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### Mack Chassis - Equipped With An Automated Manual Transmission (AMT-D, mDrive) - Unable To Program Transmission Electronic Control Unit (TECU) That Comes With A Reman Transmission; Information For Programming TECUs For Different Emissions Levels - FSB

- > Internal Content

For information on programming the correct software into a TECU, refer to bulletin FSB 432-014 Transmission ECU Compatibility. The FSB can be found in Impact under the service tab.

Tags mack k73833525

#### **Related links and attachments**

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Transmission ECU Compatibility CHU, CXU

## FSB 432-014, Transmission ECU Compatibility

(October 2014)

The current transmission ECU (TECU) hardware for the mDrive transmission used in the US2010 emissions, OBD2013 and newer vehicles in North America is the same part number (21484418). The software that is programmed into them is what makes them different.

The following instructions were written for converting a US2010 emissions TECU to an OBD2013 TECU using premium tech tool (PTT) version 2. The TECU can be converted backwards from OBD2013 to US2010 using PTT version 1 or PTT version 2 and the appropriate procedure.

**Note:** This process can only be performed on the latest TECU hardware part number 21484418.

## **Required Tools**

Premium Tech Tool version 2.03.41 or higher

Vocom Diagnostic Connector 88890304

Communication Interface 88890300

Note: Using other interfaces may affect programming speed.

Special tools 9990041, 9990061/62 and 9998699

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

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# Procedure

Connect PTT to the vehicle, identify the unit and verify that PTT can communicate with the transmission.

• If the transmission is identified, proceed to Step 5.

	Data Mismatch					
- The wrong s Due to the mis	ata and central system oftware is installed on match, some operation in the table to view do	the product. Ins may not be avail	lable.			
			Readout	Time: 10/	17/2013 2:5	6
Control Unit		Product Data	Central Data	Hardware	Software	1
Transmission ECU (	TECU)	•	•	•	•	
Aftertreatment Contr	ol Module (ACM)	<b>S</b>	0	0	0	
Engine Control Mode	ule (EMS)	<b>e</b>	0	<b>e</b>	•	1
Radio (MID 206)		<b>e</b>	0	•	0	
ECC-ECU (MID 146	)	0	0	0	0	
Airbag ECU (MID 23	(2)	<b>e</b>	0	•	0	
Details (Transmissio	n ECU (TECU))					
Hardware				_		1
and a street				7		-
<ul> <li>Software 😜</li> </ul>						1
Product Date	a					
Central Data	a design of the second s					
MSW	22182445					
CSW	22123494					

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TECU programmed with the correct software to allow communication or completely blank without software

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• If the transmission is not identified, proceed to Step 1.

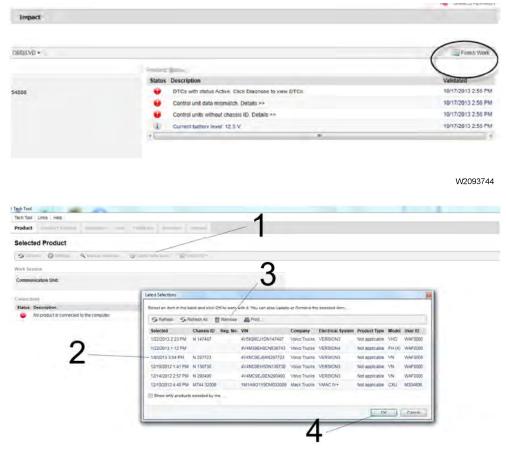
Control Unit Data Mismatch				
The product data and central sys - There are control units register Due to the mismatch, some oper Select an item in the table to view	red in central systems t rations may not be avail	hat are missing lable.	in the produ	ict.
		Readout	Time: 10/	17/2013 2.4
Control Unit	Product Data	Central Data	Hardware	Software
Information display (MID 140)	<b>S</b>	•	•	
Volvo Link (MID 142)	<b>e</b>	0		۲
ECC-ECU (MID 146)	<b>e</b>	0		۲
Gear Selector ECU (MID 223)				
Transmission ECU (TECU)	•	٢		
etails (Engine Control Module (EMS	i))			
Hardware Software				

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TECU programmed with incorrect software, no communication

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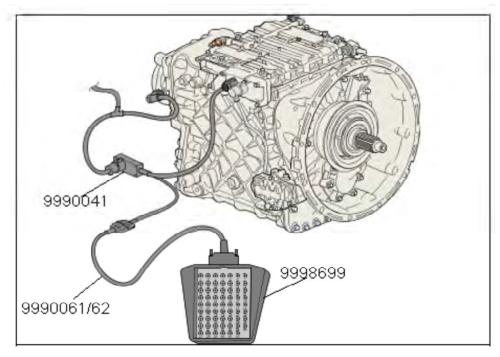
1 Turn ignition OFF, select Finish Work on the product screen and delete the chassis number from PTT.



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1	Pick Latest Selections
2	Select the chassis
3	Click Remove
4	Click OK

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2 Use special tools 9990041 and 9990061/62 to connect breakout box 9998699 to the TECU.

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- 3 Use a jumper wire to connect Pin 18 (supply +) to Pin 6 (Boot Mode) on breakout box.
- 4 Turn ignition ON and connect PTT. Allow PTT to identify chassis. PTT should indicate that the TECU is now online and does not contain a chassis ID.
- 5 Select 1700-08-03-39 Program Electronic Control Unit in Program menu. Select TECU and Update Electronic Control Unit with latest software.
- 6 Remove jumper wire from breakout box when programming starts.
- 7 After programming is complete, turn ignition OFF for 30 seconds.
- 8 Turn the ignition ON and re-identify/refresh the chassis. The TECU should be in the Control Unit Information screen and correctly programmed.
- 9 Calibrate transmission gearbox and road test vehicle to calibrate inclination sensor.
- 10 Clear diagnostic trouble codes (DTC).

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#### Reimbursement

This repair may be eligible for reimbursement if a product failure was experienced within time and mileage limits of the applicable Warranty coverage. Reimbursement is obtained via the normal claim handling process.	UCHP Reimbursement	eWarranty Reimbursement
Claim Type (used only when uploading from the Dealer Bus. Sys.)	01	01
Labor Code		
Primary Labor Code	4320-22-09-01 — 0.4 hrs.	3231M-43-80 — 0.4 hrs.
Causal Part	3092515	3092515

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