SUBJECT: Vehicle Acceleration Control on Freightliner Vehicles

MODELS AFFECTED: Freightliner Vehicles with 2000/3000/4000 Series Transmissions with 5th Generation Controls

Description of Complaint:

Customers may experience low power on acceleration with Freightliner Vehicles using 2000/3000/4000 Series Transmissions with 5th Gen Controls.

Background:

Vehicle Acceleration Control (VAC) is an engine management function where the TCM manages engine torque to limit vehicle acceleration to a calibrated rate. In order to reduce fuel consumption, DTNA/Allison decided to introduce VAC in the early part of this year as a means of limiting unnecessary acceleration during light vehicle operation. Five levels of settings were made available with the new 5th Gen Controls calibrations (refer to Table 1).

Table 1. VAC Level Settings

VAC Level	Description	Acceleration Rate (mph/sec)	Comments
5	Ultra Economy	2.2	Provides the slowest acceleration rate. Offers the highest potential for fuel savings
4	Super Economy	2.6	
3	High Economy	3.5	
2	Intermediate Economy	4.5	
1	Base Economy	5.6	Provides acceleration closest to normal vehicle acceleration. Offers the lowest potential for fuel savings.
0	Off		

Each VAC level uses an acceleration profile that the vehicle tries to follow when accelerating. Base Economy means that very little limiting will be performed. The vehicle will accelerate similarly to a truck without VAC enabled, and will have the lowest potential for fuel savings. Ultra Economy means that a large amount of limiting will be performed. The vehicle will experience the highest amount of torque and acceleration control and achieve the highest potential for fuel savings.

BRD

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A number of vehicles built at DTNA Truck Plants during the first weeks of July were programmed with VAC set to Ultra Economy (Level 5) and High Economy (Level 3). Based on the current engineering guidelines established by DTNA for VAC, the level should be set to Base Economy (Level 1).

Service Procedure:

Connect the Universal Allison DOC® and access Reprogramming tab. Under Customer Modifiable Constants, scroll down to Group VAC and adjust Vehicle Acceleration Control to Base Economy (Level 1). When VAC level is changed, click on Reprogram TCM and process will be complete.

With Universal Allison DOC® still connected to vehicle, verify VAC level change by viewing Customer Modifiable Constants.

NOTE: The Distributor/Dealer is instructed to adjust VAC settings only.

NOTE: If an engine warning light is set during this procedure, it will be eliminated by starting the engine 5 or 6 times.

Claim Submittal Information:

Allison Service Outlets shall submit a Claim Type 8 on each vehicle completed for labor. Vehicle Identification Number (VIN) required on claim.

Claim Type	8
Special Activity Indicator	DTNAVAC
Primary Failed Part	70
Complaint Code	AT02
Failure Code	CC03

Labor OP	Labor Hours	Labor Operation
00096501	1	TCM Recalibration

NOTE: Labor not to exceed 1.0 hour labor.

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

Reference: Daimler Trucks North America LLC Campaign letter #FSPR 23206

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