



**NUMBER:** 08-144-22

**GROUP:** 08 - Electrical

**DATE:** July 30, 2022

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**This bulletin supersedes Technical Service Bulletin (TSB) 08-067-21, date of issue April 28, 2021, which should be removed from your files. All revisions are highlighted with **\*\*asterisks\*\*** and include additional model year, Diagnostic Trouble Code (DTC), build date, sales code and LOP.**

**SUBJECT:**

Flash: Drivetrain Control Module (DTCM) Diagnostic and System Improvements

**OVERVIEW:**

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

**MODELS:**

2019 - **\*\*2022\*\*** (DT) RAM 1500 Pickup

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

**NOTE: This bulletin applies to vehicles built on or before **\*\*April 26, 2022 (MDH 0426XX)\*\*** equipped with Elec Shift On Demand Transfer Case (Sales Code DH8) or Elec Shift-On-The-Fly P/Time T/Case (Sales Code DH9) with or without E-Locker Rear Axle (Sales Code DSH) or Anti-Spin Differential Rear Axle (Sales Code DSA) or Conventional Differential Rear Axle (Sales Code DS8) or **\*\*Elect Full-Time 4wd-Mode Only T/Case (Sales Code DHZ).\*\*****

**SYMPTOM/CONDITION:**

The technician may find one or more of the following DTCs:

- **\*\*C1415-92 - Transfer Case Motor Current-Performance or Incorrect Operation.\*\***
- U1440 - Implausible Transfer Case Ratio High Received.
- U0403-00 - Implausible Data Received From T-case.
- C1403-92 - Transfer Case Range Position Sensor-Performance Or Incorrect Operation **(2019-2020 Vehicles Only).**

**NOTE: If only DTC C1403 is present, follow normal diagnostic procedures before updating the DTCM.**

In addition the customer may describe one or more of the following:

- Traction Control System light is illuminated.
- A driveline bump can be heard/felt occasionally when the driver is steady on the throttle at about 20-30% on a flat road while in 4WD AUTO **(2019-2020 Vehicles Only).**
- An excessive electric motor clicking sound from the middle of the vehicle/transfer case area, when on and off the throttle **(2019-2020 Vehicles Only).**
- An excessive electric motor clicking sound with steering wheel movement, most notable in parking lot or low speed maneuvering **(2019-2020 Vehicles Only).**

- A “Service 4WD” message/fault without commanding a transfer case shift **(2019-2020 Vehicles Only)**.

**NOTE: If only the “Service 4WD” message/fault is displayed in the Instrument Panel Cluster (IPC) and no other symptom/conditions are present, follow normal diagnostic procedures before updating the DTCM (2019-2020 Vehicles Only).**

- The blinking of the ‘4WD Low’ and ‘4WD High’ indicator lights at the same time, on the transfer case selector switch.

**NOTE: If both 4WD indicator lights on the transfer case selector switch are blinking and no other symptom/conditions are present, follow normal diagnostic procedures before updating the DTCM (2019-2020 Vehicles Only).**

- During highway/freeway speeds, a bump in the driveline may be felt. This could also be described as a harsh transmission shift **(2019-2020 Vehicles Only)**.

### ***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 DTCs or symptom conditions, other than the ones listed above 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 or if the technician finds the DTC, 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 DTCM with the latest available software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application’s “HELP” tab.
2. Clear all DTCs that may have been set in any module 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     |
|---------------------|-------------------------------------------------------------------|---------------------------------|------------|
| **18-19-07-AE       | Module, Drive Train Control (DTCM) - Reprogram (0 - Introduction) | 6 - Electrical and Body Systems | 0.2 Hrs.** |

**NOTE:** The expected completion time for the flash download portion of this procedure is approximately 3 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 Service Bulletin.

- If the customer's concern matches the SYMPTOM/CONDITION identified in the 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 Service Bulletin flash/reprogramming conditions.

|    |                  |
|----|------------------|
| CC | Customer Concern |
|----|------------------|