SUBJECT: Transmission Control Module (TCM) Stuck in Boot with BCKN pre-261 Software

MODELS AFFECTED: 1000 Series™, 2000 Series™, 3000 Series™, and 4000 Series™

Introduction

On May 15, 2025, Allison Transmission released BCKN 261 software to address the items below. If the vehicle is exhibiting any of the complaints or issues mentioned, please follow the outlined service procedure.

Description of Complaint

Immediately after the ignition is turned off and during an abnormal battery disconnect sequence or low battery voltage event, a small (approximately 18 milliseconds) window exists where the TCM is vulnerable when entering boot mode upon the next power-up. This will result in the vehicle not being able to start, as well as an unresponsive shift selector. This BCKN 261 software release includes robustness to voltage interrupts after abnormal vehicle shutdown sequences.

If the vehicle is exhibiting the aforementioned symptoms, Allison DOC® may be unable to communicate with the TCM to read the software level or any other identifying information. All versions of Allison 6th Generation Controls pre-261 could be susceptible to this issue. Verify that the TCM had pre-261 software by viewing the TCMs most recent summary report. Use the summary report feature within the Allison HUB™ or TCM Reflash to view the latest programming event and the most recent software level programmed into the TCM.

Verifying Current Software Level

To view a summary report on the Allison HUB, go to Engineering > ACCT > Summary Report (refer to Figure 1). From there, type in the TCM SN. This can be exported as either an HTML or an Excel® file.

The software level can be found in the first four digits of the vocational model Calibration Identification Number (CIN), as shown in Figure 2.

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Please Note: Allison Transmission Service Information Letters are intended for use by professional, trained technicians, not for the "do-it-yourselfer." They are written to inform those technicians of conditions that may occur on some transmission models (or serial numbers ranges) or to provide information that could assist in the proper servicing of a specific Allison transmission. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, do not assume that the Service Information Letter applies to your transmission, or that your transmission has the condition described. Product evolution and information updates are inevitable. Please see your authorized Allison Transmission service leader or distributor to understand if your particular transmission may benefit from the information contained within the Service Information Letter.



Figure 1. Summary Report in ACCT

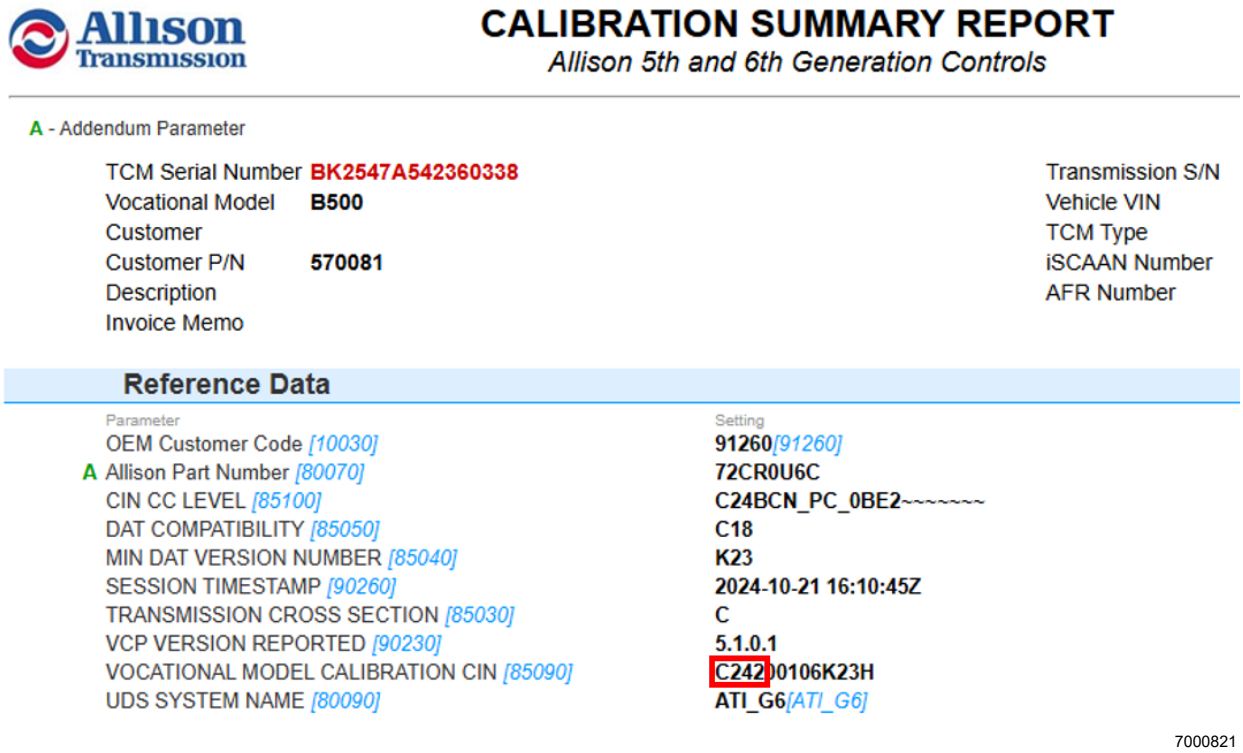
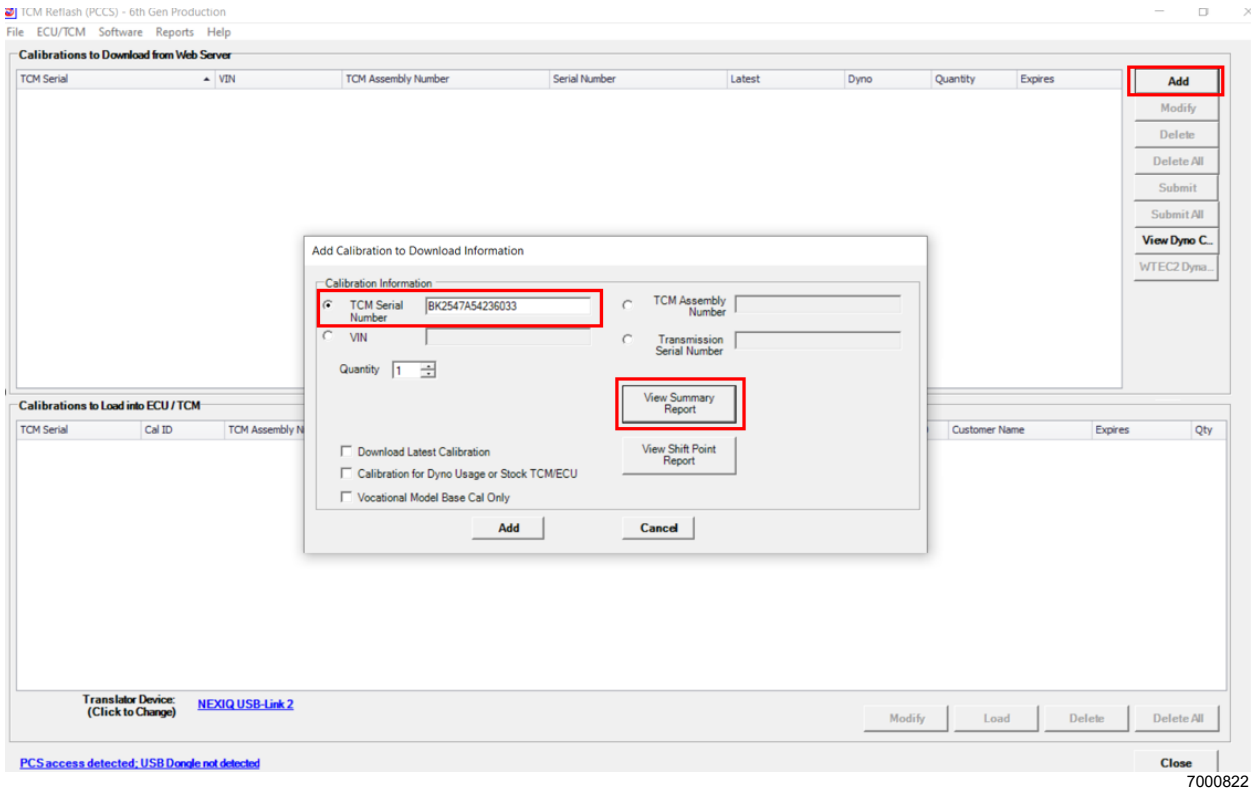


Figure 2. Verifying Software Level

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To view the summary report within TCM Reflash, open the tool and then select ADD to the right. In the popup window, type in the TCM Serial Number (SN) and select VIEW SUMMARY REPORT. This will launch ACCT and allow the summary report to be exported from there.

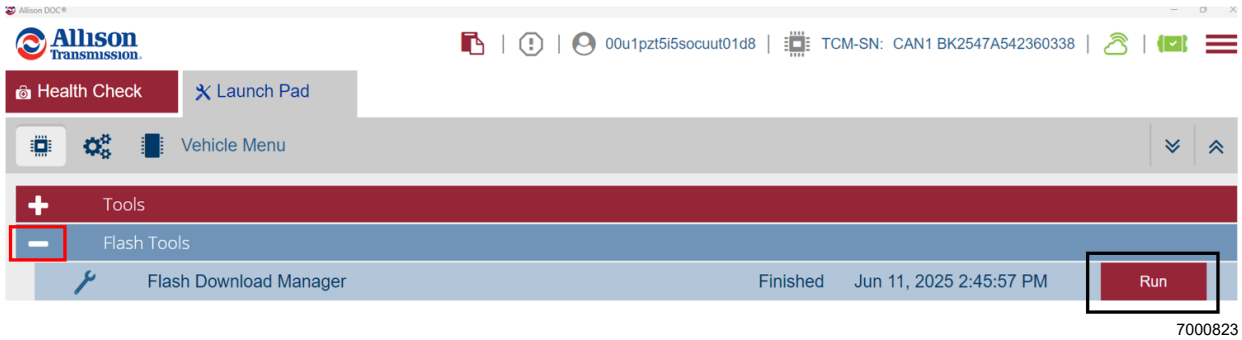


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Figure 3. Summary Report in TCM Reflash

New Service Tools

After the software level has been confirmed, connect to Allison DOC to reprogram. Navigate to the launch pad and expand the Flash Tools drop down. Click RUN next to Flash Download Manager (refer to Figure 4).



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Figure 4. Opening Flash Manager

To add a calibration, click the ADD button on the bottom right (refer to Figure 5).

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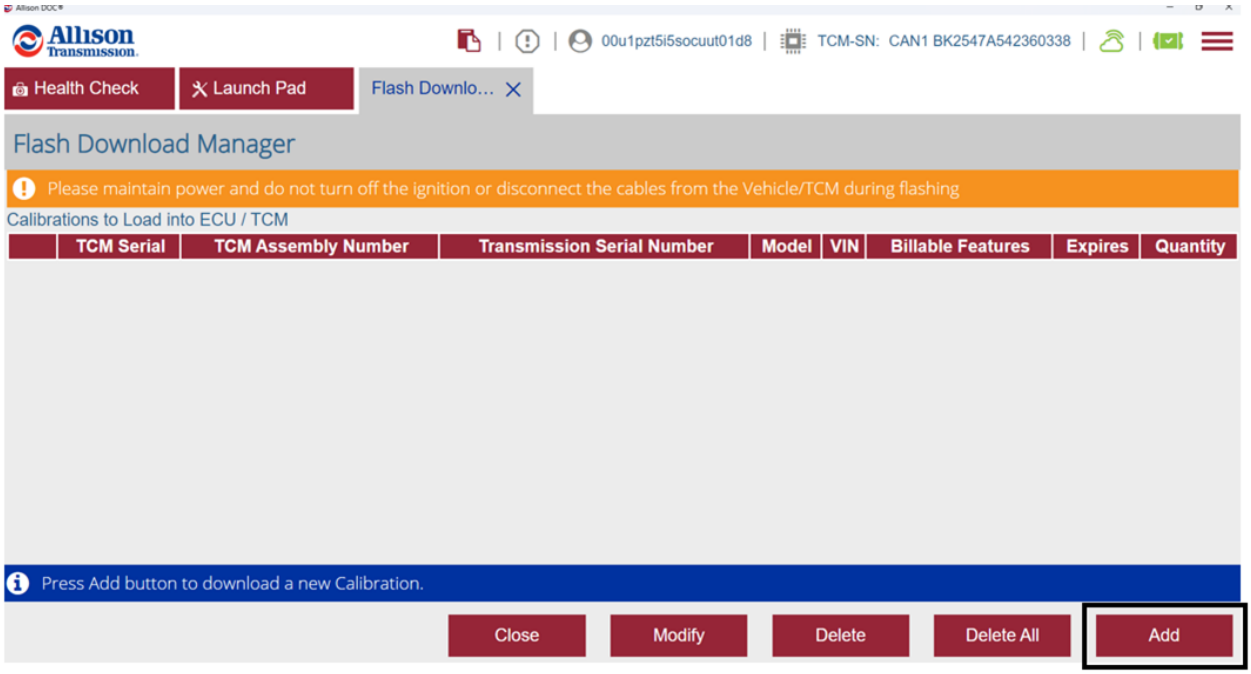


Figure 5. Adding Calibration

To update the TCM software, select TCM SERIAL NUMBER for the Calibration Information Type. Type in the TCM SN and then select the check box next to Download Latest Calibration (refer to Figure 6).

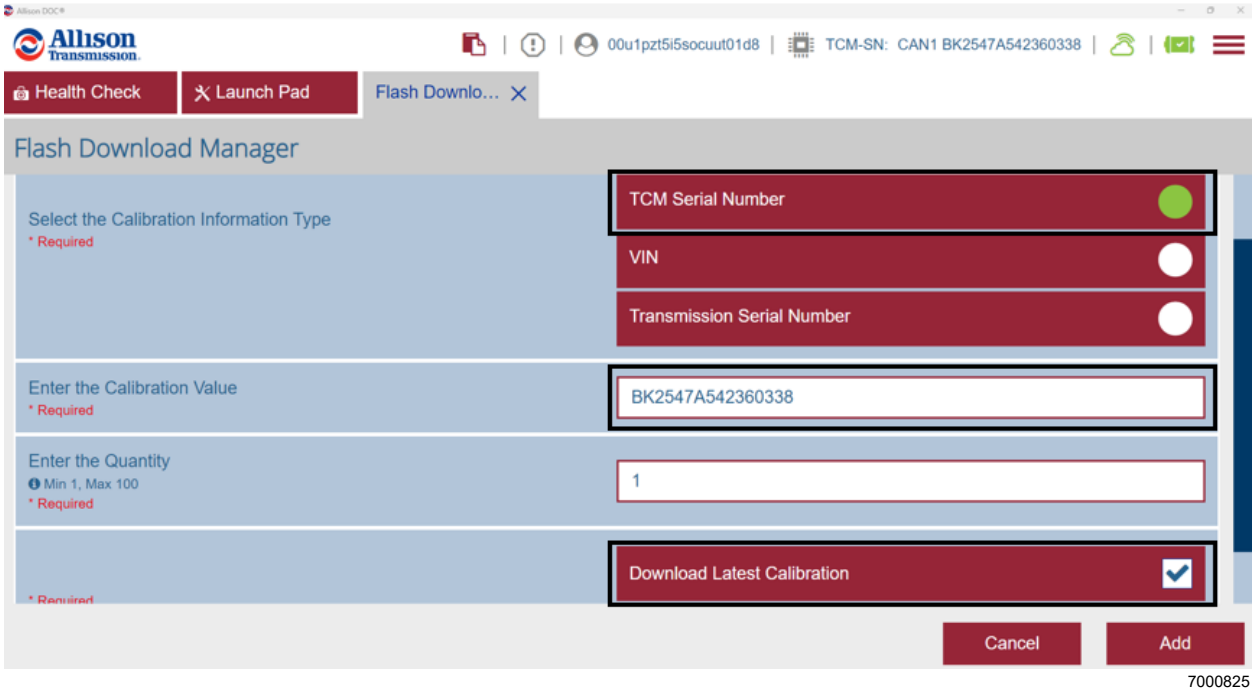


Figure 6. Updating Software

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NOTE: The Download Latest Calibration option should only be used when there is a specific need to update the software.

After the programming event is complete, verify that the software is at 261 or later by reading the Calibration ID in the TCM Information menu (refer to Figure 7).

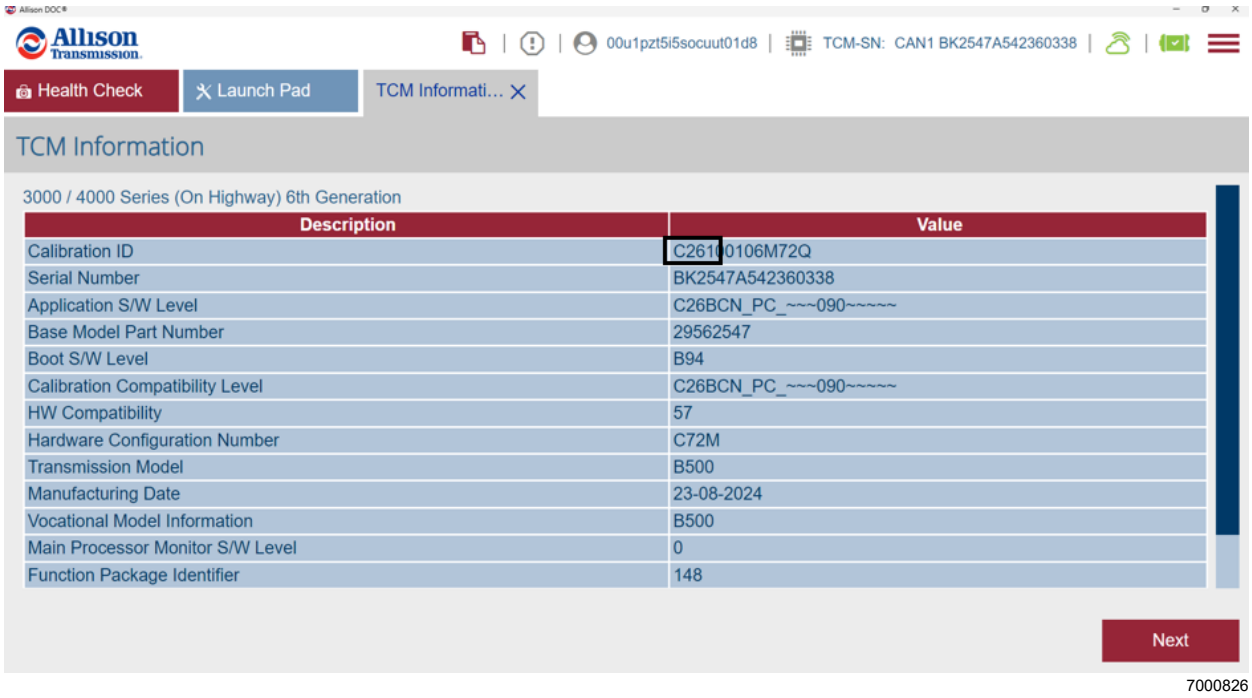


Figure 7. Updated Software in Allison DOC

Prior Service Tools

To update the TCM software, open TCM Reflash and click ADD (refer to Figure 8). In the popup window, type in the TCM SN, check the box next to Download Latest Calibration, and click ADD.

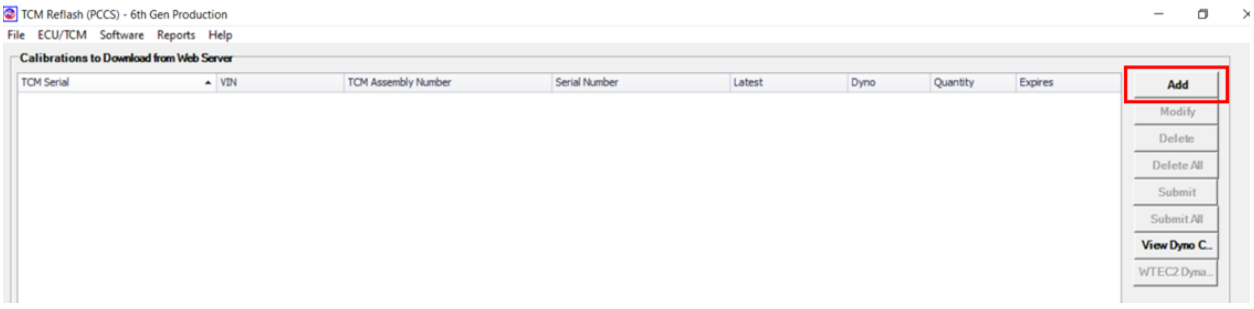


Figure 8. Adding Calibration in TCM Reflash

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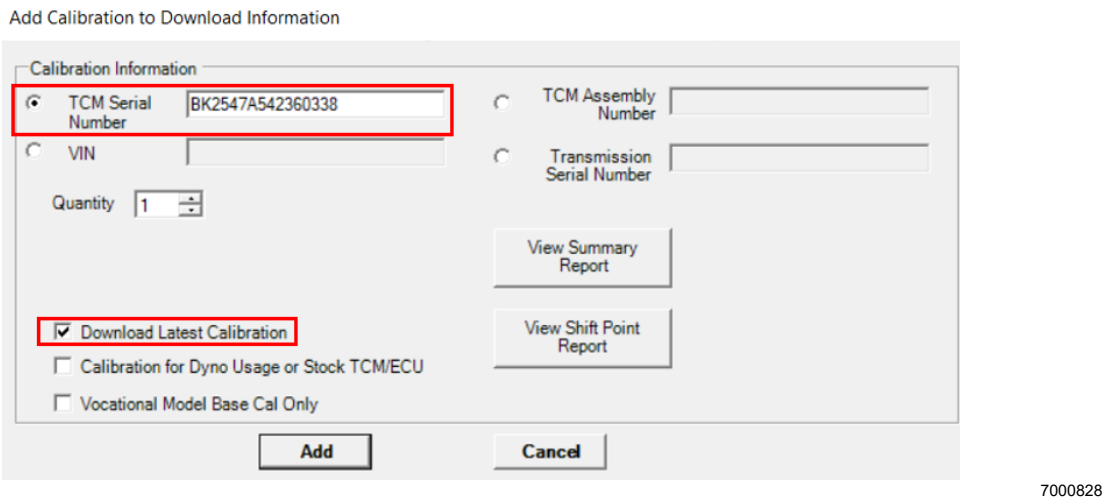
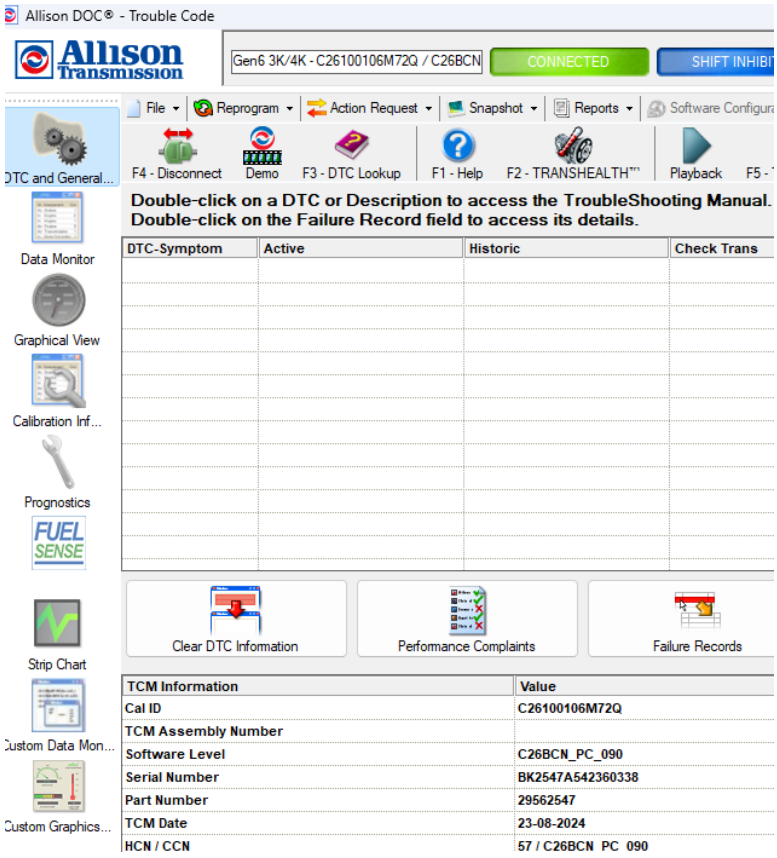


Figure 9. Downloading Latest Software

NOTE: The Download Latest Calibration option should only be used when there is a specific need to update the software.

Next, connect to the TCM with Allison DOC and verify that the update was successful and the TCM software is at 261 or later (refer to Figure 10).

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Figure 10. Current Software Level Example in Allison DOC

Claim Submittal Information

The actions described in this document will be covered by the standard warranty, supplemental, or EC coverage, whichever is relevant on your Repair Order Open Date. If the transmission no longer has an active coverage, this action will not be covered by warranty.

Include a screenshot of the Allison DOC DTC and General Information page, showing the TCM serial number and CAL ID fields prior to updating the calibration as shown in Figure 2.

Table 1 Claim Information

Claim Type	Machine
Primary Failed Part (PFP)	400
PFP Serial Number	TCM Serial Number shown in DOC Snapshot

Include reference to this SIL in the 4WARD Work Performed Comments field with your normal complaint, cause, and correction narrative (refer to Figure 11).

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Figure 11. Work Performed Comments

Table 2 Labor Codes/Hours

Labor Code	Labor Hours	Labor Operation
00096501	1.0	Recalibrate TCM
00096400	0.5	Test Drive

Any additional parts, labor, or net items required to complete this action must be justified in the Work Performed Comments field of the claim.

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