



Solution

Title (customer effect)	US15 And Newer Chassis Equipped With Automated Manual Transmission (AMT) (I-Shift, mDRIVE) Generating Anti-Lock Braking System (ABS) Wheel Speed Sensor Diagnostic Trouble Codes (DTC)
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Cause	Chassis equipped with an AMT may display ABS wheel speed codes due to water intrusion and pin corrosion in the wiring harness.
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Solution	Volvo chassis built after week W1534 and Mack chassis built after week W1546 use a new, rectangular 24-way connector to join the front and rear chassis harnesses at connections FCCE1 and FCCE2.
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The front to rear chassis harness connectors are located near the air dryer and may experience water intrusion. See the image below for the connector location.



Water intrusion may cause corrosion on connector terminals as shown below:



The corrosion may cause wheel speed sensor faults to log in the ABS module, which **can lead to derate conditions** on trucks equipped with I-Shift and mDrive transmissions. If water intrusion and corrosion are found during inspection, replace both FCCE1 and FCCE2 connectors with pigtail jumper part number 23163491 for Volvo or part number 23173933 for Mack.

Temporary solution	Temporary solution
Solution visibility	Dealer distribution
Function(s)/component(s) affected	
Function affected	automatic transmission , braking/auxiliary pneumatic circuits , tires/wheels , wiring harness , 3 1 0 TECU , 8 1 0 ABS , MID 130 – TECU , MID 136 ABS
Function Group	
Function Group	373 cable system, front , 374 cable system, central , 376 cable system, rear , 593 anti-lock brake (anti-skid)
Customer effect	
Main customer effect	diagnostics/methodology , fault code/display
Lights/Messages on information display	- - - - , - - / - -
Fault code(s)	
OBD 2013 Diagnostic Trouble Codes	CHASSIS
NA_MIDs	MID 136 ABS
Conditions	
Vehicle operating mode	when driving , when stationary
Frequency of occurrence of problem	random
Weather conditions	wet , rain , snow , ice
Administration	
Author	UT0538V
Last modified by	A241298
Creation date	27-06-2017 23:06
Date of last update	01-11-2017 14:11
Status	Published
NA_MACK_Vehicle_Range	
NA_MACK_Vehicle_Range	Conventional , CHU , CXU , GU , TD
NA_VOLVO_Vehicle_Range	
NA_VOLVO_Vehicle_Range	Conventional , VNR , VNX , VNL , VNM , VHD , VAH
Engine family	
Engine family	11L Engine , 13L Engine , 16L Engine , MP7 , MP8 , MP10
Emission Standard	
Emission Standard	2018 , OBD2017 , US17 GHG , US15