



NUMBER: 21-020-22 REV. A

GROUP: 21 - Transmission and Transfer Case

DATE: November 1, 2022

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This bulletin supersedes Technical Service Bulletins (TSBs) 21-020-22, date of issue July 12, 2022, 21-001-21, date of issue January 23, 2021 and 21-006-21, date of issue February 13, 2021, which should be removed from your files. All revisions are highlighted with **asterisks**** and include additional symptom/conditions and LOP.**

This Technical Service Bulletin has also been released as a Rapid Service Update (RSU) 19-095, dated November 09, 2019. All applicable Sold and Un-Sold RSU VINs have been loaded. To verify this RSU service action is applicable to the vehicle, use VIP or perform a VIN search in DealerCONNECT/Service Library. All repairs are reimbursable within the provisions of warranty. This RSU will expire 18 months after the date of issue.

SUBJECT:

Flash: Transmission Control Module (TCM) Updates

OVERVIEW:

This bulletin involves reprogramming the TCM with the latest available software.

MODELS:

2019	(DD)	RAM 3500 Cab Chassis
2019	(DP)	RAM 4500/5500 Cab Chassis
2019	(D2)	RAM 3500 Pickup

NOTE: This bulletin applies to vehicles within the following markets/countries: North America and Enlarged Europe.

NOTE: This bulletin applies to vehicles equipped with the following:

- **D2 vehicles equipped with an 6.7L I6 Cummins HO Turbo Diesel Engine (Sales Codes ETL, or ETM) and an 6-SPD Auto Aisin AS69RC HD Transmission (Sales Code DF2).**
- **DD/DP vehicles equipped with an 6.7L I6 Cummins Turbo Diesel Engine (Sales Code ETN) or with an 6.4L V8 Heavy Duty Hemi Engine (Sales Code ESB) and an 6-SPD Auto Aisin AS69RC HD Transmission (Sales Code DF2) or an 6-SPD Auto Aisin AS66RC HD Trans (Sales Code DF3).**

SYMPTOM/CONDITION:

The customer may notice one or more of the following:

- ****Harsh shifts.**
- **Poor shift quality, with light pedal. (Sales Codes ETM and ETN Only).**
- **Poor shift quality, 32-48 kph (20-30 mph), at low rpm with light to medium pedal apply, typically tipping in from zero pedal. (Sales Codes ETM and ETN Only).**
- **Coasting shift bump with exhaust brake and/or tow/haul active. (Sales Codes ETM and ETN Only).**
- **Poor shift quality, often when increasing pedal during a shift. (Sales Code ESB Only).**

- Squawk/chirp/squeak type noise during a 3-4 upshift. **(D2 Only)**.
- Poor 1-2 upshift quality. **(D2 with ETM or DD/DP with Sales Code ESB Only)****.
- When decelerating from a 1 to 2 gear shift, the vehicle may have a harsh shift.
- From a 1 to 2 gear change there may be a perceived bump feeling, while having a light pedal **(Sales Codes ETL and ETN Only)**.
- A harsh shift from a 2 to 3 gear shift while at almost or wide open throttle.
- A harsh shift from a 3 to 4 shift and heavy on the pedal, lifting off the pedal, then back on the pedal again.
- While coasting down a grade, an abrupt deceleration may be felt.
- A clunk heard when shifting from park to reverse or drive.
- Cold engine flare during a shift.
- A delay when coasting down, vehicle is in a downshift at low speeds and then trying to accelerate. (The vehicle will have a hesitation as the vehicle tries to change gears to accommodate the new pedal demand).
- Excessive shifting **(DD and DP Only)**.
- Engine flare caused by the transmission releasing the clutch too early during a 1 to 2 shift.
- Poor shift quality.
- Shift or gear hunting.
- A harsh 2-1 shift.
- Hesitation in up-shifts and/or down-shifts.
- Shudder and/or clunk when shifting into gear.
- The 6-4 and 5-3 shift may have a bump.
- Some 2-3, 3-4 and 4-5 shifts may “flare” when cold.
- Coast down bump.

The following software enhancements are available:

- Stored faults can only be cleared by a diagnostic scan tool, this software will allow the TCM to self clear.
- 2-1 coast down-shift improvements.
- 1-2/2-3/3-4/4-5 and 5-6 shift improvements.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/Service Library, verify all related systems are functioning as designed. If Diagnostic Trouble Codes (DTCs) or symptom conditions, other than the ones listed are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If the customer describes the symptom/condition listed above, perform the Repair Procedure.

REPAIR PROCEDURE:

NOTE: Install a battery charger to ensure battery voltage does not drop below 13.2 volts. Do not allow the charging voltage to climb above 13.5 volts during the flash process.

NOTE: If this flash process is interrupted/aborted, the flash should be restarted.

1. Reprogram the TCM with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's “HELP” tab.
2. Once programming is complete, perform the “Quick Learn” procedure using the wiTECH.
3. Clear any DTCs that may have been set in any modules due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow them to be cleared.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-05-RT	Module, Transmission Control (TCM) - Reprogram and Perform Quick Learn Procedure (0 - Introduction)	2 - Automatic Transmission	0.4 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 5 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

FAILURE CODE:

The dealer must use failure code CC with this Technical Service Bulletin.

- If the customer's concern matches the SYMPTOM/CONDITION identified in the Technical Service Bulletin, failure code CC is to be used.
- When utilizing this failure code, the 3C's (customer's concern, cause and correction) must be provided for processing Technical Service Bulletin flash/reprogramming conditions.

CC	Customer Concern
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