

**** SOLUTION ****

Title	Aftertreatment Control Module (ACM) Offline / Not Visible / Missing From Control Unit Information in Premium Tech Tool (PTT) - US10 And Newer Emissions
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Mack Models

Mack Model	LEU , LR , MRU - TerraPro , CHU - Pinnacle, Axle back , CXU - Pinnacle, Axle front , GU - Granite , TD - Titan
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Volvo Models

Volvo Model	VN , VNL , VNM , VNR , VNX , VAH , VHD , VT
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Emission Standard

Emission Standard	US10+OBD13 , US14+OBD15 , US14+OBD16 , US17+OBD16 , US17+OBD18 , US17+OBD19
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Engine family

Engine family	11L Engine , 13L Engine , 16L Engine , MP7 , MP8 , MP10
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**** SOLUTION ****

Cause	When connecting to a chassis for diagnosis or programming, the ACM may not be visible. This is not an immediate indication of a failed module. Most ACMs replaced for this issue are found to be in working condition during failure analysis.
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Solution

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- A. When replacing an ACM, always use Replace Hardware, operation 1700-22-03-12.
- B. Review the DTC Readout for communications codes that may indicate a data link problem.
- C. Ensure that there are no voltage or resistance issues with power and ground to the module.
- Ensure that there are at least 12 volts present on ACM pin 3 with Key On.
- D. Unplug the ACM. Allow the chassis to sit with key on, engine off for 5 minutes. Reconnect the ACM **without turning the key off**.
- E. Make sure that the ACM is compatible with the truck.
- OBD13 to OBD15 (Model Years 2014 to 2016) have two compatible modules:
 - 21870087
 - 22449432
 - OBD16 and newer is only compatible with one module:
 - 22449432
- F. Make sure to disconnect any third party devices (GPS, QUALCOMM etc.) that are connected anywhere to the data link, possibly on the diagnostic connector (back side).
- G. Make sure Tech Tool is at version 2.5.87 or newer. Tech Tool databases are up to

date (when in doubt use the Update Product Information function).

H. Remove the fuses for the TGW and ABS modules. This should only be required if there are issues with programming a module for the first time. Follow the procedure in Step H to ensure PTT has to re-identify the vehicle.

I. If the original ACM is not visible in Tech Tool, make sure to do the following steps to clean the history of the truck inside tech tool:

1. Disconnect from the truck and then remove the truck from the latest selections list.
2. Exit out of PTT.
3. Using the Tech Tool Log Manager, stop the BAF services, clean up all log files and then start the BAF services.
4. Restart PTT and connect to the truck.

J. If the ACM is still not visible, start an eService case for further assistance. **The case must include:**

- A complete DTC Readout from the time of the truck's arrival.
- A thorough description of all tests performed with results and numeric values noted ("Good" is not a value).
- Screenshots of any errors encountered while attempting to program.

Internal comments (BO)

Before shipping the pre-programmed ACM, the following steps can be performed to allow the programming of the ACM.

1. Disconnect 62 PIN connector at the ACM

2. Eliminate J1939 communication by using either of the procedures attached [here](#).

3. Connect 62PIN connector at the ACM.

4. Program ACM using TT2.

5. If " ONLY " the ACM is still not visible, the new ACM will need to be sent to Technical Support Services after they have been contacted and a case opened.

Solution visibility

Dealer distribution

Function(s)/component(s) affected

Function affected

2 1 0 ACM , Diagnostic tool

Function Group

Function Group

258 emissions after-treatment , 2841 Electronic Control Unit

Customer effect

Main customer effect

calibration/programming/pairing/missing operation , diagnostics/methodology

Conditions

Vehicle operating mode	when stationary
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Administration

Author	ut01793
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Last modified by	A241298
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Creation date	29-11-2016 15:11
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Date of last update	22-05-2019 17:05
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Review date	15-02-2017 00:02
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Status	Published
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NA_Author_Group	GTT
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