

** SOLUTION **

Title	Electronic Control Unit (ECU) Replacement (Instrument Cluster, EMS, VECU, TECU, LCM) - Programming (Conversion Kit) Requirements When Installing An ECU With A Newer Part Number - US04 To US10 Chassis (9-Pin Diagnostic Connector)
Mack Models	
Mack Model	LEU, MRU - TerraPro, CHU - Pinnacle, Axle back, CXU - Pinnacle, Axle front, G U - Granite, TD - Titan
Volvo Models	
Volvo Model	VN, VNL, VNM, VNX, VAH, VHD, VT
Emission Standard	
Emission Standard	US04, US07, US10
Engine family	
Engine family	D12, 11L Engine, 13L Engine, 16L Engine, MP7, MP8, MP10, CU15, CU12 CNG, CU9 CNG, CU9
** SOLUTION **	
Cause	If installing a new Module, error messages or programming failure may be encountered during the programming process, especially when the old Module is multiple part number supercessions older than the one being installed. There have been several software changes made in the background as new versions of the Module were released. This may necessitate running Conversion Kits prior to programming the new Module in order to receive the proper configuration from Central Systems.
Solution	To program a Conversion Kit and update Central Systems with proper part information:
	1. Check the part number of the original Module, and the Module being installed. Make note of both numbers.
	Obtain part numbers from the label on the Modules. Do not use numbers from product packaging for reference.Verify that the new Module is compatible with the chassis.
	2. In PTT, go to the Program tab. Select 1700-22-03-04 - Conversion Kit. Press the Start button in the lower right-hand corner of the screen to start the operation.

Product	Product History	Diagnose	Test	Calibrate	Program	In
Progr Select a	ram n operation and click St	art		-		
æ						
P						
B 1-5	ervice and maintenance					
1	700-08-03-13 - Change	Component				
1	700-22-03-02 - System	Date and Time	Program	iming		
1	700-22-03-03 - Parame	ter, Programmi	ng			
1	700-22-03-04 - Conven	son Kit	1			
1	700-22-03-06 - Accesso	ary Kit				
⊞ 2-E	ingine, Engine mounting	and equipmen	t			
	Inching maters and inch	in one can be				

3. Press the Play button in the upper left-hand corner of the screen. The Conditions window will open. Ensure that both conditions are met and check the boxes.

Tech Tool	Conditions
Tech Tool Links Help	The engine must be switched off.
Product Product History Diagno	The parking brake must be applied.
Conve	Cancel

4. A list of all Conversion Kits available will open. Find the available kits for Information Display. The part number of the Module currently installed should appear next to the section header.

- **NOTE:** If there are no Conversion Kits displayed for the Module, power, ground, and data links will need to be checked to ensure a communication or power supply issue is not preventing programming.

nmunication with the central s	systems in progress
ring to a job card	
aration complete	
onversion kit	
VIN: N 291942 Conversion kit Information display 21 21545052 - 21844837 - 21844837	Current Cluster Part Number
22805599 22805599 21002200 e Transmission ECU 21	Driversion Kits LCAN 20975406 274018

5. Refer to the new Module part number. Each Conversion Kit listed will need to be run **one at a time starting from the lowest part number, up to but not past** the part number of the new Module.

- DO NOT go straight to the conversion kit that matches the part number. Older kits must be run <u>FIRST</u>.

- NOTE: If the new Module has a part number that is not shown on the list, run the Conversion Kits up to the closest number to but lower than the new Module part number. Contact Tech Support through eService for the part number to be updated in Central Systems once conversion kits have been run. Required information for the eService case can be found at the end of this solution.

A. Select the first Kit on the list. Click Okay.

Information display	21350964	
21546092 🔶	Select the first kit fro	om
-21844837	the list	
-22261638	and the second second	
-22805599		11
E Light Control Modu	le (LCM) 20976406	
-21803280		18
E Transmission ECU	J 21274018	
21484418	Click OK	

B. An alert will open advising that the Kit is ordered and VDA updated. Click OK



C. Wait for all steps to complete. It may take several minutes for the "Saving to job card" step to complete the first time through.

D. Once the operation completes, press the Play button again. Repeat steps A and B as necessary.



i. Once a kit has been run, the current part number will be updated and the previously run kit will no longer be present on the list.



E. DO NOT RUN ANY KITS PAST THE PART NUMBER BEING INSTALLED.

6. Once all of the necessary kits have been run, exit the operation. Refresh product data.

7. Program the Module as normal.

NOTE: It may be necessary for direct changes to be made once all available Conversion Kits are run if programming still will not complete. Swapping a Standard (MPH) Module to a Metric (KPH) Module is a common example of this.

If programming will not complete after all Conversion Kits have been run:

• Start an eService case.

	 The new Module part number The old Module part number Advise that Conversion Kits have been run. Provide a screenshot (preferred) or a <u>complete</u> description of the error code observed when programming.
Solution visibility	
Function(s)/compon	ent(s) affected
Function affected	MID 128 – EMS , MID 130 – TECU , MID 140 – IC04 / IC05 , MID 144 – VECU , M ID 216 – LCM , Diagnostic tool
Function Group	
Function Group	2841 Electronic Control Unit, 357 lighting control system, 381 combined instrument, 432 gear lever carrier, gear selector controls
Customer effect	
Main customer effect	calibration/programming/pairing/missing operation, diagnostics/methodology, fault code/display
Conditions	
Other conditions	after a workshop procedure on the vehicle
Administration	
Author	RU4469V
Dealer ID	RU4469V
Last modified by	RU4469V
Creation date	05-01-2018 20:01
Date of last update	30-09-2019 18:09
Status	Published
Average score	5
Number of scores	1

• In the case, provide:

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