



Subject: Endurant and PACCAR Proactive Software and Calibration Update Program

Document Number: TAIB-0885

Updated: December 21, 2020

Date: September 21, 2020

Issue Description:

Customers may experience transmission service lamp, no gear engagement from neutral and fault codes due to Linear Clutch Actuator (LCA) not being able to achieve desired clutch position. This Service Bulletin covers 3 scenarios:

- **Scenario 1:** FC 511 FMI 7 or 10 is set **without** the updated software and calibration installed
- **Scenario 2:** FC 511 FMI 7 or 10 is set **with** the updated software and calibration installed
- **Scenario 3:** No Fault Code 511 FMI 7 or 10 is set and the **serial number is less than or equal to Z0057102**

Containment/Corrective Action:

Update Transmission Calibration as part of Software **5516023** (PACCAR) or **5516024** (Endurant) on all transmissions with serial numbers **less than or equal to Z0057102**.

Important: Calibration Update is **REQUIRED** to enable this corrective action; the calibration is only available in the following Software packages.

- **5516023 PACCAR** - software and calibration released through DAVIE4 November 9, 2020.
- **5516024 Endurant** - software and calibration released through ServiceRanger 4 at dealer level (Pro).

Affected Models/Population:

Serial Number less than or equal to Z0057102 for:

- Endurant Transmissions
- PACCAR Transmissions

Field Strategy:

Step A:

Update transmission software as indicated:

Transmission	Software	Tool Used	Date Available
PACCAR	5516023	DAVIE4	11/9/2020
Endurant	5516024	ServiceRanger4	10/21/2020

Note:

- If transmission software is not **5516023 (PACCAR)**, update the transmission software from the Programming Navigation Menu of **DAVIE4** (PACCAR OEM Tool).
- If transmission software is not **5516024 (Endurant)**, update the transmission software utilizing the **ServiceRanger 4 Procedure for Endurant** (provided after **Step B**).

Step B:

Update transmission calibration to appropriate REV. Calibrations indicated below:

5516023 PACCAR Transmission Calibrations:				
Eaton Part Number	OEM Part Number	Description	Speed	Calibration REV
5539965	8888883	PACCAR MX13 Euro 5 Standard (Australia)	12 Speed	Cal Rev 8
5539984	2293677	PACCAR MX11 Economy	12 Speed	Cal Rev 10
5539985	2293679	PACCAR MX11 Performance	12 Speed	Cal Rev 10
5539986	2293681	PACCAR MX11 Tanker	12 Speed	Cal Rev 10
5539987	2293676	PACCAR MX13 Economy	12 Speed	Cal Rev 10
5539988	2293678	PACCAR MX13 Performance	12 Speed	Cal Rev 10
5539989	2293680	PACCAR MX13 Tanker	12 Speed	Cal Rev 10

5516024 Endurant Transmission Calibrations:				
Eaton Part Number	OEM Part Number	Description	Speed	Calibration REV
5539999	8888883	PACCAR X15 Economy	12 Speed	Cal Rev 11
5540000	8888883	PACCAR X15 Performance	12 Speed	Cal Rev 11

5516024 Endurant Transmission Calibrations:				
Eaton Part Number	OEM Part Number	Description	Speed	Calibration REV
5540001	8888883	PACCAR X15 Tanker	12 Speed	Cal Rev 11
5540002	8888883	Paccar X15 2020 Efficiency Series Economy	12 Speed	Cal Rev 11
5540003	8888883	PACCAR X15 2020 Efficiency Series Performance	12 Speed	Cal Rev 11
5540004	8888883	Paccar X15 2020 Efficiency Series Tanker	12 Speed	Cal Rev 11
5540005	8888883	PACCAR X15 2020 Productivity Series Economy	12 Speed	Cal Rev 11
5540006	8888883	PACCAR X15 2020 Productivity Series Performance	12 Speed	Cal Rev 11
5540007	8888883	PACCAR X15 2020 Productivity Series Tanker	12 Speed	Cal Rev 11
5540008	8888883	Navistar A26 Economy	12 Speed	Cal Rev 11
5540009	8888883	Navistar A26 Performance	12 Speed	Cal Rev 11
5540010	8888883	Navistar A26 Tanker	12 Speed	Cal Rev 11
5540011	8888883	Navistar A26 Economy	11 Speed	Cal Rev 11
5540012	8888883	Navistar A26 Performance	11 Speed	Cal Rev 11
5540013	8888883	Navistar A26 Tanker	11 Speed	Cal Rev 11
5540014	8888883	Navistar X15 Economy	12 Speed	Cal Rev 11
5540015	8888883	Navistar X15 Performance	12 Speed	Cal Rev 11
5540016	8888883	Navistar X15 Tanker	12 Speed	Cal Rev 11
5540017	8888883	Navistar X15 Economy	11 Speed	Cal Rev 11
5540018	8888883	Navistar X15 Performance	11 Speed	Cal Rev 11

5516024 Endurant Transmission Calibrations:				
Eaton Part Number	OEM Part Number	Description	Speed	Calibration REV
5540019	8888883	Navistar X15 Tanker	11 Speed	Cal Rev 11
5540020	8888883	Navistar X15 Performance Series Standard	12 Speed	Cal Rev 11
5540021	8888883	Navistar X15 2020 Efficiency Series Economy	12 Speed	Cal Rev 11
5540022	8888883	Navistar X15 2020 Efficiency Series Performance	12 Speed	Cal Rev 11
5540023	8888883	Navistar X15 2020 Efficiency Series Tanker	12 Speed	Cal Rev 11
5540024	8888883	Navistar X15 2020 Efficiency Series Economy	11 Speed	Cal Rev 11
5540025	8888883	Navistar X15 2020 Efficiency Series Performance	11 Speed	Cal Rev 11
5540026	8888883	Navistar X15 2020 Efficiency Series Tanker	11 Speed	Cal Rev 11
5540027	8888883	Navistar X15 2020 Productivity Series Economy	12 Speed	Cal Rev 11
5540028	8888883	Navistar X15 2020 Productivity Series Performance	12 Speed	Cal Rev 11
5540029	8888883	Navistar X15 2020 Productivity Series Tanker	12 Speed	Cal Rev 11
5540030	8888883	Volvo X15 Economy	11 Speed	Cal Rev 13
5540031	8888883	Volvo X15 Economy	12 Speed	Cal Rev 13
5540032	8888883	Volvo X15 Performance	11 Speed	Cal Rev 13
5540033	8888883	Volvo X15 Performance	12 Speed	Cal Rev 13
5540034	8888883	Volvo X15 Tanker	11 Speed	Cal Rev 13
5540035	8888883	Volvo X15 Tanker	12 Speed	Cal Rev 13
5540036	8888883	Volvo X15 2020 Efficiency Series Economy	11 Speed	Cal Rev 13

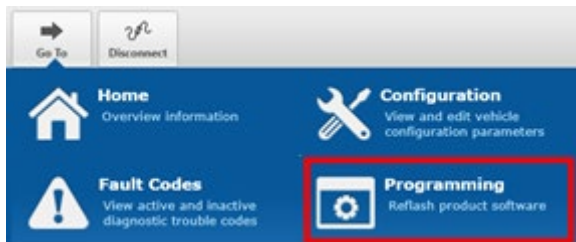
5516024 Endurant Transmission Calibrations:				
Eaton Part Number	OEM Part Number	Description	Speed	Calibration REV
5540037	8888883	Volvo X15 2020 Efficiency Series Economy	12 Speed	Cal Rev 13
5540038	8888883	Volvo X15 2020 Efficiency Series Performance	11 Speed	Cal Rev 13
5540039	8888883	Volvo X15 2020 Efficiency Series Performance	12 Speed	Cal Rev 13
5540040	8888883	Volvo X15 2020 Efficiency Series Tanker	11 Speed	Cal Rev 13
5540041	8888883	Volvo X15 2020 Efficiency Series Tanker	12 Speed	Cal Rev 13
5540042	8888883	Volvo X15 2020 Productivity Series Economy	12 Speed	Cal Rev 13
5540043	8888883	Volvo X15 2020 Productivity Series Performance	12 Speed	Cal Rev 13
5540044	8888883	Volvo X15 2020 Productivity Series Tanker	12 Speed	Cal Rev 13
5540047	8888883	Freightliner X15 2020 Efficiency Series Economy	11 Speed	Cal Rev 13
5540048	8888883	Freightliner X15 2020 Efficiency Series Economy	12 Speed	Cal Rev 13
5540049	8888883	Freightliner X15 2020 Efficiency Series Performance	11 Speed	Cal Rev 13
5540050	8888883	Freightliner X15 2020 Efficiency Series Performance	12 Speed	Cal Rev 13
5540051	8888883	Freightliner X15 2020 Efficiency Series Tanker	11 Speed	Cal Rev 13
5540052	8888883	Freightliner X15 2020 Efficiency Series Tanker	12 Speed	Cal Rev 13
5540053	8888883	Freightliner X15 2020 Productivity Series Economy	12 Speed	Cal Rev 13
5540054	8888883	Freightliner X15 2020 Productivity Series Performance	12 Speed	Cal Rev 13
5540055	8888883	Freightliner X15 2020 Productivity Series Tanker	12 Speed	Cal Rev 13
5540056	8888883	PACCAR X15 Euro5 Mexico Standard	12 Speed	Cal Rev 13

5516024 Endurant Transmission Calibrations:				
Eaton Part Number	OEM Part Number	Description	Speed	Calibration REV
5540057	8888883	Freightliner DD13 Economy	11 Speed	Cal Rev 15
5540061	8888883	Freightliner DD13 Tanker	11 Speed	Cal Rev 15
5540063	8888883	Freightliner X12 Economy	11 Speed	Cal Rev 16
5540064	8888883	Freightliner X12 Economy	12 Speed	Cal Rev 13
5540065	8888883	Freightliner X12 Performance	11 Speed	Cal Rev 13
5540066	8888883	Freightliner X12 Performance	12 Speed	Cal Rev 13
5540067	8888883	Freightliner X12 Tanker	11 Speed	Cal Rev 13
5540068	8888883	Freightliner X12 Tanker	12 Speed	Cal Rev 13
5540069	8888883	Freightliner X12 2021 Economy	11 Speed	Cal Rev 13
5540070	8888883	Freightliner X12 2021 Economy	12 Speed	Cal Rev 13
5540071	8888883	Freightliner X12 2021 Performance	11 Speed	Cal Rev 13
5540072	8888883	Freightliner X12 2021 Performance	12 Speed	Cal Rev 13
5540073	8888883	Freightliner X12 2021 Tanker	11 Speed	Cal Rev 13
5540074	8888883	Freightliner X12 2021 Tanker	12 Speed	Cal Rev 13
5540075	8888883	Freightliner DD13 Performance	11 Speed	Cal Rev 15
5540077	8888883	Freightliner DD13 Tanker	12 Speed	Cal Rev 16
5540078	8888883	Freightliner DD13 Performance	12 Speed	Cal Rev 16
5540079	8888883	Freightliner DD13 Economy	12 Speed	Cal Rev 16

ServiceRanger 4 Procedure for Endurant:

Ensure ServiceRanger 4 Data base level is updated to: 2010-01-SCB-4209 10/21/2020 or greater.

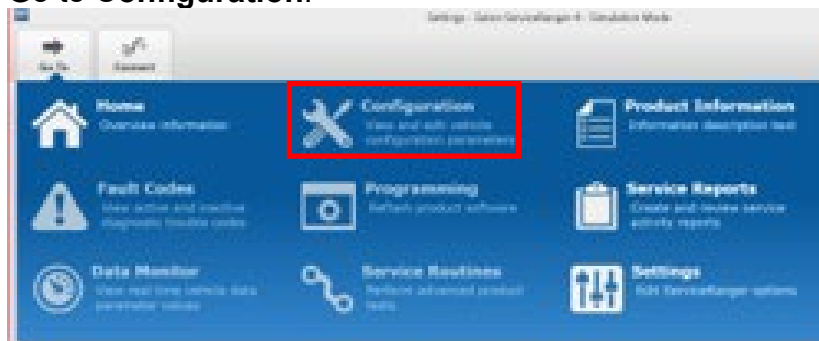
1. Connect the computer to the Transmission Control Module (TCM) using ServiceRanger 4.
2. Go to **Programming**.



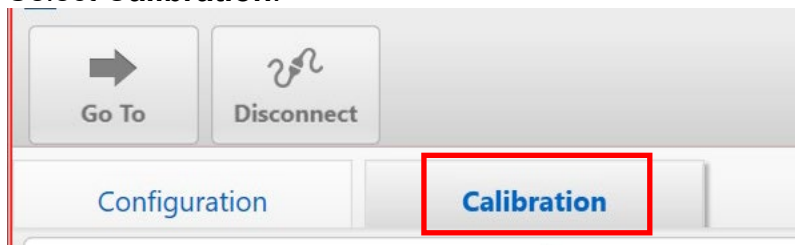
3. Check for **Available Updates**.



4. Ensure transmission software is 5516024 (Endurant). If not, perform update.
5. Go to **Configuration**.

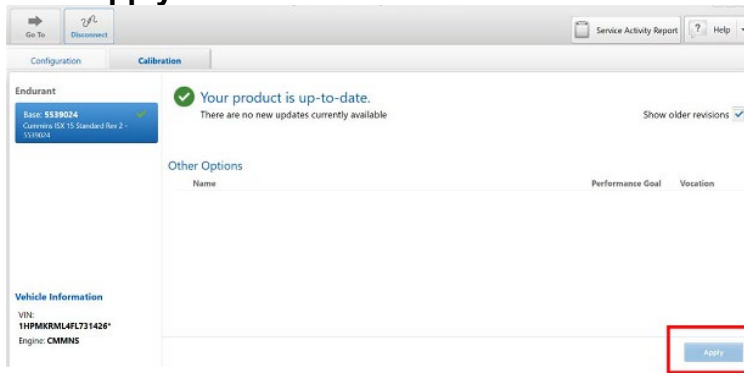


6. Select **Calibration**.



7. Select the appropriate **Calibration** from the tables in **Step B**.

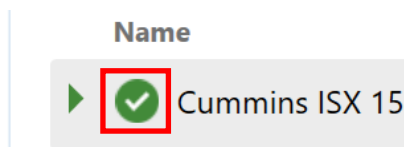
8. Click **Apply**.



9. Turn the key off and let the transmission power down until your computer disconnects from the Transmission Control Module (TCM).

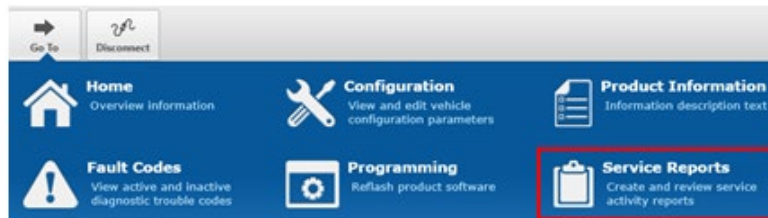
10. Once disconnected from the TCM, turn the key back on.

11. Select **Reconnect** and verify the calibration has changed.
a. If the green check mark is displayed with the calibration, the calibration has been updated.



12. Create Service Activity Report and **Send to Eaton**.

a) Go to **Service Reports** in the **Navigation Menu**.



b) Create **New Service Activity Report**.

c) Fill in the **Vehicle Information**.

d) Click **Start** – data will begin extraction.

e) After report has finished select “**Send to Eaton**” displayed in the screen header.



Warranty Information:

Fix as Fail:

- **Scenario 1:** FC 511 FMI 7 or 10 is set without the updated software and calibration installed:

Warranty Parts:

No parts needed, software and calibration update only. Reference above software and calibration charts.

Warranty Labor:

- Diagnostics (1.0 hour)
- Software Update and Calibration (0.5 hour)
- Test Drive (0.5 hour)

Repair Order / Claim Text:

- Claim Text – Enter the following:
 - Primary Causal Part #: A-10000714
 - TAIB-0885
- **Scenario 2:** FC 511 FMI 7 or 10 is set **with** the above software and calibration installed:

Warranty Parts:

- K-4357 LCA Kit (Endurant)
- K-4357-PAC LCA Kit (PACCAR)

Warranty Labor:

- LCA Replacement
 - Diagnostics (1.0 hour)
 - LCA R&R (0.5 hour)
 - Clutch Calibration (0.5 hour)
 - Test Drive (0.5 hour)

Repair Order / Claim Text:

- Claim Text – Enter the following:
 - Primary Causal Part #: A-10000714
 - TAIB-0885
- Part Return Instructions:
 - Claimed parts are to be returned to the Eaton Warranty Return Center (Galesburg MI.) “Collect” per TMIB0129. Follow packaging instructions per TCWY0600.

Campaign:

- **Scenario 3:** No Fault Code 511 FMI 7 or 10 is set and the serial number is **less than or equal to Z0057102**:

Warranty Parts:

- No parts to be replaced

Warranty Labor:

- Software download and calibration (OEM SRT up to 0.5 hour)

Repair Order / Claim Text:

- Claim Text – Enter the following:
 - Primary Causal Part #: A-10000714
 - Campaign #: LCASWC
 - PACCAR Campaign #: 26-035
 - Navistar Campaign #: 20905

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