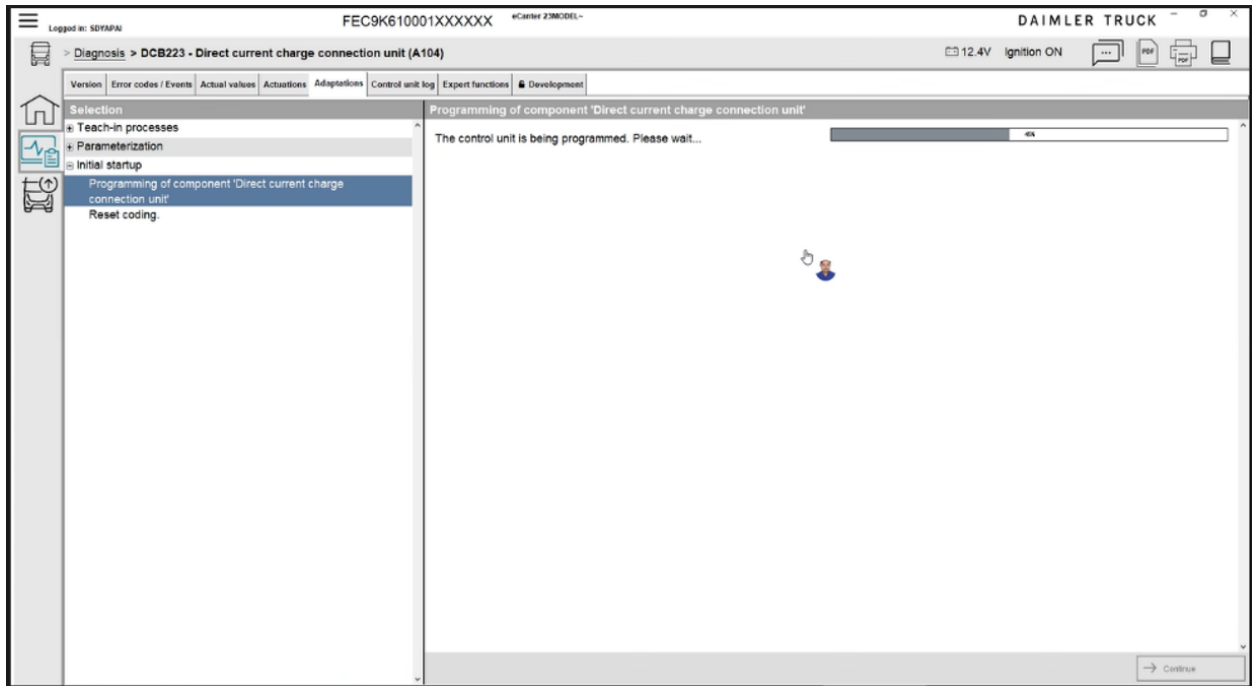
E-Canter DCB ECU Reprogramming Procedure



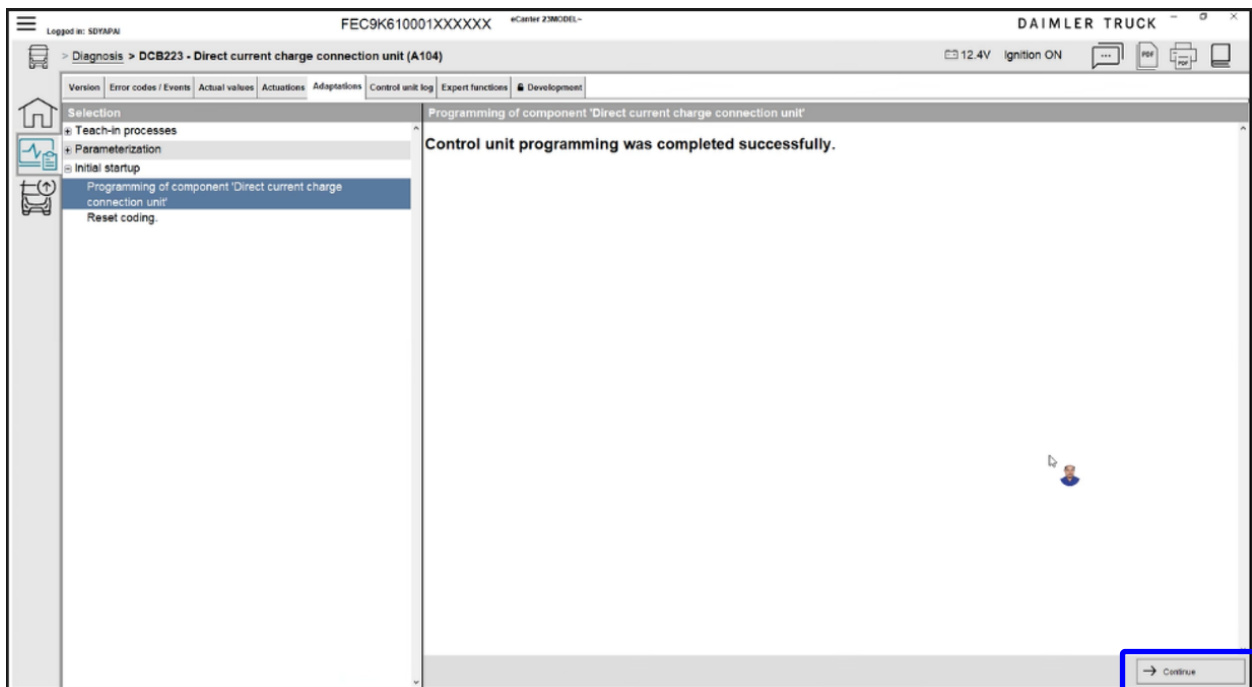
10. Once the DCB data has been loaded, menu will appear on the left side of the screen.

11. Click Programming of component 'Direct current change connection unit' (menu name may have changed due to update of DTD, but select one from the same place) & "Continue"

E-Canter DCB ECU Reprogramming Procedure

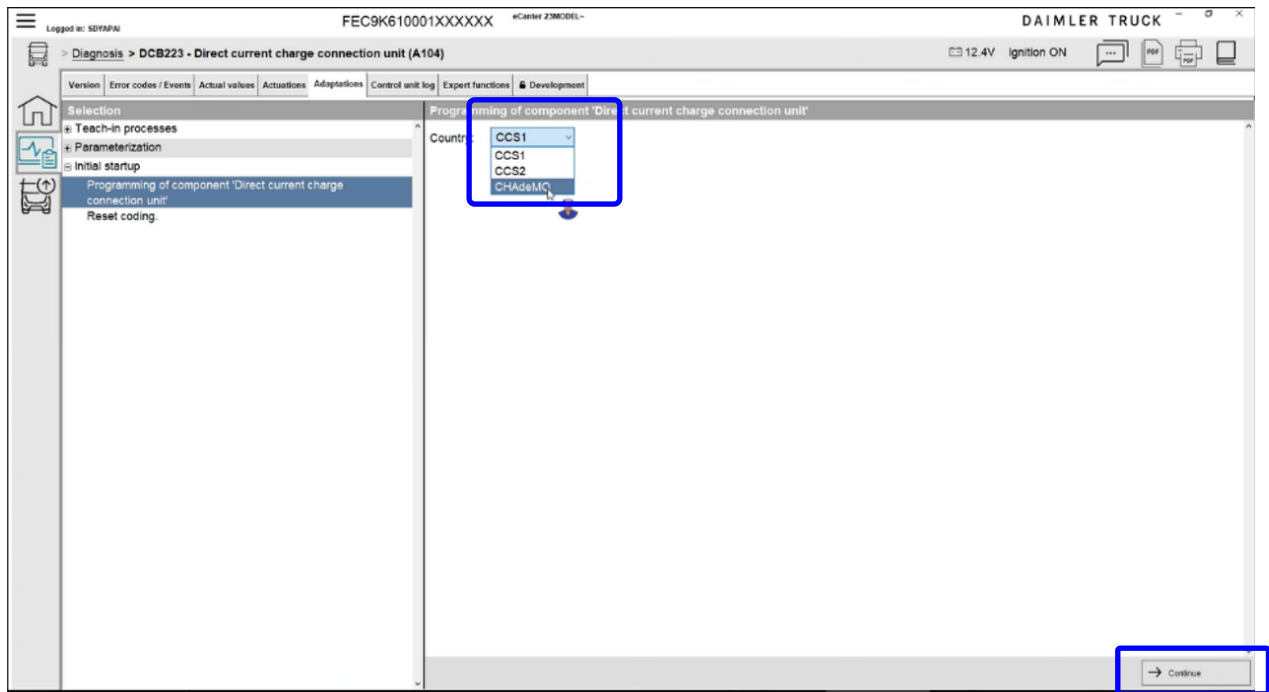


12. Reprogramming in progress. Wait for 100 % completion.



13. When this screen appears, the software rewrite is complete. Select “continue”

E-Canter DCB ECU Reprogramming Procedure

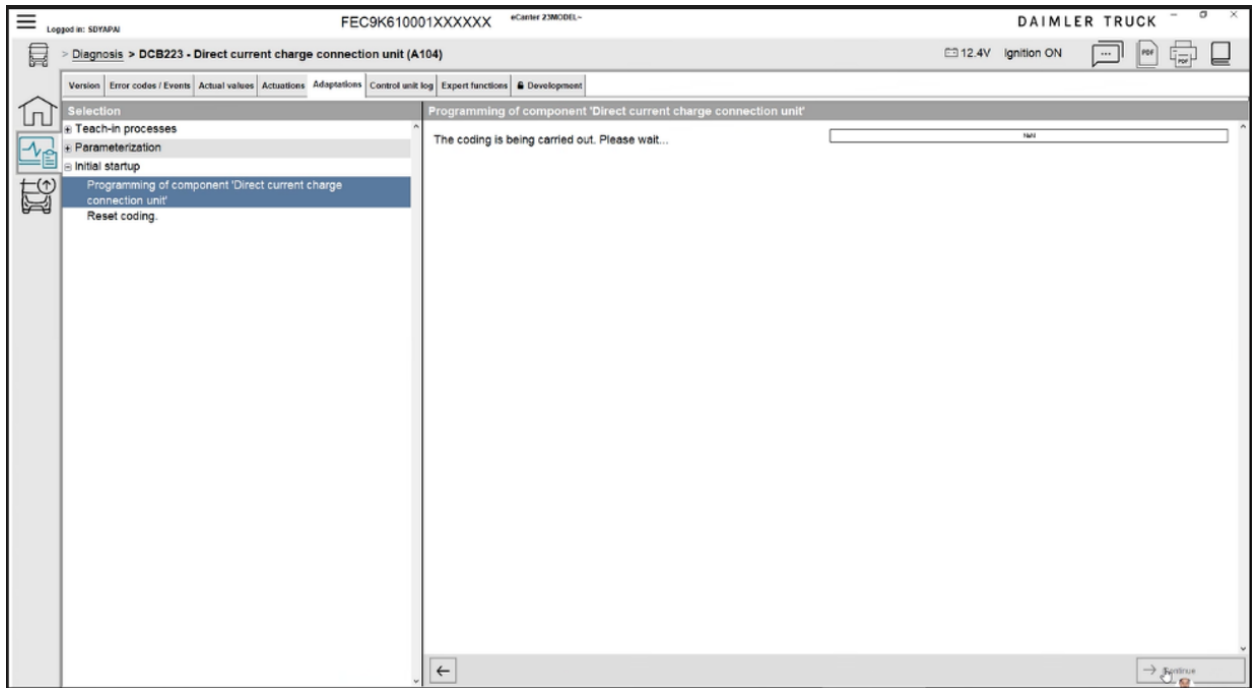


14. Select option as applicable country

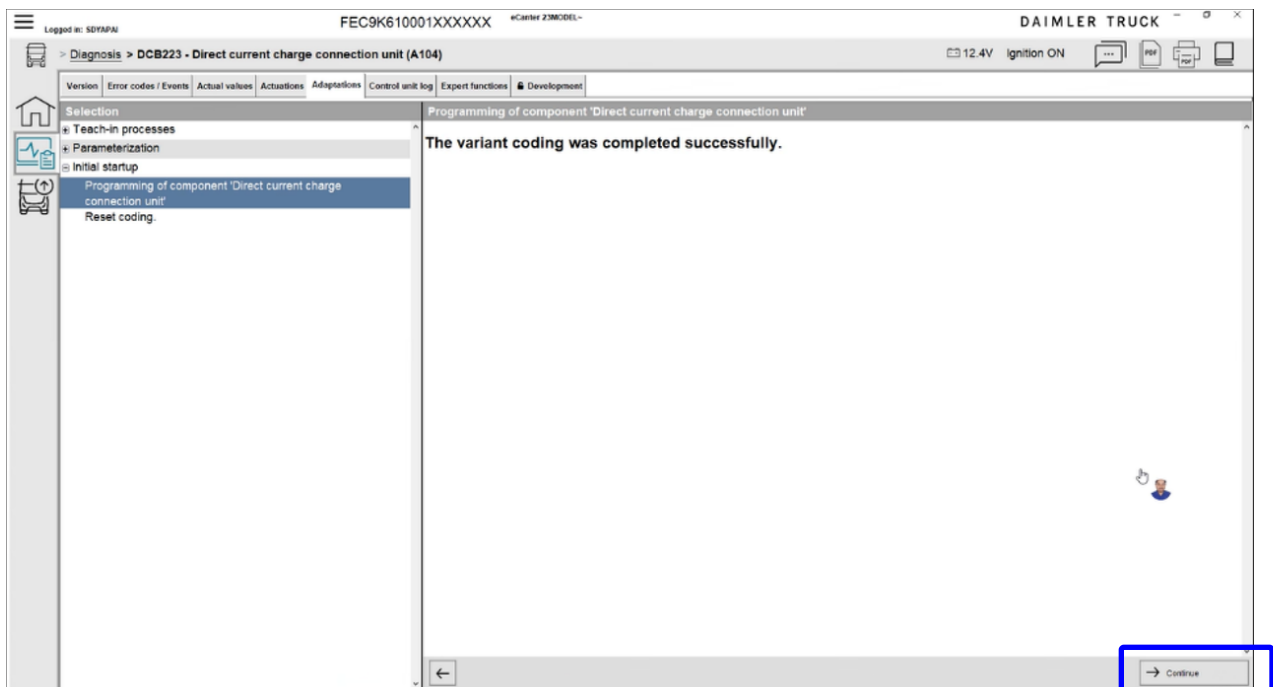
Option	Country
CCS1	USA
CCS2	Europe Other country without Japan and USA
CHAdeMO	Japan

15. Then click “continue”

E-Canter DCB ECU Reprogramming Procedure

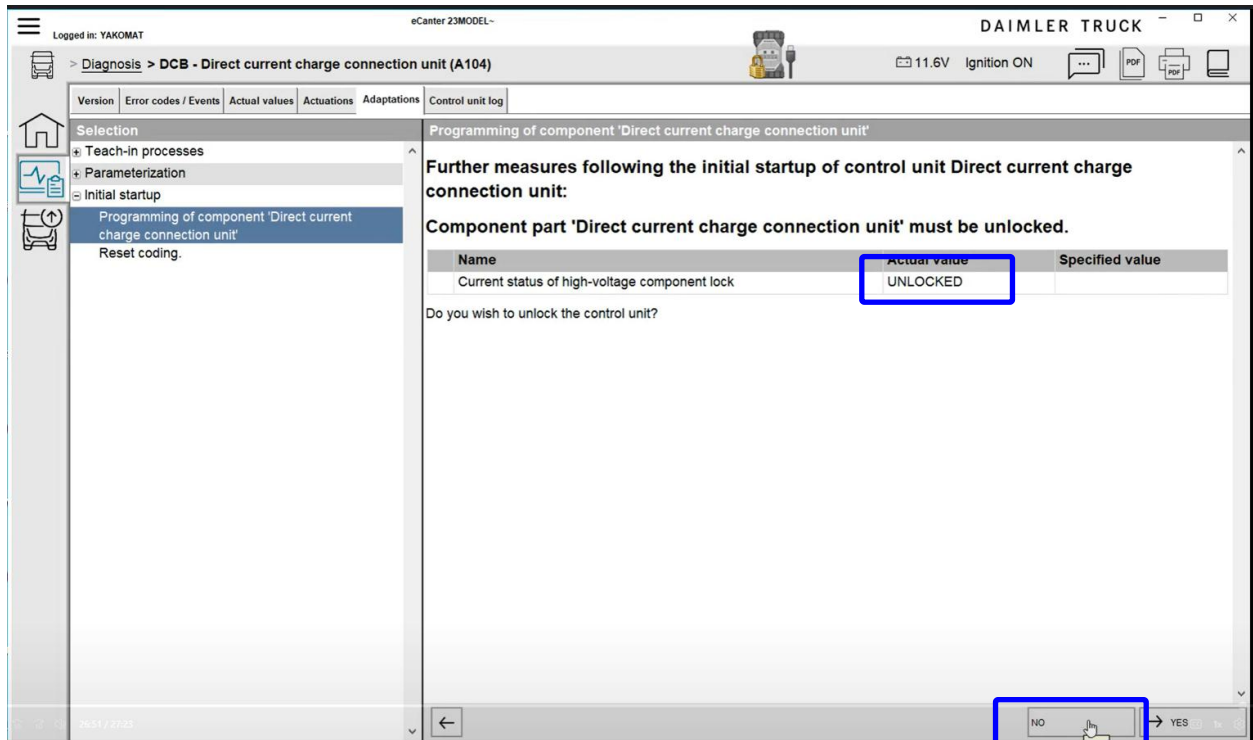


16. Parameter coding in progress



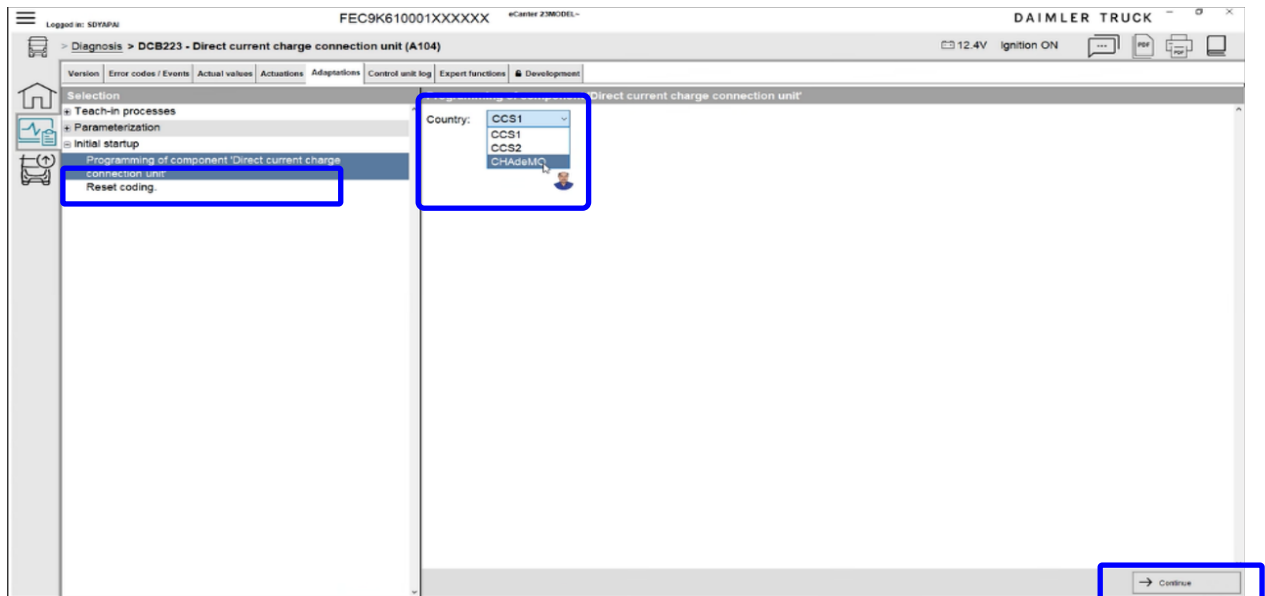
17. Confirm Variant coding completion and then click “continue”

E-Canter DCB ECU Reprogramming Procedure



18. Check Current status of High voltage Component lock “UNLOCKED” Status and then click “No”.
If Current status is in “LOCKED state, then click “yes”.

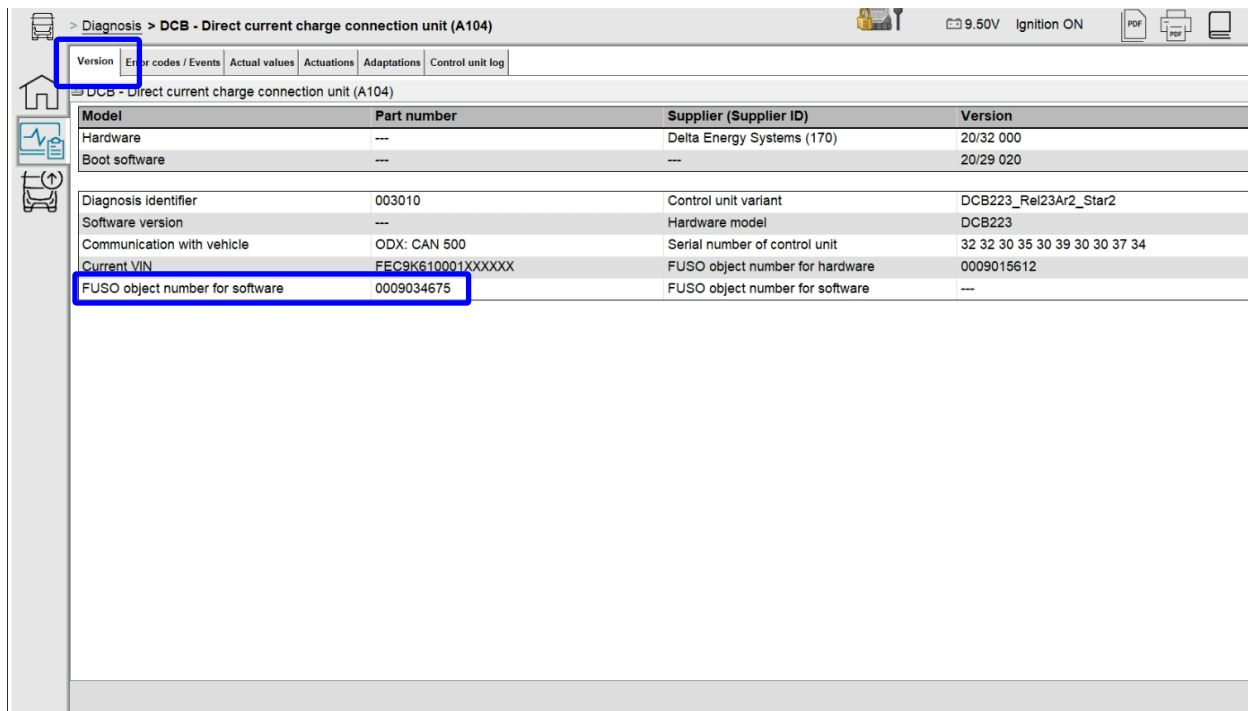
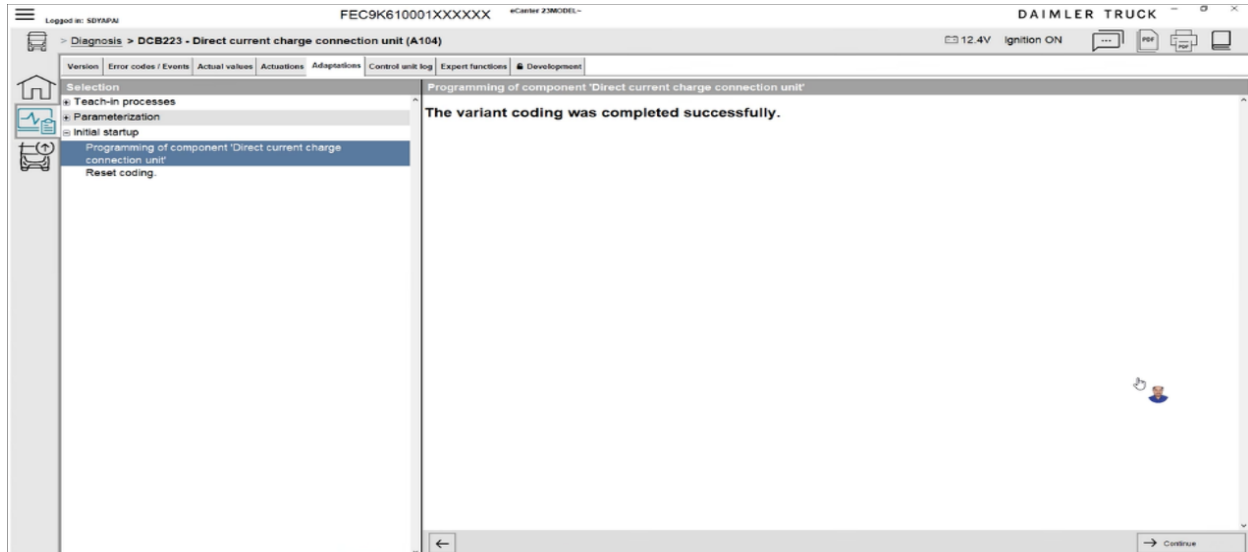
- Unlock: Select No
- Lock: Select Yes



19. Select “Reset of Coding” select country code accordingly from below, and select “continue”

E-Canter DCB ECU Reprogramming Procedure

- CCS1: NORTH AMERICA
- CCS2: EUROPE, OTHER COUNTRIES
- CHAdEMO: Japanese



21. Select version tab for software part number check and confirm new Software Part Number.

E-Canter DCB ECU Reprogramming Procedure

S.NO	Software Part Number	Type	Remarks
1	0009033074	Current	Before Flash Version
2	0009034675	New	After Flash Version

Note: IF THE BATTERY LEVEL ON THE ICUC DISPLAY WAS 0% AFTER COMPLETION OF THE WORK, THE BATTERY DISPLAY RETURNS TO NORMAL BY PERFORMING A RUN-ON TIME OF 1 MINUTE WITH THE KEY OFF.



This completes the software update procedure for after a rewrite failure.

Mail Add-on file for eCanter – R5670 (BMS, DCB)