

Date	Group	No.	Release	Page
7.2018	284	883	01	1(8)

Engine Control Module (ECM) and
Aftertreatment Control Module (ACM),
Software Updates
MP7, MP8
CHU, CXU, GU, MRU, LR

PI0883, Engine Control Module (ECM) and Aftertreatment Control Module (ACM), Software Updates

(July 2018)

Information

Software updates with enhancements are available for the Engine Control Module (ECM) and Aftertreatment Control Module (ACM), for certain MACK MP7 and MP8 engines with US2017 emission level, on vehicles built from November 2016 to July 2018.

Note: Follow the reprogramming procedure in the following order as outlined in this document:

- ECM reprogramming
- ACM reprogramming

Note: This bulletin does not apply to MACK Trucks Australia.

The software updates address the following Diagnostic Trouble Codes (DTCs):

- P0471 - Engine Exhaust Backpressure Circuit Range/Performance
- P04DB – Crankcase Ventilation System Disconnected
- P1031 – Particulate Matter Sensor Clogged Tip
- P009E – Fuel Pressure Relief Control Performance / Stuck Off
- P0087 – Fuel Rail/System Pressure - Too low Bank 1
- P02EC – Diesel Intake Air Flow Control System - High Air Flow Detected
- P02ED – Diesel Intake Air Flow Control System - Low Air Flow Detected

Note: If any DTCs reoccur after software updates, they must be diagnosed properly before replacing components.

Required Tools

Premium Tech Tool (PTT) version 2.06.65 or higher

VOCOM Diagnostic Connector 88890304

Communication Interface 88890300 or 88894000

Note: Using other interfaces may affect programming speed.

Note: Check Premium Tech Tool version by clicking on Help tab and then click on "About Tech Tool".

Software Update Procedure

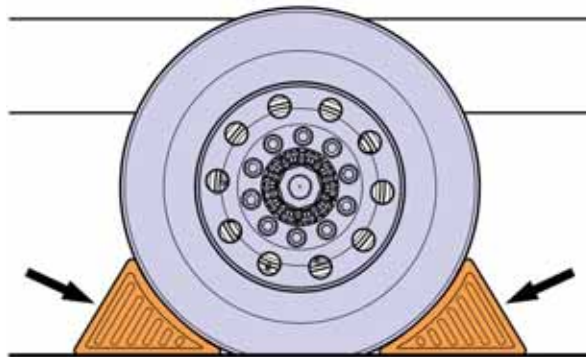
You must read and understand the precautions and guidelines in Service Information, group 20, "General Safety Practices, Engines" before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.



DANGER

Do not attempt to repair or service this vehicle without having sufficient training, the correct service literature and the proper tools. Failure to follow this could make the vehicle unsafe and lead to serious personal injury or death.

- 1 Park the vehicle on a level surface.
- 2 Apply the parking brake.
- 3 Place the transmission in neutral or park.
- 4 Install the wheel chocks.



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- 5 Verify service program eligibility by checking service program status in VDA.
- 6 Connect Premium Tech Tool (PTT) to the vehicle diagnostics connector using the 16 pin OBD cable 88890304 and Communication Interface 88890300 or 88894000. Connect the PC to a functional LAN or modem connection and a 120 Volt AC source.

- 7 Turn the ignition switch “**ON**”.
- 8 Log in to PTT and Identify Vehicle is displayed.
- 9 Once the vehicle has been identified, enter the Work Order Number information, then click Start Work.

Work Order Number

Enter a work order number or select a recently used work order number in the list.

Enter work order number:

Select a recently used work order:

Work Order No	User ID	Date
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Enter Notes:

Start Work Cancel

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- 10 From the Main Menu select Program and **then** Program Electronic Control Unit 1700-08-03-39. Then click Start.

Tech Tool

Tech Tool Links Help

Product Product History Diagnose Test Calibrate Program Impact

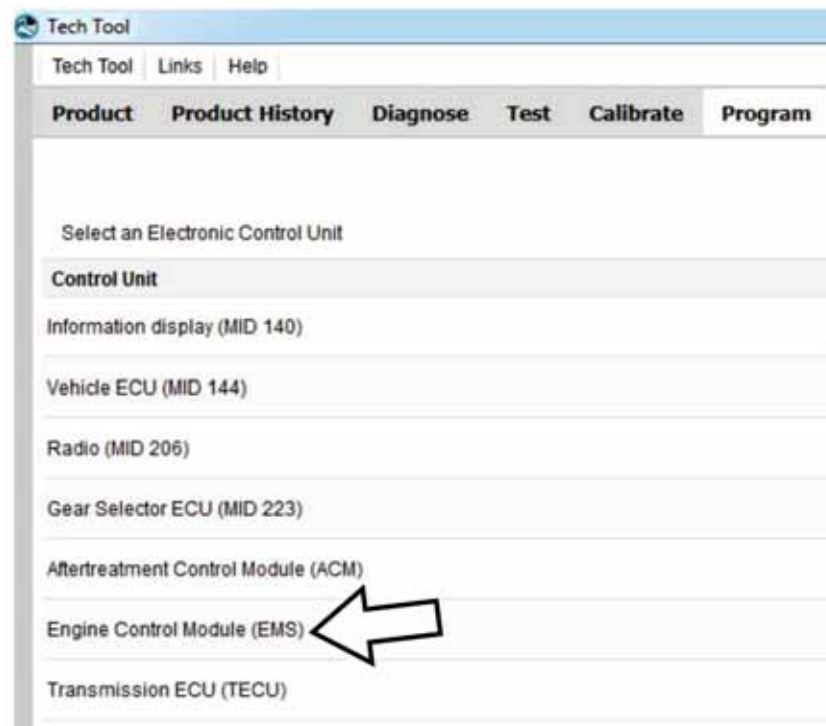
Program

Select an operation and click Start

- 1700-08-03-39 Program Electronic Control Unit
- 1700-22-03-03 Parameter, programming
- 1700-22-03-28 Accessory Kit
- 1700-22-03-12 Replace Electronic Control Unit
- 1700-22-03-13 Program with Stored Software
- 1700-08-03-40 Handle Component
- 2841-22-03-04 Create Engine Label
- 3810-22-03-10 Change Language

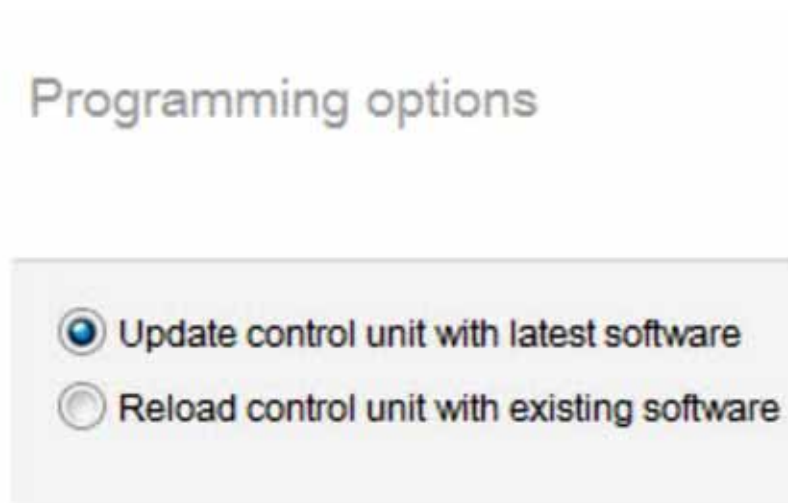
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11 Select **EMS**.



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12 Select Program to update the **EMS** with the latest software.



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- 13 Certain conditions must be met to continue with programming: battery voltage above 10v, parking brake applied, and ignition key in ON position with engine not running. When all conditions have been met, click Continue to proceed with programming.

1	 > 10 V	12.7 V	
2	  		
3	  = 0 rpm	 0 rpm	

1700-08-03-39 Program control unit - Update software

Automatically checked conditions

- 1 Battery voltage above 10 V
- 2 Parking brake applied
- 3 Ignition key in **ON** position. Engine not running

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- 14 Select "I accept" to agree to the terms and press continue to proceed.

Note: In the United States and Canada, the programing is NOT chargeable. An invoice will not be generated.

1700-08-03-39 Program control unit - Update software

The following control units will be programmed

Engine Control Module (EMS)

Chargeable programming

The software you are about to program is chargeable. If programming is performed using the software, an invoice will be generated.

Programming will be charged once even if multiple retries are needed.

The software has commercial part number

85136079 : Engine Control Module

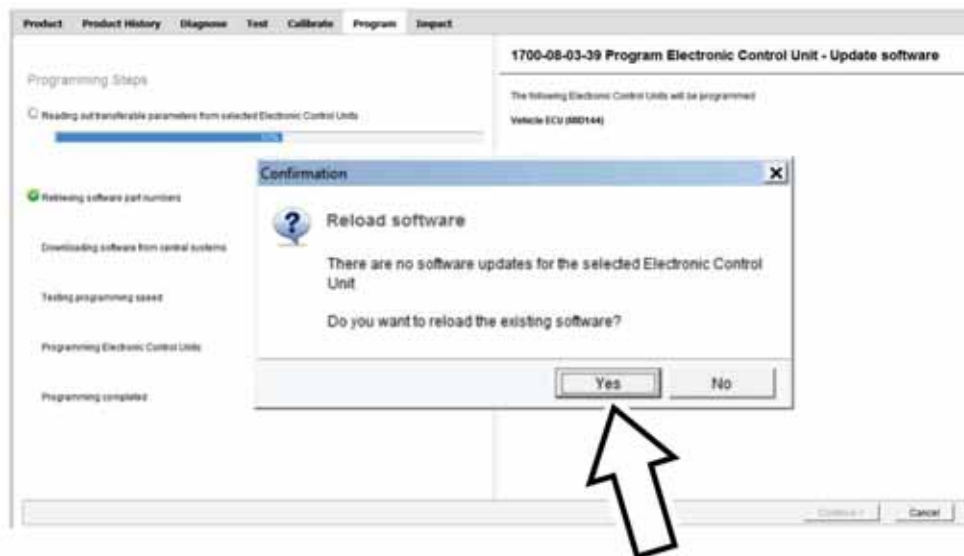
The number can be used for price lookup in your local system and will be specified on the invoice.

☒ I accept 

Select I accept to agree to the terms Press Continue to proceed

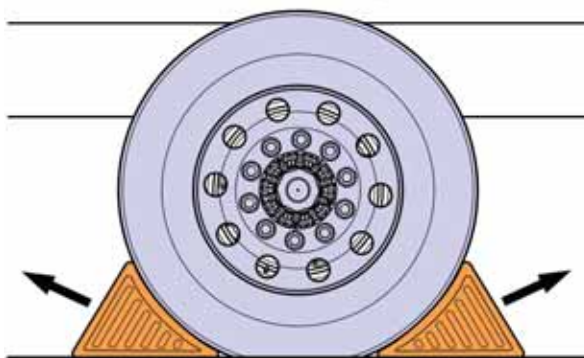
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- 15 If the software is already updated, this screen opens. Select Yes to reload existing software.



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- 16 When the programming is complete, clear any diagnostic trouble codes (DTC) and Finish.
17 When programming is complete, click Exit to return to Main Menu to program the ACM.
18 When all programming is complete, clear any diagnostic trouble codes (DTC) and Finish Work.
19 Remove the wheel chocks.



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Reimbursement

This repair is covered by an authorized Service Program. Reimbursement is obtained via the normal claim handling process.	UCHP Reimbursement
Recall Status	
Vehicle inspected, repair not required	1- Inspected OK
Vehicle repaired per instruction	2- Modified per instruction
Labor Code	
Primary Labor Code: Engine Control Module (ECM) and Aftertreatment Control Module (ACM), Software Updates	2841-22-09-21 0.4 hrs
Time to take charge and determine campaign status	1700-16-01-01 0.3 hrs
Causal Part	3092091
Parts Disposition	N/A
SCC Code	S7317
Authorization Number	N/A
Expiration Date	25- JUN - 2019

Note: Take Charge Time is not included in the Labor Code for this operation. Take charge may be eligible but can only be used once per repair visit. If vehicle is having other warranty repairs performed, take charge should be charged to the warranty repair, otherwise take charge can be charged to this service program.