

Revisions to this document are noted
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TT8045EN, Rev. A
August, 2018
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SUBJECT: Incorrect Calibration Setting for Primary Mode: Gears in Freightliner Custom Chassis Corporation (FCCC) Motorhome Chassis

MODELS AFFECTED: FCCC Motorhome Chassis MC, XBS, XCR, and XCS with 2500MH Series Transmission

Description of Complaint:

The Preselect Downshift is not functioning properly in a certain population of FCCC motorhome chassis. This is due to an incorrect Calibration Setting for Primary Mode: Gears.

A customer may complain that during a preselect downshift request, the transmission is shifting at normal speeds and not allowing a higher downshift point, which would allow the engine speed to increase. Without higher engine speeds, the desired amount of engine braking is not attainable.

The following Preselect Downshift feature operates when the Calibration Setting is correct:

- The operator initiates the Preselect Downshift Schedule by selecting any forward range on the Pushbutton Shift Selector (PBSS) lower than the current range.
 - When a range has been preselected, shifts to and from the gears above the preselected gear range occur at higher than normal engine speeds.



NOTE: Preselect downshifting is used to maintain higher engine speed, resulting in increased engine braking.

Cause:

The Primary Mode: Gear calibration setting was **incorrectly** set to 6321 instead of the **correct** setting of 6M1 for 6-speed units in the affected population. 5-speed units were **incorrectly** set to 5321 instead of the **correct** setting of 5M1 for units in the affected population. This correction will allow preselect downshift, which allow an increase in engine speed, thus increasing the amount of engine braking.

Service Channel Procedure:

FCCC issued letters to customers with motorhomes within the affected population under FCCC ICI 17-024. The ICI 17-024 letter directed the customers to take the motorhome to an Allison authorized outlet that has Allison TCM Reflash™ capability.

Using Allison DOC®, determine the current setting for the Primary Mode: Gears parameter. Once connected to the TCM, select the Calibration Information icon. Look at Group: Primary Mode to verify the current Primary Mode: Gears setting. Refer to [Figure 1](#). Record the current setting for later reference. Using Allison TCM Reflash™, enter

the TCM serial number into the 5th Generation Controls database. The system will correct the calibration settings for the specific TCM when the calibration is downloaded. Flash the TCM with the updated calibration.

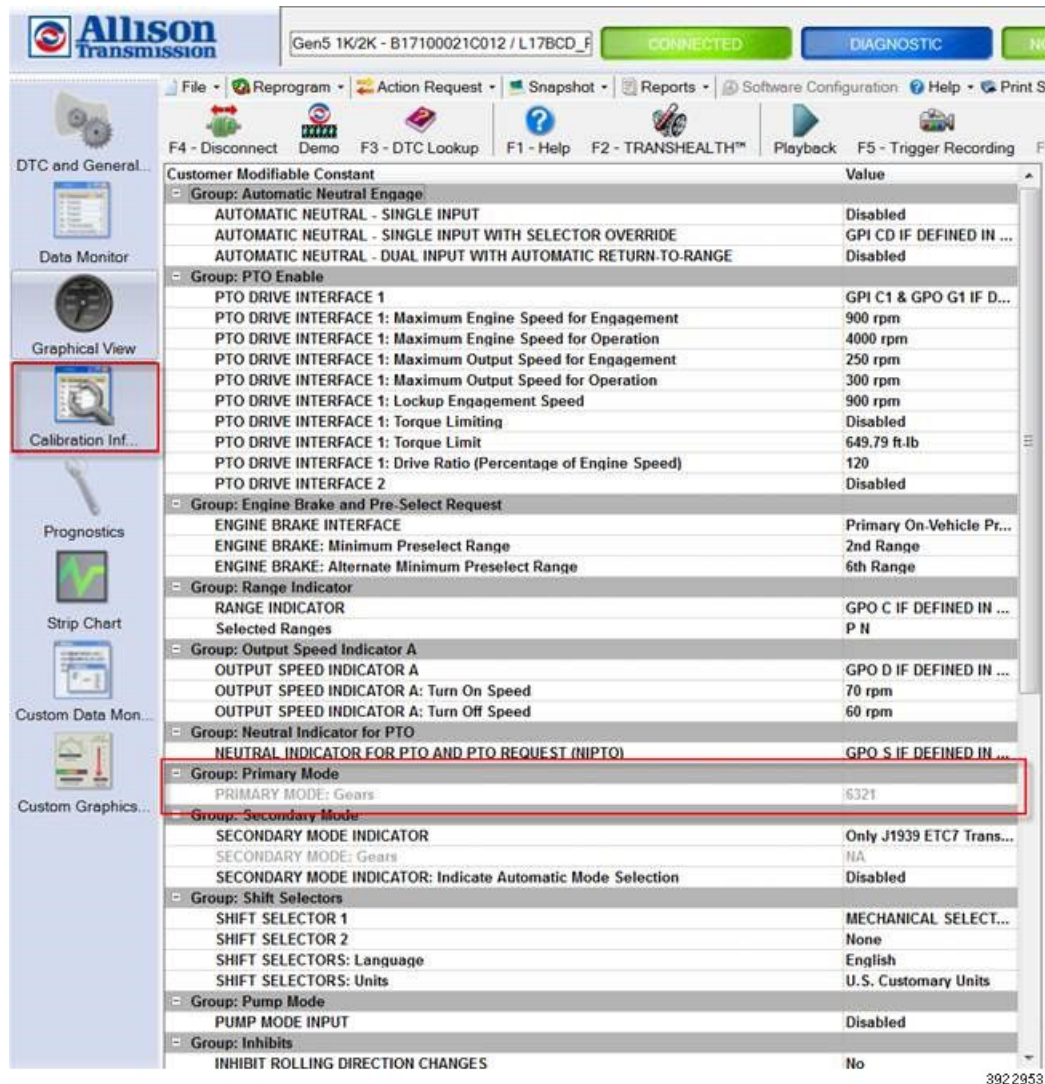


Figure 1. Example of the Incorrect Setting Prior to Reflashing

Connect to the TCM using Allison DOC® to verify that the calibration parameters are set to correct settings. Once connected to the TCM, select the Calibration Information icon. Look at Group: Primary Mode to verify the correct setting. Figure 1 is an example of the **incorrect** setting prior to reflashing. Notice the Value for Primary Mode: Gears is set to 6321. The value may be 5321 on some of these motorhomes.

Figure 2 is an example of the **correct** setting after reflashing. Notice the Value for Primary Mode: Gears is set to 6M1. The value may be 5M1 on some of these motorhomes.

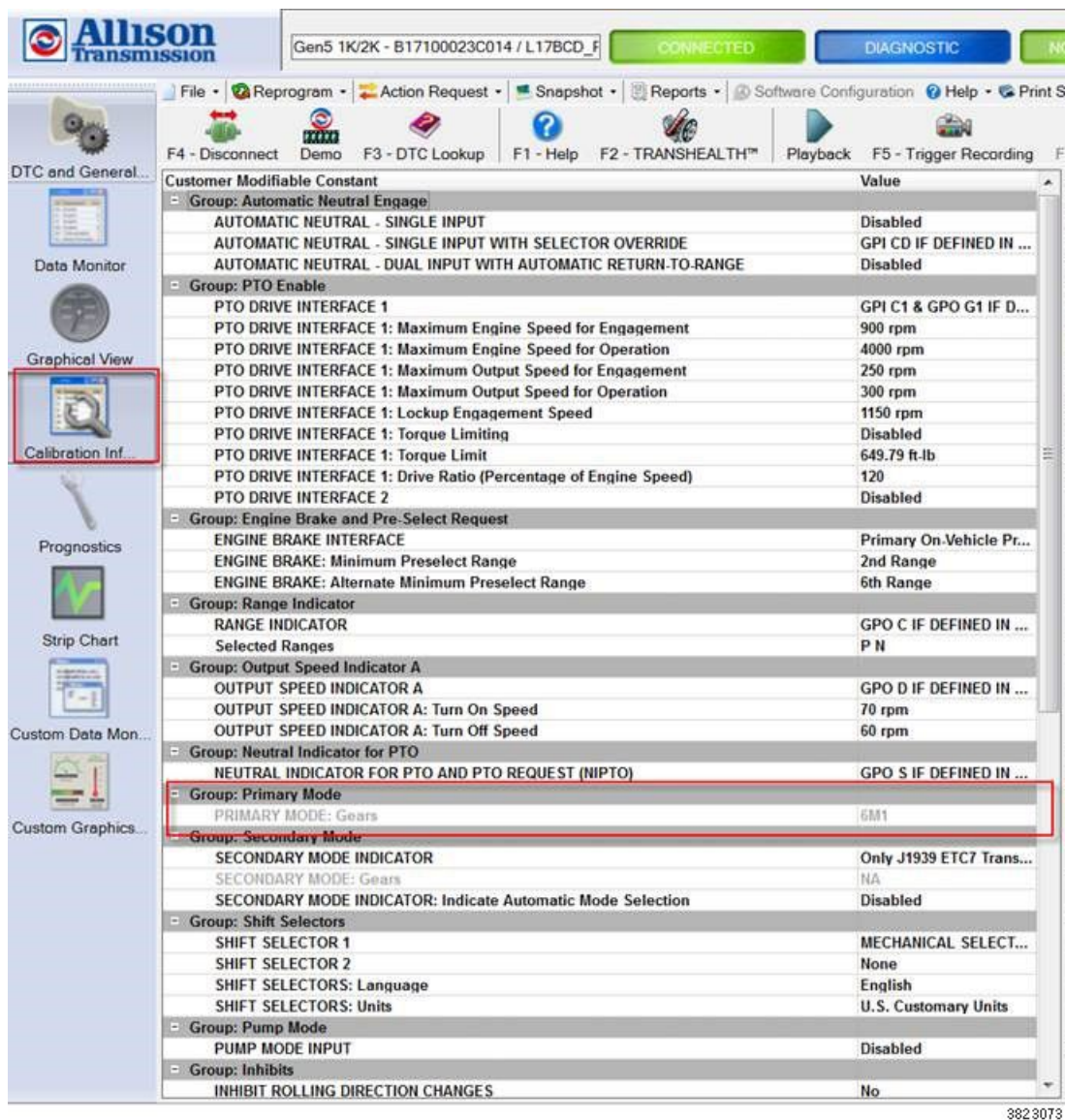


Figure 2. Example of the Correct Setting After Reflashing



NOTE: 6-speed transmission will use 6M1 and 5-speed transmissions will use 5M1.



NOTE: Some of the TCMs included in this Tech Tip are also included in TT8009EN. When either Tech Tip is implemented by updating the calibration using the TCM serial number, both changes will be made at the same time. Upon updating the calibration, the Engine Governed Speed, Primary Mode: Shift Speed, and Secondary Mode: Shift Speed settings may also be modified per Tech Tip TT8009EN. Refer to TT8009EN for more information

After recalibration, if the calibration parameters are not set as listed above, call the Allison Technical Assistance Center (TAC) at 800-252-5283

Claim Filing Procedure:

As of September 30, 2018 claims for reflashing the TCM under this Tech Tip, TT8045 will no longer be paid by Allison Transmission, Inc. or the OEM. Any TCM reprogramming related to this Tech Tip will be a Customer Pay invoice. This Tech Tip will remain as a technical reference document only.



NOTE: The issue outlined in this document is not an Allison Transmission, Inc. defect in material or workmanship.
