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**Mack Models**

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**Mack Model** TE-TerraPro , GR-Granite , PI-Pinnacle , AN-Anthem

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**Volvo Models**

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**Volvo Model** VNR , VNL , VHD , VAH

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**Engine family**

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Engine family 11L Engine , 13L Engine , MP7 , MP8

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**Emission Standard**

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Emission Standard 2018 , OBD2017 , US17

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**\*\* SOLUTION \*\***

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**Title** Vehicle Speed Factor (K-Factor) Programming - Speed Factor Value Incorrect When Calculated In Premium Tech Tool (PTT); Speedometer Reading Incorrectly Following A Change To Vehicle Speed Factor - **US17+OBD16 And Newer Emissions, Common Model Year 2018 And Newer**

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**Cause** Newer vehicles may display an incorrect speedometer reading in the Instrument Cluster following Vehicle Speed Sensor (VSS) Calibration. following a drive axle ratio or tire size/model change.

This issue is caused by a conversion error in PTT. It has been determined that the calculated value is correctly displayed, but the value that is programmed is incorrect.

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**Solution** **Prior to performing any steps below, ensure that PTT is the current version. At the time of this solution's composition, PTT version 2.6.70 is the current release. The conversion error will be fixed in a future release. If a newer version is available, PTT should be updated and the issue confirmed to still exist prior to proceeding.**

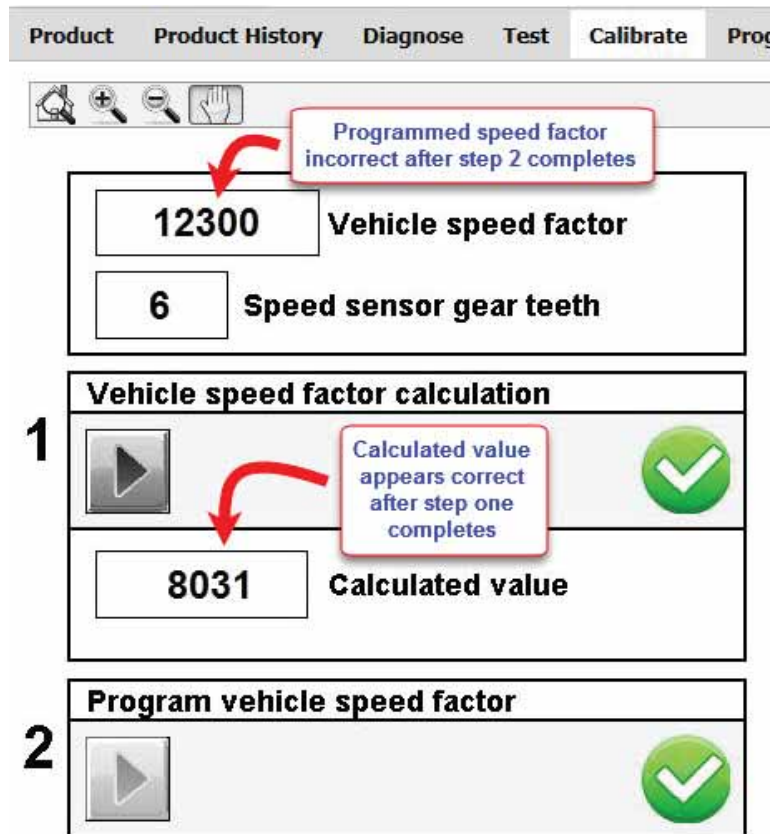
**A. Calculate the Vehicle Speed Factor**

1. Run PTT Operation [3829-08-03-06 Vehicle Speed Factor](#), located under the Calibrate tab.

2. Enter the Drive axle ratio and Tire Revolutions per Mile (Revolutions per Kilometer) as required

3. Press the Play button in the Step 1 box on the left-hand side of the screen. The Calculated Value box will display the Speed Factor. **This value is correctly calculated.**

4. **DO NOT PRESS PLAY IN THE STEP 2 BOX.** Copy or record the value displayed in the Step 1 box, then exit the Operation.



## B. Program the Calculated Value

1. Run PTT Operation [1700-22-03-03 Parameter Programming](#), located under the Program tab.
2. Once parameters have loaded, search for or locate parameter [MH, Vehicle Speed Factor US](#).
3. Enter the value that was copied or recorded in Part A as the new value for parameter [MH](#).
4. Complete the parameter programming operation to save the new Vehicle Speed Factor value.

Solution visibility

[Dealer distribution](#)

### Function(s)/component(s) affected

Function affected

dashboard/information display , Diagnostic tool

### Function Group

Function Group

382 engine and transmission instrument , 383 speedometer; trip meter; hour counter; clock

### Customer effect

Main customer effect

acceleration/speed , calibration/programming/pairing/missing operation

### Conditions

Vehicle operating mode

when driving

Other conditions after a workshop procedure on the vehicle

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## Administration

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