



Recall Information Bulletin

No: C10126 **Issued:** 2/16/2024

NHTSA No: 24V072

Transport Canada No: N/A

SUBJECT:

Safety Recall C10126 – HV System Shows 0% State of Charge While Driving

MODELS:

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

VEHICLES INVOLVED:

Certain 2024 model year FEC7K and FEC9K 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:

No vehicles affected by this Safety Recall have been delivered to retail customers.

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 model year FEC7K (E16L/E16M) and FEC9K (E18L/E18M) RIZON trucks. An internal malfunction in the control unit causes a direct charging box sequential counter error, resulting in a 0% state of charge (SoC). If the vehicle is in motion and the SoC is displayed as 0%, the vehicle will come to a gradual stop. If vehicle is stationary, it will not move. If the vehicle continues to be operated in this condition, and displays a 0% SoC while in motion, it could result in a crash without warning.

MODIFICATION:

The VCU and instrument panel control unit (ICUC) will be reprogrammed with software correcting the direct charging box sequential counter error.

PARTS PROCUREMENT:

N/A

RECALL CLAIM SUBMITTAL:

Reimbursement claims are filed through FALCON using the Field Fix claim type. Enter all requested information. The system will automatically apply the labor allowance. If repair parts were needed, enter those part numbers in the OEM section of the FALCON Field Fix claim.

Campaign Reimbursement					
Campaign Number	Models	Allowances		Labor Description	Repair Parts
C1012610	FEC9T	Labor Time	1.7 hours	Reprogram the VCU	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 VCU and ICUC using instructions found in the Modification Procedure on the next page.

MODIFICATION PROCEDURE

Notes:

- Ensure that XENTRY software version "**FD09/2023 with update patch file 1**" or "**DTD12/2023 with AddOn 30279**" software version is installed.
- Check for any diagnosis trouble codes (DTC) before reprogramming the VCU software. Any DTCs must be remedied before reprogramming.
- Confirm a secure connection between the XENTRY 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.

VCU reprogramming

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

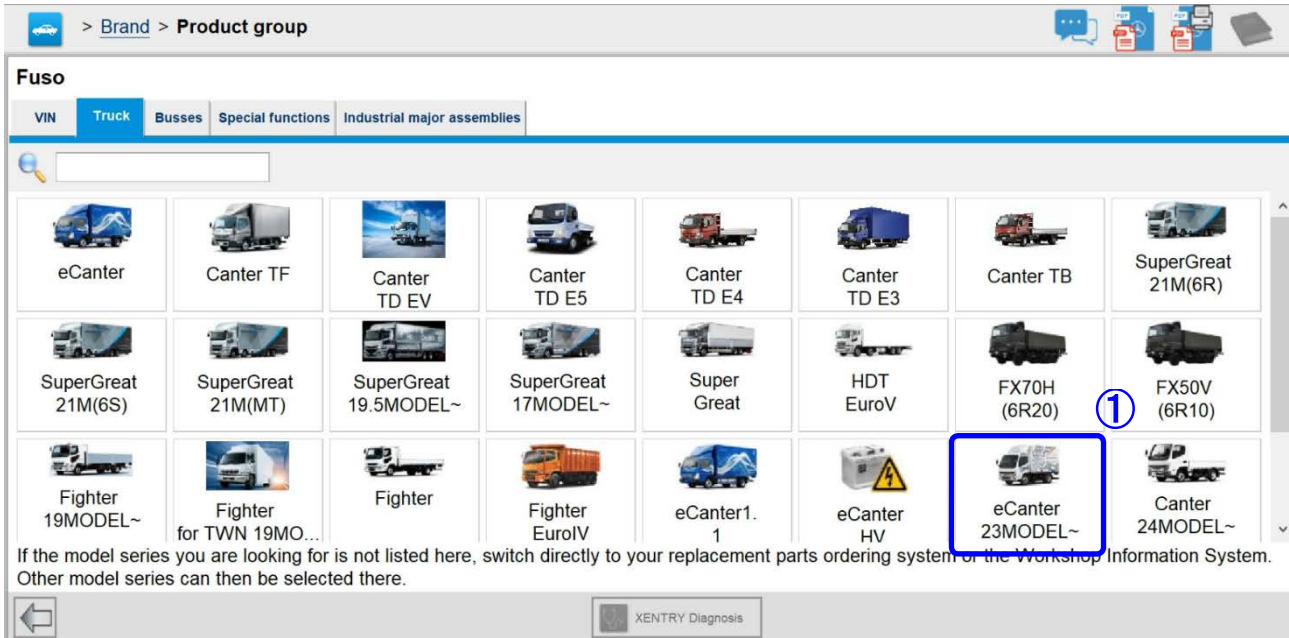
While rewriting the software, the following vehicle behavior will occur, so please proceed with caution. Exterior lamps (head lamps, tail lamps) will turn on.



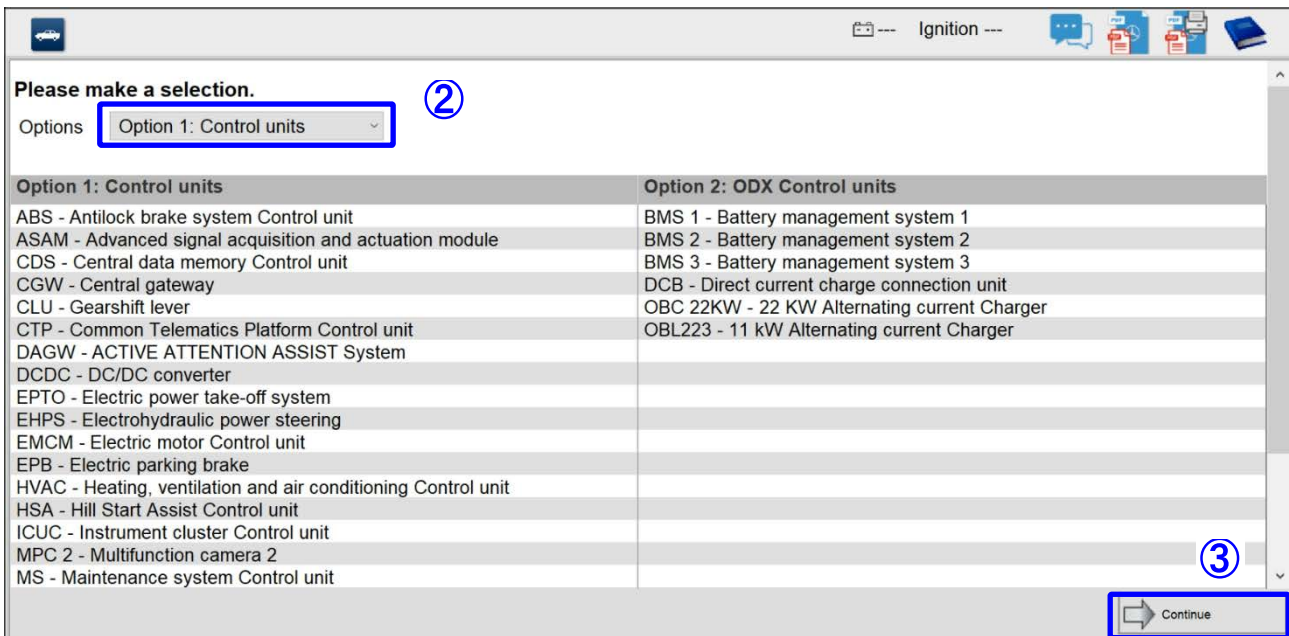
VCU software updating procedure

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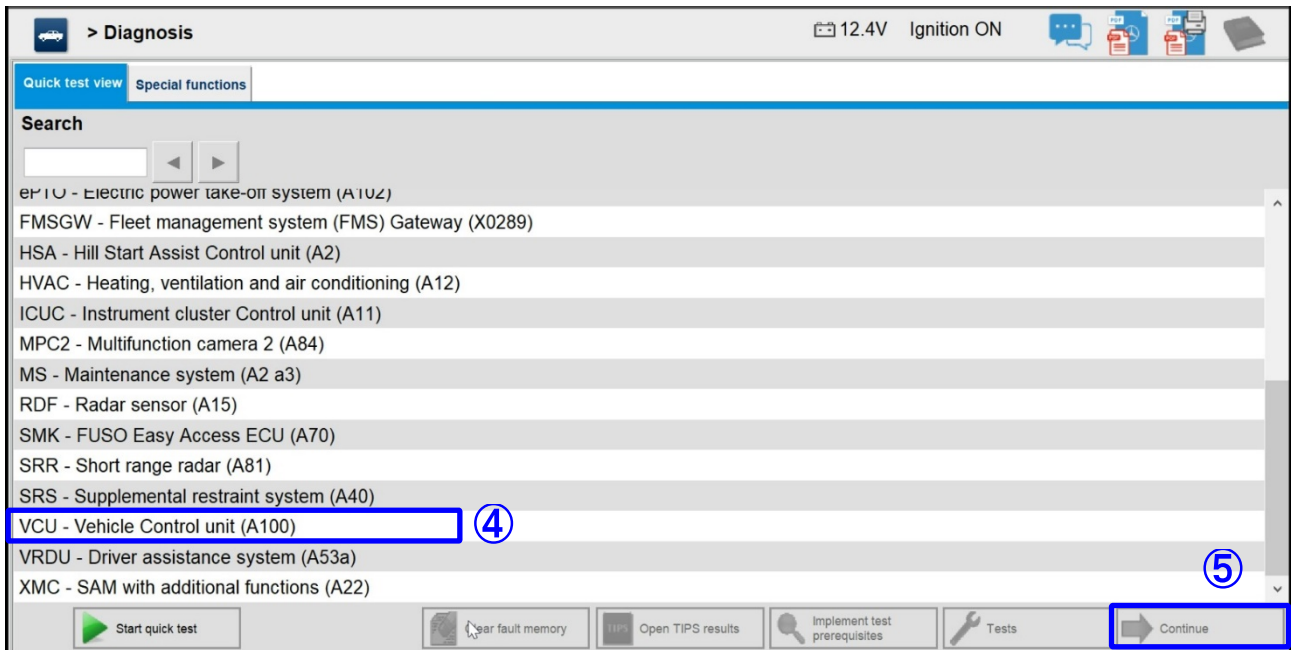
- Download FRN file
It is necessary to copy the downloaded FRN file to a USB memory and import it into the computer on which the FD is set up (see FD Instruction Manual F2-070: Copy from USB memory).
- Perform Reprogramming
- Turn on the vehicle's ignition.



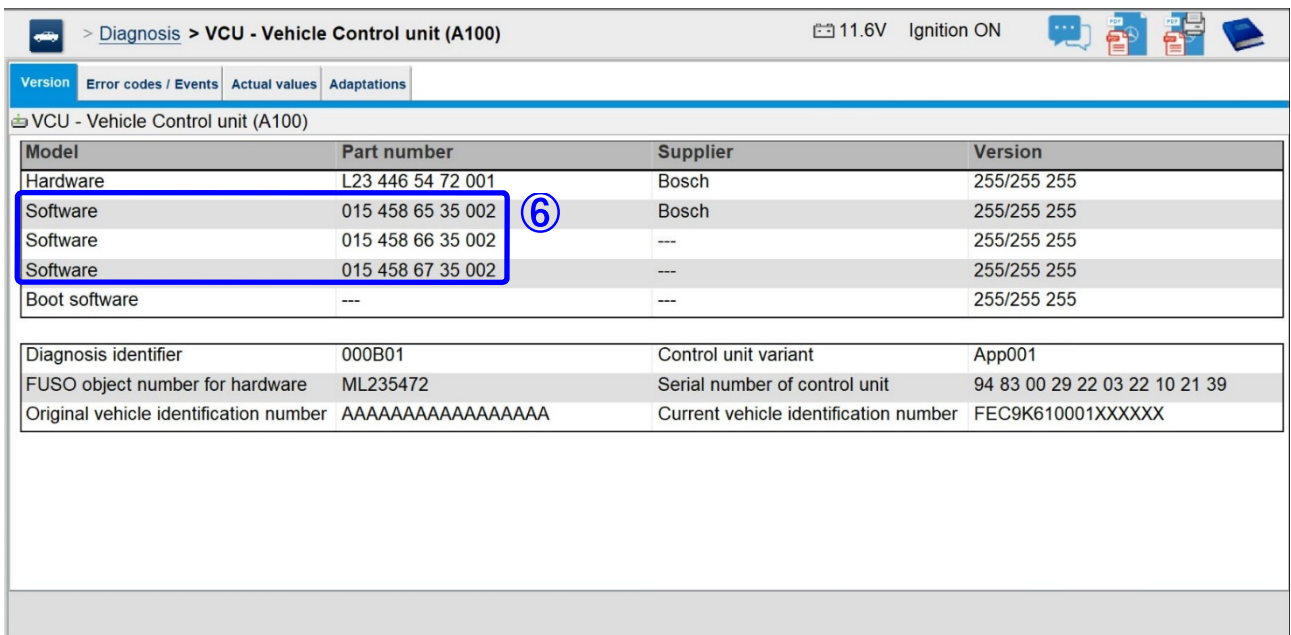
- ① Click "eCANTER 23MODEL".



- ② Click "Option 1: Control units".
- ③ Click "Continue" button.



- ④ Click "VCU".
- ⑤ Click "Continue" button.



- ⑥ Confirm that the software part number is the one shown in Table1 below before being rewritten. If the software part number is the same after rewriting, rewriting is not necessary.

Table 1 Software part number before rewriting

	Software part number	
	Software part number before rewriting	Software part number after rewriting
CB	A 005 458 50 35_003 A 015 458 65 35_002	A 015 458 77 35_001
ASW	A 005 458 51 35_003 A 015 458 66 35_002	A 015 458 78 35_001
DS	A 005 458 52 35_003 A 015 458 67 35_002	A 015 458 79 35_001

> Diagnosis > VCU - Vehicle Control unit (A100) 12.4V Ignition ON

Version Error codes / Events Actual values Adaptations

Selection

- Parameterization
- Initial startup **7**
 - Control unit replacement
 - Reprogramming**
 - Reset of coding
- Data transfer

Reprogramming

Perform control unit programming.

The following operation steps must be performed before continuing:

- Switch off ignition.

You will be guided through the following steps:

- Programming of new control unit software
- Reset of coding
- Redocumentation

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Continue

- 7** Click "Reprogramming".
- 8** Click "Continue" button.

> Diagnosis > VCU - Vehicle Control unit (A100) 12.5V Ignition ON

Version Error codes / Events Actual values Adaptations

Selection

- Parameterization
- Initial startup
- Control unit replacement
- Reprogramming**
- Reset of coding
- Data transfer

Reprogramming

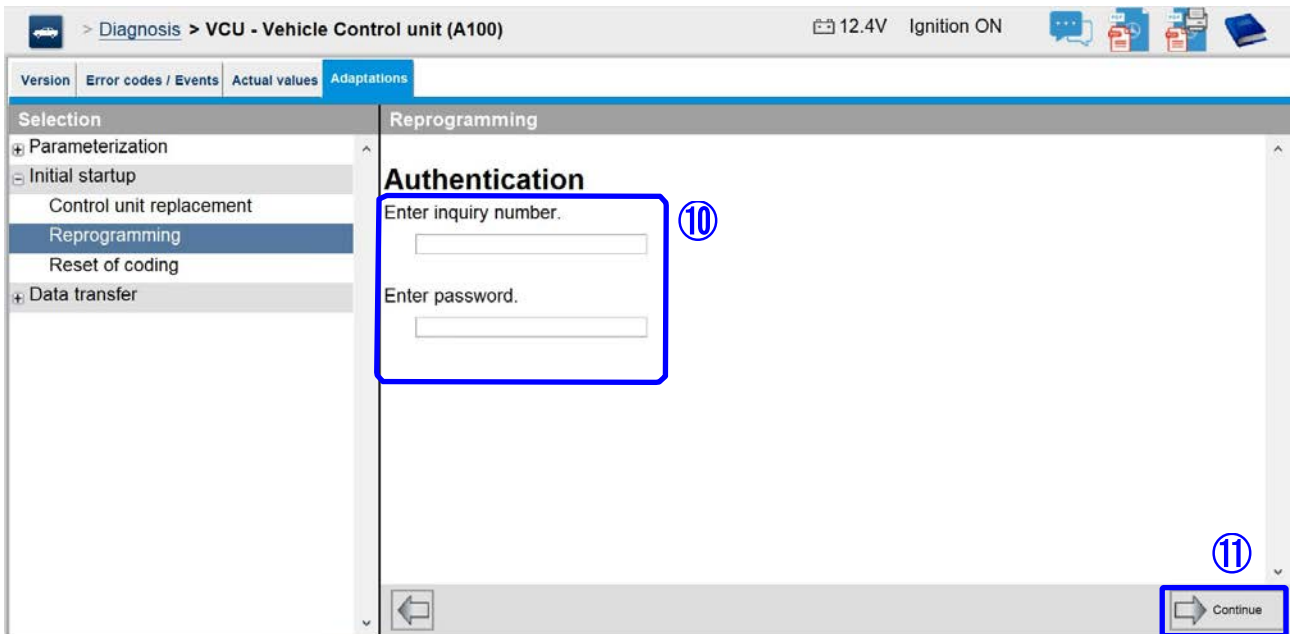
Switch on ignition.

Press button 'Continue' to continue.

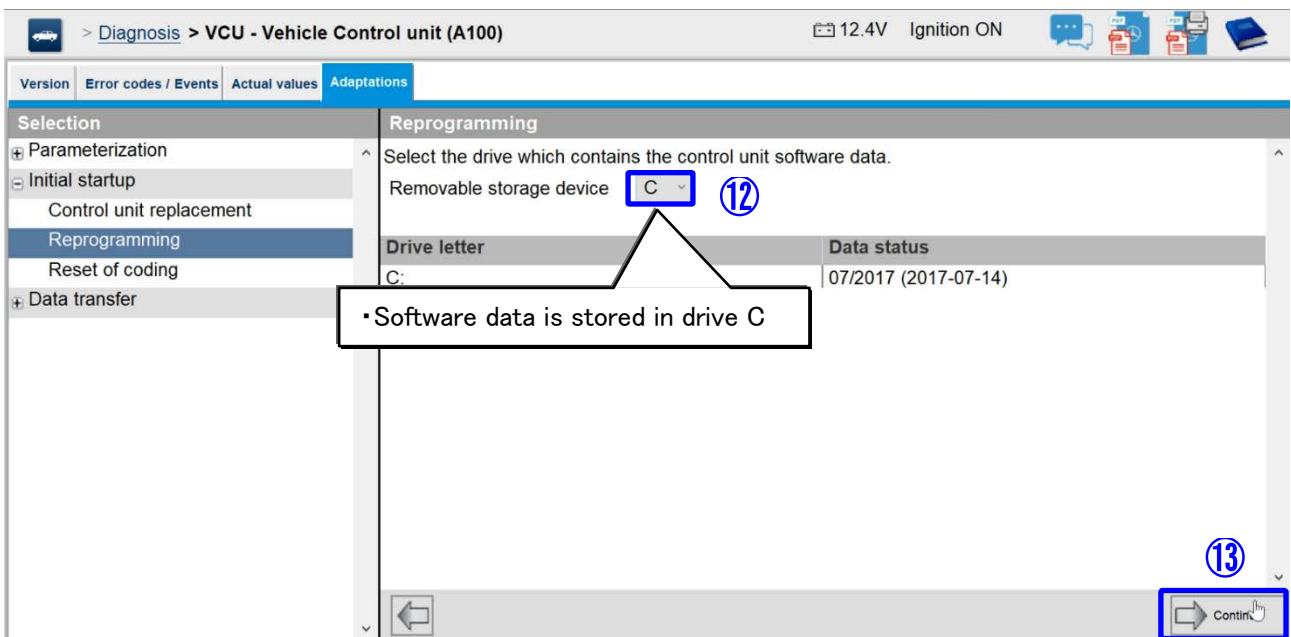
9

Continue

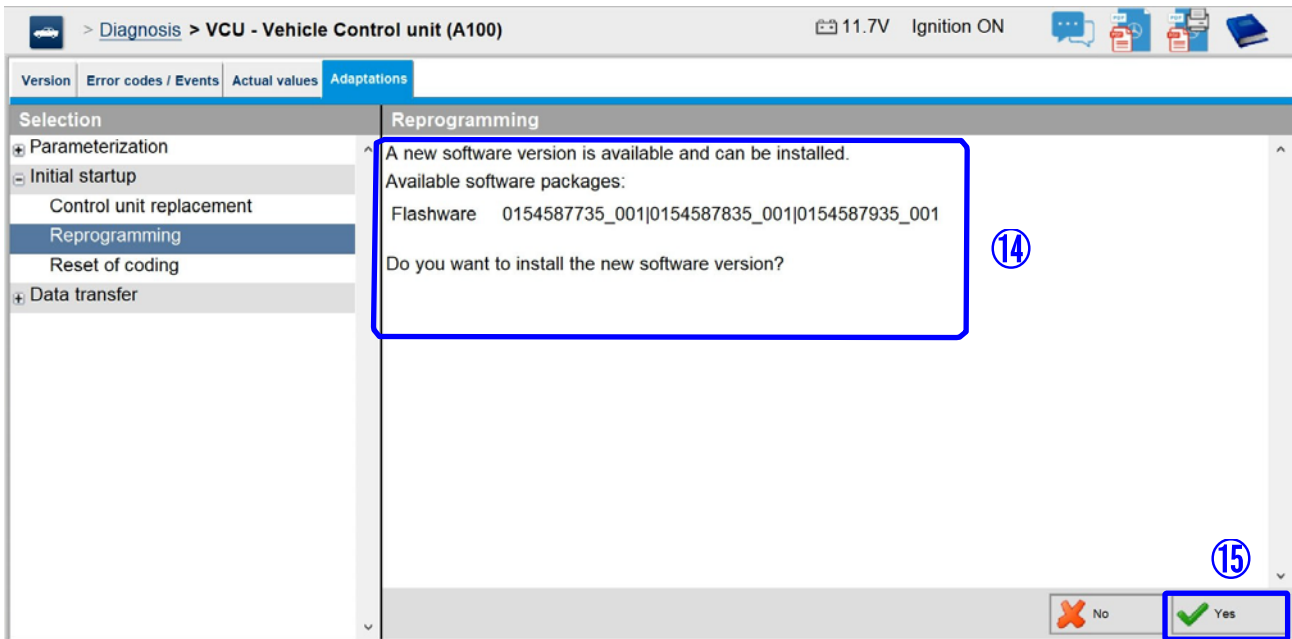
- 9** Click "Continue" button because the ignition is already switched on.



- ⑩ Enter the inquiry number and password from FRN server.
(The alphabetical part of the inquiry number must be entered in capital letters.)
- ⑪ Click "Continue" button.



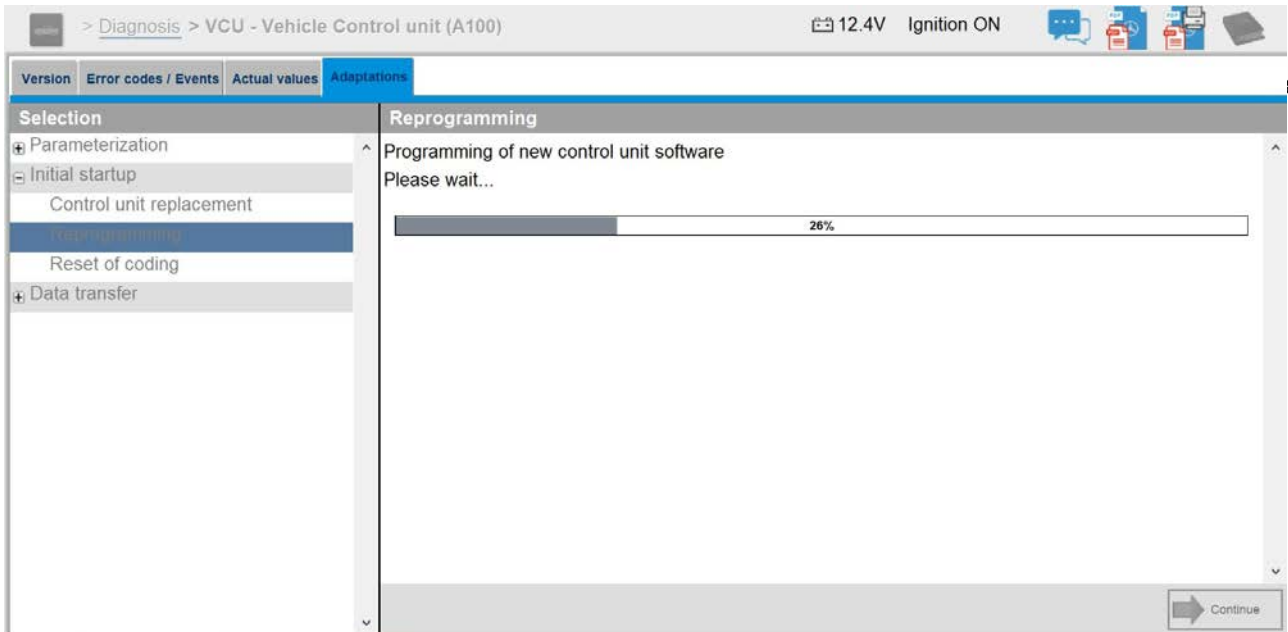
- ⑫ Select the drive where the software data is saving.
- ⑬ Click "Continue" button.



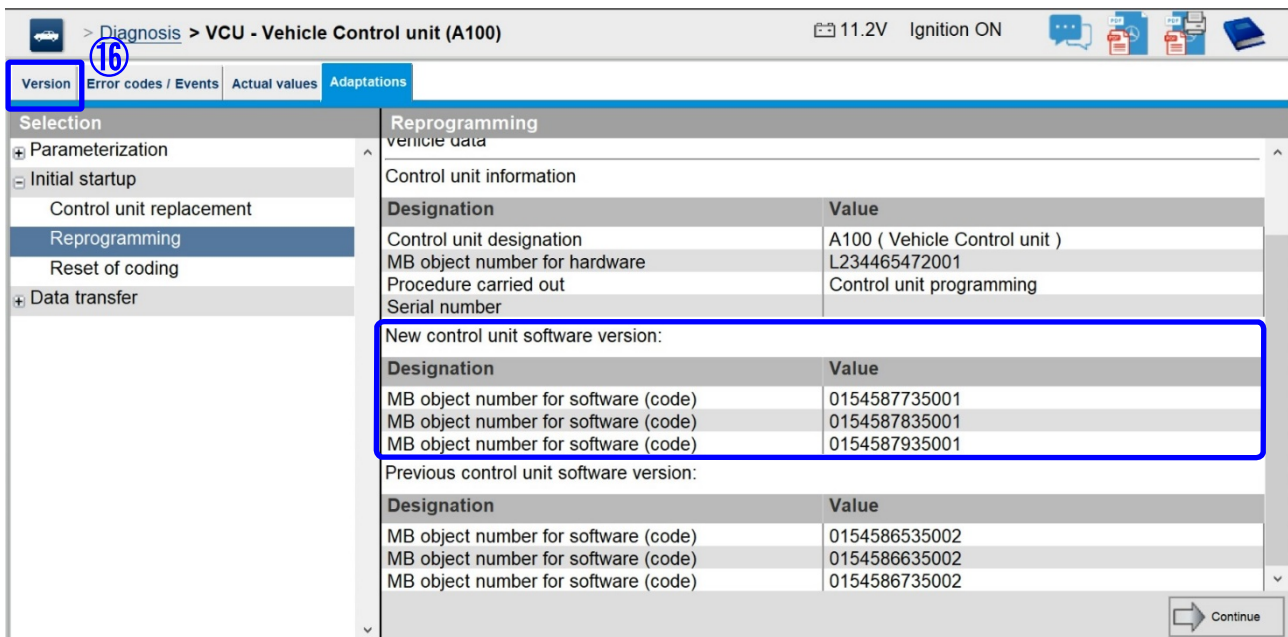
- ⑭ If installation software is available, it will be displayed as shown above.
✖Confirm that the “After rewrite software part number” shown in the table2 below is displayed.
- ⑮ Click “Yes” button.

Table 2 Rewriting software part number

	Software part number	
	Software part number before rewriting	Software part number after rewriting
CB	A 005 458 50 35_003 A 015 458 65 35_002	A 015 458 77 35_001
ASW	A 005 458 51 35_003 A 015 458 66 35_002	A 015 458 78 35_001
DS	A 005 458 52 35_003 A 015 458 67 35_002	A 015 458 79 35_001



- The above screen will be displayed when re-writing starts.



- The above screen will be displayed when re-writing ends.

⑩ Select the tab "Version".

> Diagnosis > VCU - Vehicle Control unit (A100) 12.0V Ignition ON

Version Error codes / Events Actual values Adaptations

VCU - Vehicle Control unit (A100)

Model	Part number	Supplier	Version
Hardware	L23 446 54 72 001	Bosch	255/255 255
Software	015 458 65 35 002	Bosch	255/255 255
Software	015 458 66 35 002	---	255/255 255
Software	015 458 67 35 002	---	255/255 255
Boot software	---	---	255/255 255

Diagnosis identifier	000B01	Control unit variant	App001
FUSO object number for hardware	ML235472	Serial number of control unit	94 81 00 16 24 06 22 12 59 45
Original vehicle identification number	FECXKKJ00001XXXXX	Current vehicle identification number	FECXKKJ00001XXXXX

- After the reprogramming is completed, select the tab “Version” and check that the software number in the blue frame is the same as in the operation manual.

Table 3 Rewriting software part number

	Software part number	
	Software part number before rewriting	Software part number after rewriting
CB	A 005 458 50 35_003 A 015 458 65 35_002	A 015 458 77 35_001
ASW	A 005 458 51 35_003 A 015 458 66 35_002	A 015 458 78 35_001
DS	A 005 458 52 35_003 A 015 458 67 35_002	A 015 458 79 35_001

Extract FRN file / Upload FRN file

- Refer to FD operation manual “F6-010 FRN (Field rewrite network)”, upload FRN file on FRN server.

Instrument Panel Control Unit (ICUC) software updating procedure

ICUC rewriting work

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- The ECU software can be reprogrammed from the "Initial start-up" - "Reprogramming" screen of the corresponding ECU.
- Before reprogramming, you need to download the FRN file of the ECU of corresponding vehicle from FRN (Refer to FD operation manual F6-010: FRN).
- It is necessary to copy the downloaded FRN file to a USB memory and import it into the computer on which the FD is set up (see FD Instruction Manual F2-070: Copy from USB memory).
- After performing reprogramming, it is necessary to upload the FRN file to the FRN server (refer to FD Instruction Manual F6-010: FRN (Field Rewrite Network)).

Important

If the software rewriting fails and ICUC's display is remains blacked out, there is no back to initial state for the meter cluster. In that case, the ICUC must be replaced.

Procedure for reprogramming the ICUC

- Download FRN file
It is necessary to copy the downloaded FRN file to a USB memory and import it into the computer on which the FD is set up (see FD Instruction Manual F2-070: Copy from USB memory).
- Perform Reprogramming
- Turn on the vehicle's ignition.

The screenshot shows the Fuso product selection interface. The 'Truck' tab is selected. A grid of vehicle models is displayed, including eCarter, 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, eCarter1. 1, eCarter HV, eCarter 23MODEL~, and Canter 24MODEL~. The 'eCarter 23MODEL~' model is highlighted with a blue box and a circled '1' next to it. Below 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.' At the bottom, there is a 'XENTRY Diagnosis' button.

- ① Click "eCANTER 23MODEL".

Please make a selection.

Options ②

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	
EPTO - Electric power take-off system	
EHPS - Electrohydraulic power steering	
EMCM - Electric motor Control unit	
EPB - Electric parking brake	
HVAC - Heating, ventilation and air conditioning Control unit	
HSA - Hill Start Assist Control unit	
ICUC - Instrument cluster Control unit	
MPC 2 - Multifunction camera 2	
MS - Maintenance system Control unit	

③

② Click "Option 1: Control units".

③ Click "Continue" button.

> Diagnosis 12.4V Ignition ON

Quick test view Special functions

Search

EP1U - Electric power take-off system (A102)

FMSGW - Fleet management system (FMS) Gateway (X0289)

HSA - Hill Start Assist Control unit (A2)

HVAC - Heating, ventilation and air conditioning (A12)

ICUC - Instrument cluster Control unit (A11) ④

MPC2 - Multifunction camera 2 (A84)

MS - Maintenance system (A2 a3)

RDF - Radar sensor (A15)

SMK - FUSO Easy Access ECU (A70)

SRR - Short range radar (A81)

SRS - Supplemental restraint system (A40)

VCU - Vehicle Control unit (A100)

VRDU - Driver assistance system (A53a) ⑤

XMC - SAM with additional functions (A22)

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

④ Click "ICUC".

⑤ Click "Continue" button.

> Diagnosis > ICUC - Instrument cluster Control unit (A11) 11.4V Ignition ON

Version Error codes / Events Actual values Actuators Adaptations

ICUC - Instrument cluster Control unit (A11)

Model	Part number	Supplier	Version
Hardware	---	Continental	255/255 255
Software	034 448 90 21 005	Continental	23/12 00
Software	034 448 91 21 201	Continental	23/06 00
Software	034 448 92 21 003	Continental	23/12 00
Software	034 448 93 21 003	Continental	23/12 00
Software	034 448 94 21 003	Continental	23/12 00
Software	034 448 95 21 003	Continental	23/12 00
Software	034 448 96 21 003	Continental	23/12 00
Software	034 448 97 21 003	Continental	23/12 00
Software	034 448 98 21 003	Continental	23/12 00
Boot software	---	---	22/48 00

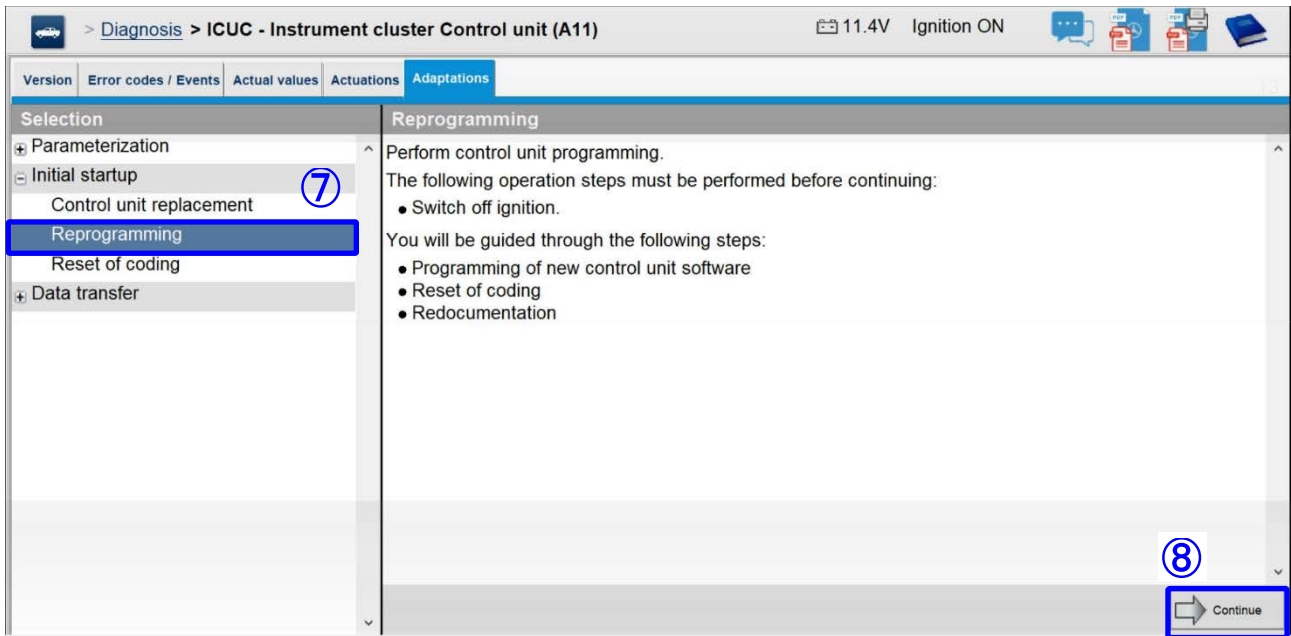
Diagnosis identifier	000800	Control unit variant	App_0800
FUSO object number for hardware	yyyyyyyyyyyyyy	Serial number of control unit	yyyyyyyyyy
Current vehicle identification number	FFC9K610001XXXXX	Original vehicle identification	FFC9K610001XXXXX

⑥ Confirm that the software part number (Total 9) is the one shown in Table1 below before being rewritten.

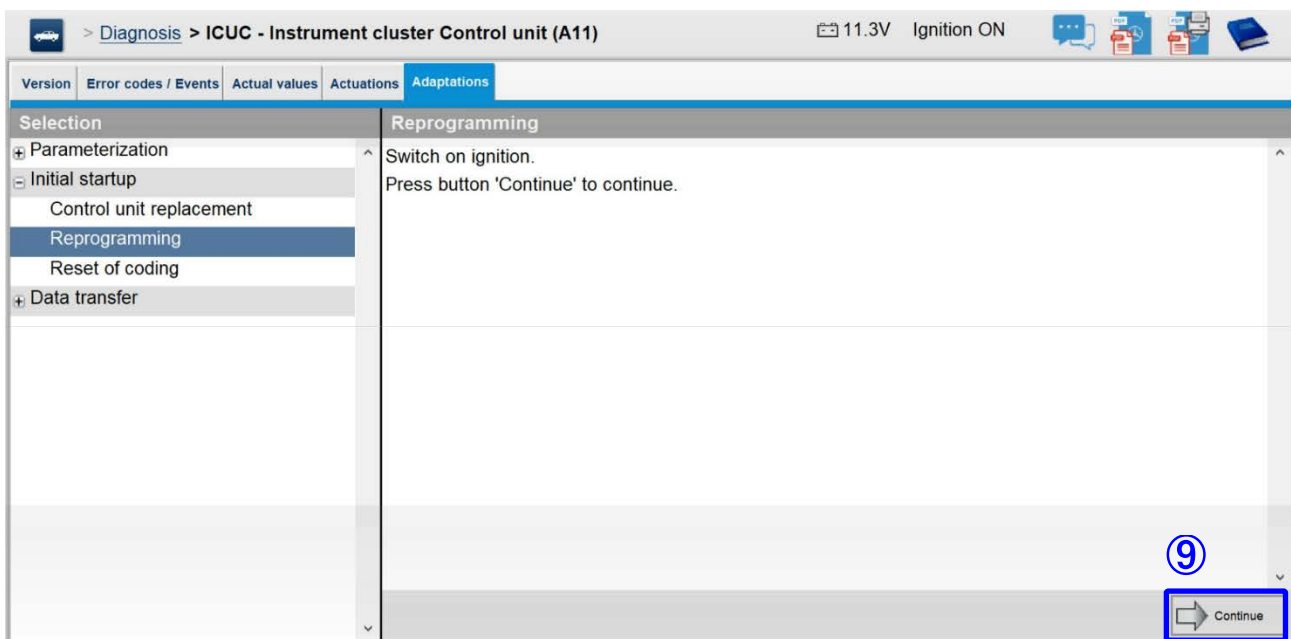
If the software part number is the same after rewriting, rewriting is not necessary.

Table 1 Software part number before rewriting

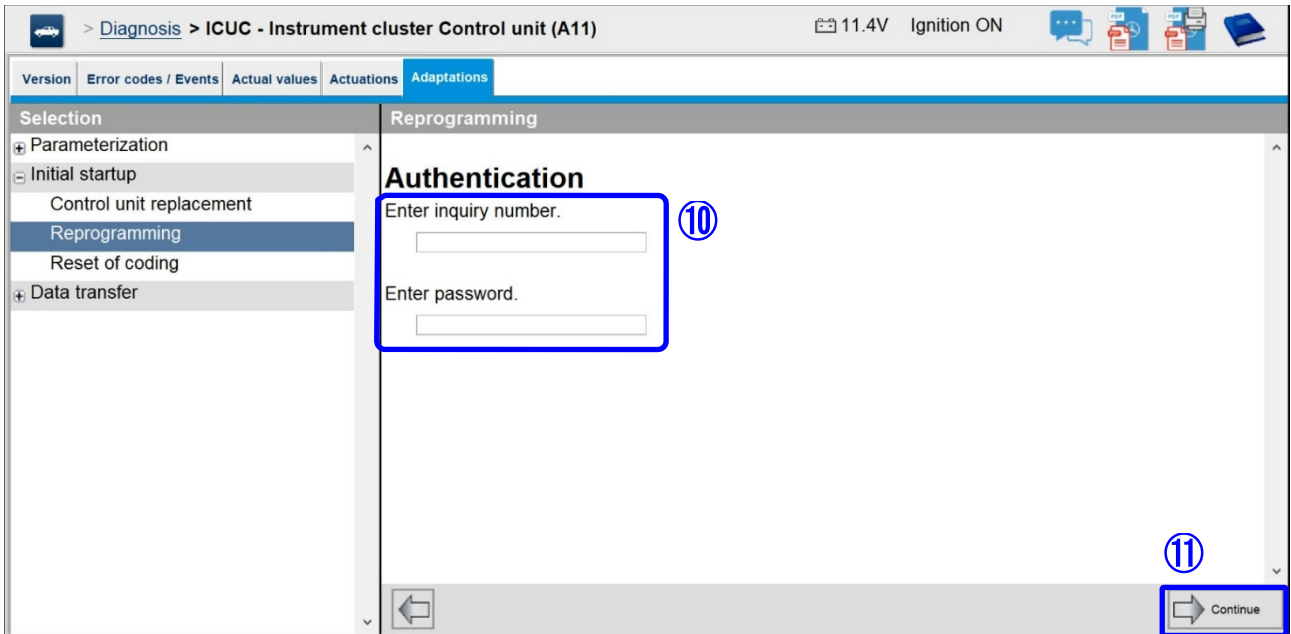
	Software part number	
	Software part number before rewriting	Software part number after rewriting
Software	A034 448 90 21 005	A034 448 90 21 013
Software	A034 448 91 21 201	A034 448 91 21 223
Software	A034 448 92 21 003	A034 448 92 21 011
Software	A034 448 93 21 003	A034 448 93 21 011
Software	A034 448 94 21 003	A034 448 94 21 011
Software	A034 448 95 21 003	A034 448 95 21 011
Software	A034 448 96 21 003	A034 448 96 21 011
Software	A034 448 97 21 003	A034 448 97 21 011
Software	A034 448 98 21 003	A034 448 98 21 011



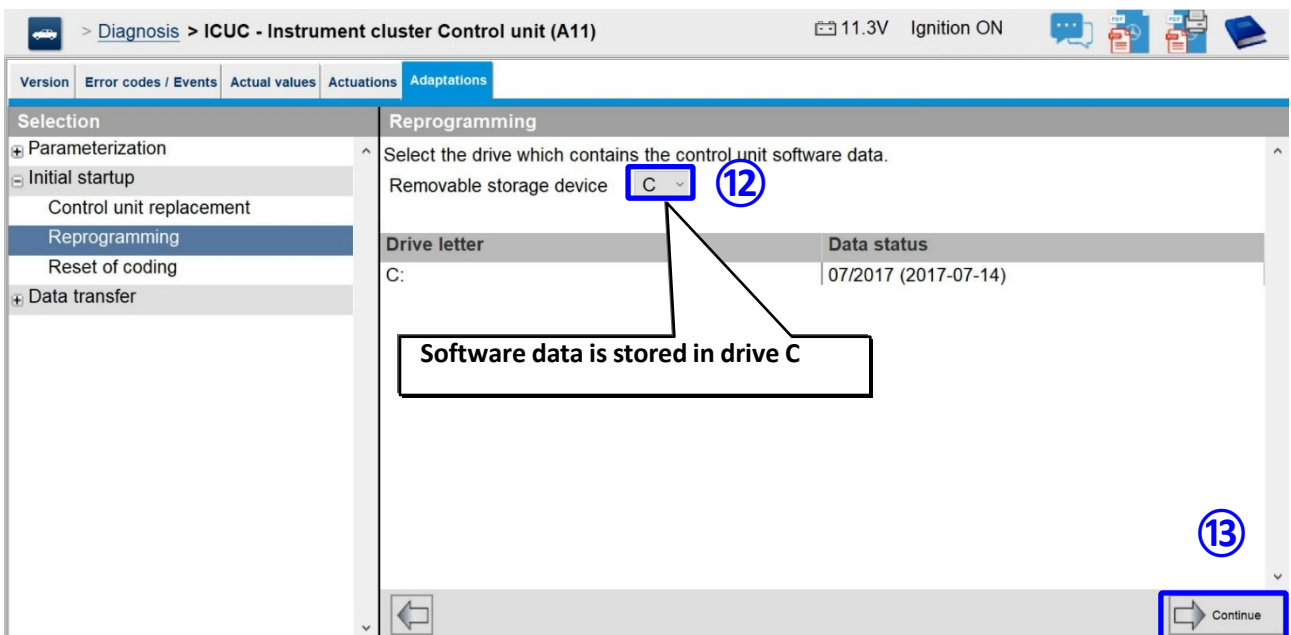
- ⑦ Click "Reprogramming".
- ⑧ Click "Continue" button.



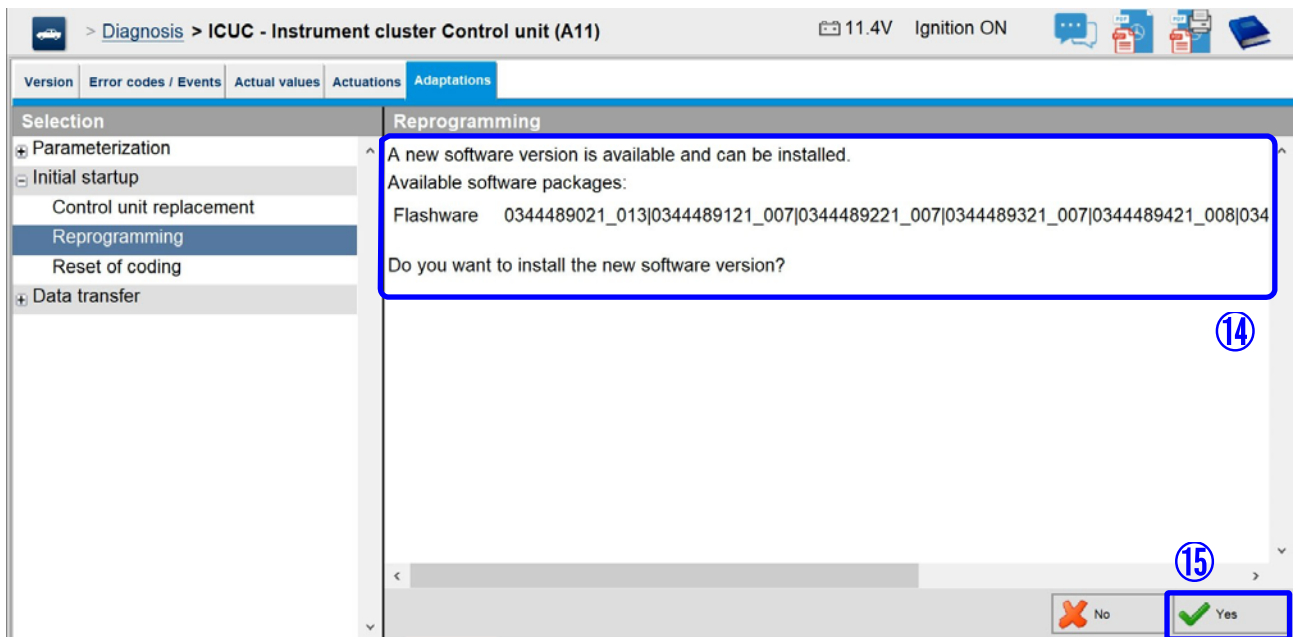
- ⑨ Click "Continue" button because the ignition is already switched on.



- ⑩ It will enter the inquiry number and password from FRN server.
(The alphabetical part of the inquiry number must be entered in capital letters.)
- ⑪ Click "Continue" button.



- ⑫ It will select the drive which software data is saving.
- ⑬ Click "Continue" button.



⑭ If installation software is available, it will be displayed as shown above.

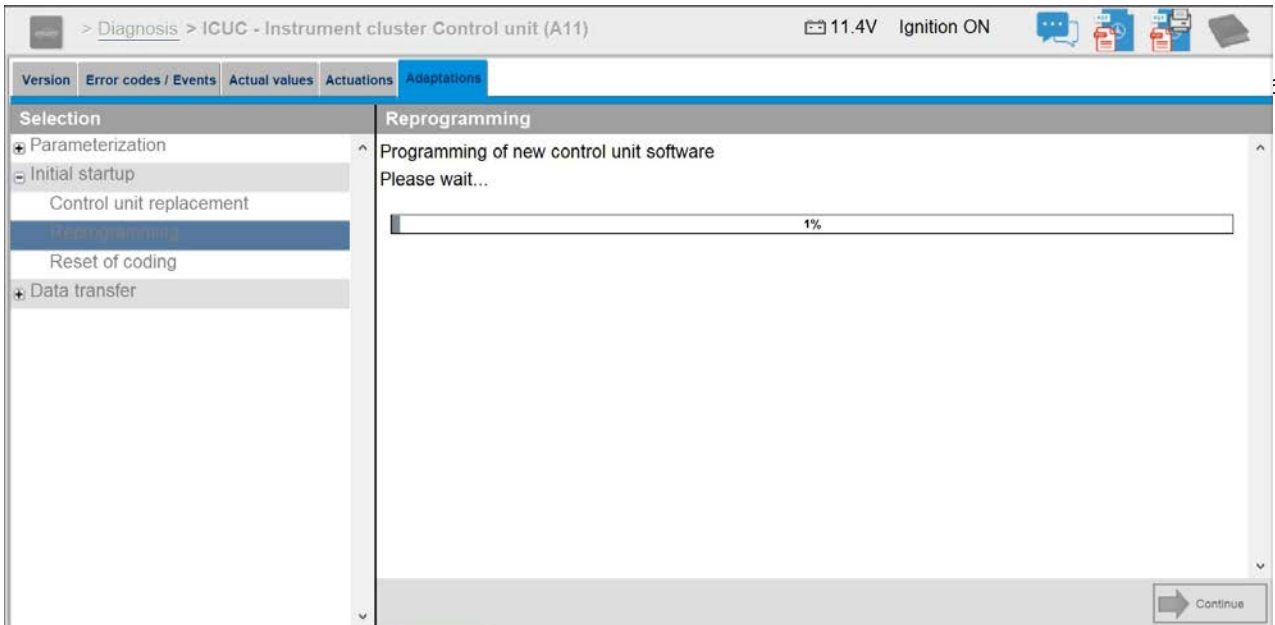
Important

Confirm whether the “Installable software part number” shown in the table 2 below is displayed.

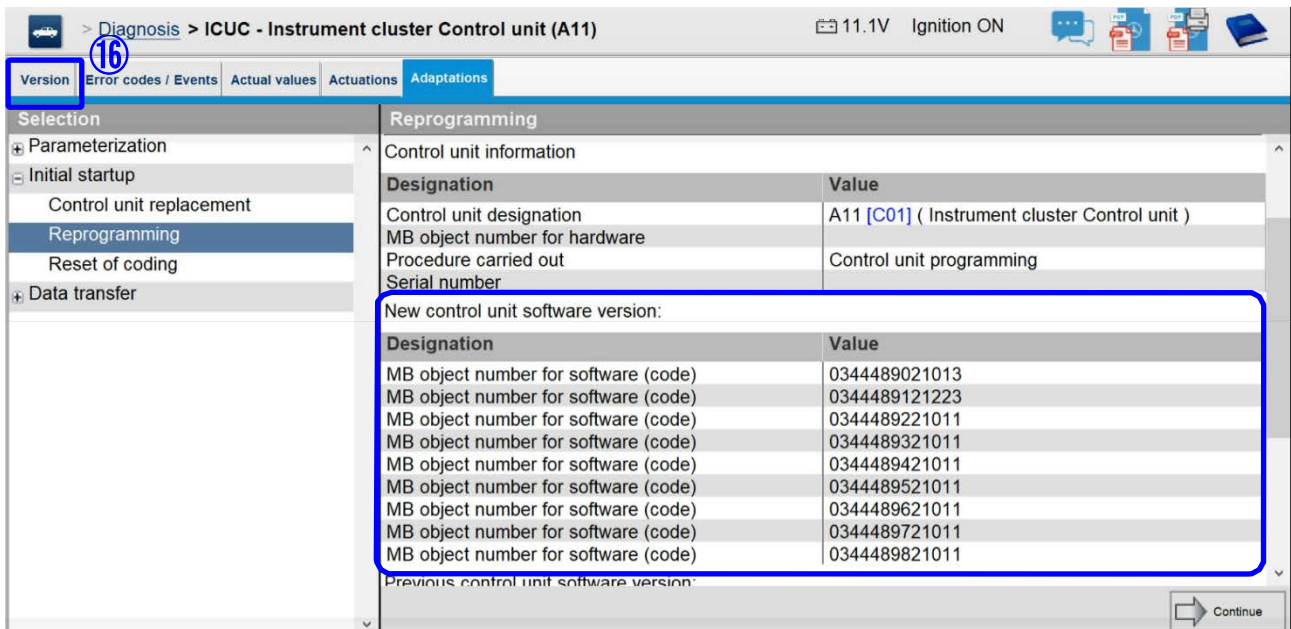
⑮ Click “Yes” button.

Table 2 Rewriting software part number

	Software part number	
	Software part number before rewriting	Software part number after rewriting
Software	A034 448 90 21_013	A034 448 90 21 013
Software	A034 448 91 21_007	A034 448 91 21 223
Software	A034 448 92 21_007	A034 448 92 21 011
Software	A034 448 93 21_007	A034 448 93 21 011
Software	A034 448 94 21_008	A034 448 94 21 011
Software	A034 448 95 21_007	A034 448 95 21 011
Software	A034 448 96 21_008	A034 448 96 21 011
Software	A034 448 97 21_008	A034 448 97 21 011
Software	A034 448 98 21_007	A034 448 98 21 011

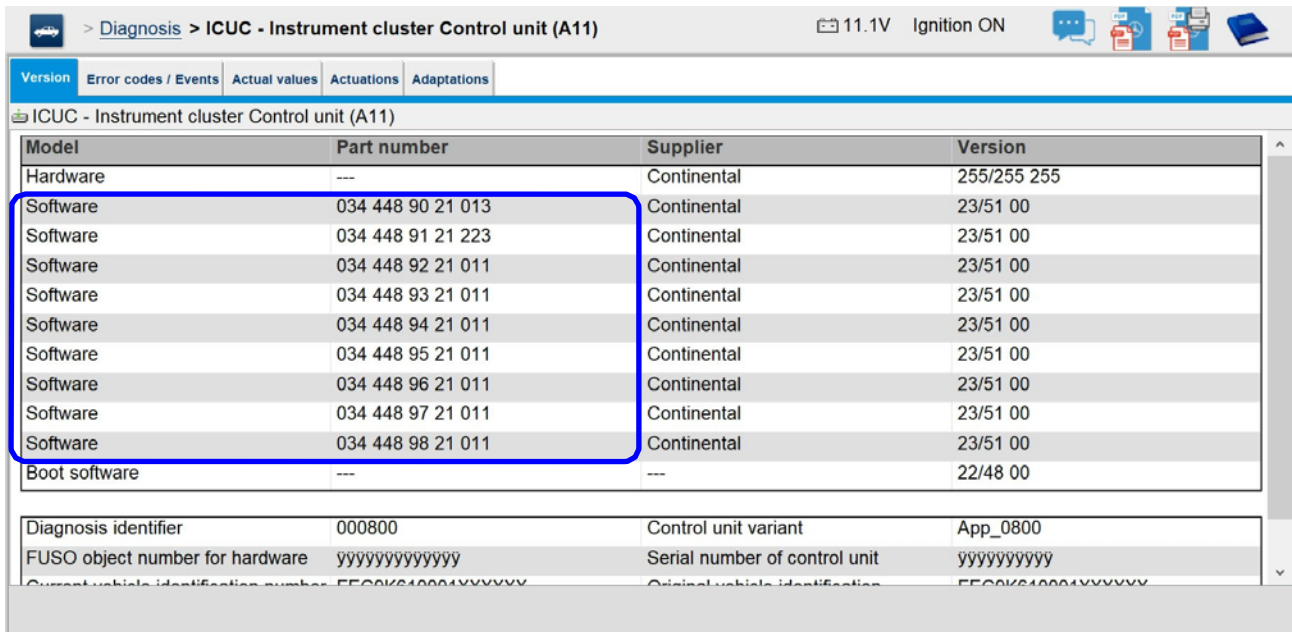


- The above screen will be displayed when re-writing starts.



- The above screen will be displayed when re-writing ends.

⑩ Select the tab "Version".



- After the reprogramming is completed, select the tab “Version” and check that the software number in the blue frame is the same as in the operation manual.

Table 3 Rewriting software part number

	Software part number	
	Software part number before rewriting	Software part number after rewriting
Software	A034 448 90 21_013	A034 448 90 21 013
Software	A034 448 91 21_007	A034 448 91 21 223
Software	A034 448 92 21_007	A034 448 92 21 011
Software	A034 448 93 21_007	A034 448 93 21 011
Software	A034 448 94 21_008	A034 448 94 21 011
Software	A034 448 95 21_007	A034 448 95 21 011
Software	A034 448 96 21_008	A034 448 96 21 011
Software	A034 448 97 21_008	A034 448 97 21 011
Software	A034 448 98 21_007	A034 448 98 21 011

Extract FRN file / Upload FRN file

- Refer to FD operation manual “F6-010 FRN (Field rewrite network)”, upload FRN file on FRN server.