



Solution

Title (customer effect) Volvo Chassis - Equipped With An Automated Manual Transmission Model F (AMT-F, I-Shift) - Inconsistent Or Out Of Range Parameters Preventing/Blocking Programming; Road Speed Parameter Discrepancies (P1ALV) Following Software Update; Road Speed Limit Incorrect - **OBD16 And Newer Chassis**

Cause Software updates to the Transmission Electronic Control Unit (TECU) of AMT-F transmissions added parameter P1ALV to the TECU, previously only an Engine Control Module (EMS) parameter. The parameters in each module may not match following a software update and must be verified and corrected.

Solution

Overview

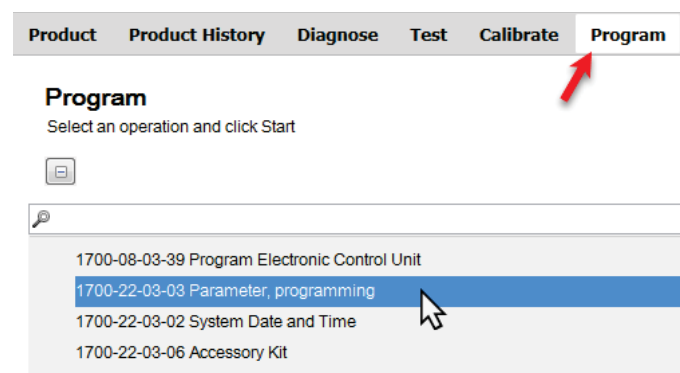
The latest software update (TECU MSW 23263953) for the AMT-F gearbox has added the parameter P1ALV - Road Speed Limit, Legislated. The same Parameter has been present in the ECM for several years now. Because the two parameters can be set independently of one another, PTT may flag the TECU parameter as inconsistent with the EMS value.

This condition is normally encountered during a Pre-Delivery Inspection (PDI) when customer parameters are being set. **All parameter inconsistencies should be resolved prior to releasing the chassis into service.**

Repair

For all new chassis, and any chassis equipped with an AMT-F for which the TECU software is updated to or beyond MSW 23263953:

- Inconsistencies can be found by running Operation [1700-22-03-03 Parameter, programming](#) under the Program tab of Premium Tech Tool (PTT).



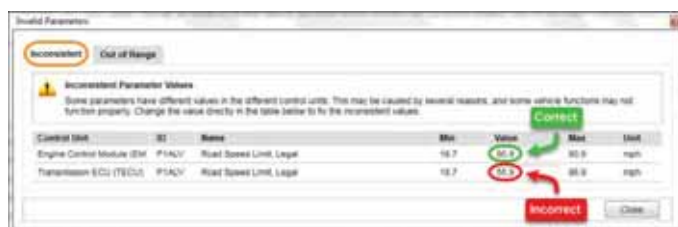
- If any Parameter inconsistencies are identified, an extra button will appear on the bar at the top of the programming screen as shown below:

1700-22-03-03 Parameter Programming

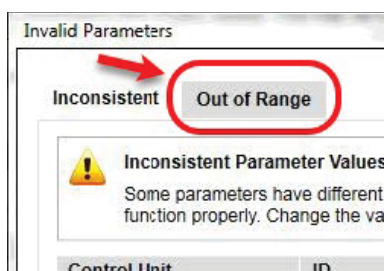
Find a parameter applying a filter using the options below or by searching for its



- Clicking the Invalid Parameters button opens a new window. The window will show parameter values that are inconsistent, which means the value of one or more parameters does not agree with the value of a related parameter or parameters. Inconsistencies can occur within the same ECU or between multiple ECUs. A mismatch of parameter P1ALV is shown below:



- Both P1ALV values should be reviewed, and the parameter with the incorrect value should be set to **the same value** as the correct one.
- Any other Inconsistencies that are listed should also be corrected.
- There is a second tab in the Invalid Parameters window that lists parameter values that are set outside of the allowable range. Verify that there are no parameters on this list after correcting Inconsistent values.



Solution visibility

Dealer distribution

Function(s)/component(s) affected

Function affected transmission , 1 1 0 EMS , 3 1 0 TECU , MID 130 – TECU , Diagnostic tool

Function Group

Function Group 284 control system, fuel supply , 43 gearbox

Customer effect

Main customer effect acceleration/speed , road behaviour , calibration/programming/pairing/missing operation , efficiency/abnormal behavior

Acceleration/speed	does not exceed a certain velocity
Road behaviour	driveability
Conditions	
Vehicle operating mode	when driving
Frequency of occurrence of problem	random
Administration	
Author	UT9268H
Dealer ID	UT9268H
Last modified by	RU4469V
Creation date	05-03-2018 16:03
Date of last update	02-04-2018 16:04
Review date	05-03-2019 00:03
Status	Published
NA_Reviewer	ut9268h
NA_Author_Group	GTT
NA_VOLVO_Vehicle_Range	
NA_VOLVO_Vehicle_Range	VNR , VNL , VHD , VAH
nge	
Engine family	
Engine family	11L Engine , 13L Engine
Emission Standard	
Emission Standard	2018 , OBD2017 , US17 GHG , US16