



**NUMBER:** 08-014-22

**GROUP:** 08 - Electrical

**DATE:** January 15, 2022

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This Technical Service Bulletin (TSB) has also been released as a Rapid Response Transmittal (RRT)/Rapid Service Update (RSU) 22-006, date of issue January 15, 2022. All applicable Sold and UnSold RRT/RSU VINs have been loaded. To verify this RRT/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 RRT/RSU will expire 18 months after the date of issue.

# SUBJECT:

Flash: Drivetrain Control Module (DTCM) Updates

## **OVERVIEW:**

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

## **MODELS:**

2022 (WS)

Grand Wagoneer/Wagoneer

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

NOTE: This bulletin applies to vehicles built on or before October 15, 2021 (MDH 1015XX) equipped with a 2 Speed On Demand Transfer Case (Sales Code DKA) or a Single Speed On Demand Transfer Case (Sales Code DHR).

#### SYMPTOM/CONDITION:

The customer may describe one or more of the following:

- "Service 4WD warning" displayed in the Instrument Panel Cluster (IPC).
- A binding or heavy steering feel when making sharp turns at low speeds.

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find that one or more of the following Diagnostic Trouble Codes (DTCs) have been set:

- C1423-64 Transfer Case Internal Performance-Signal Plausibility Failure.
- C149E-64 Transfer Case Motor Position Sensor-Signal Plausibility Failure.

## **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 a customer's VIN is listed in VIP or your RRT/RSU VIN list, perform the repair. If any vehicle not on the VIN list exhibits the symptom/condition or DTC, perform the repair.

### 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. Is the vehicle on the RRT/RSU VIN list?
  - YES>>> Proceed to Step 2.
  - NO>>> Proceed to Step 3.
- 2. Does the DTCM have the latest software already installed?
  - YES>>> This bulletin has been completed. Use inspect LOP (18-19-07-93) to close the active RRT/RSU.
  - NO>>> Proceed to Step 3.
- 3. 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.
- 4. Use wiTECH to perform a NVM (Non Volatile Memory) clear routine, which is found in the DTCM Misc. Functions tab, followed by a key off cycle.
- 5. 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
18-19-07-93	Module, Drive Train Control (DTCM) - Inspect (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.
18-19-07-94	Module, Drive Train Control (DTCM) - Inspect and 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 1 minute. Actual flash download times may be affected by vehicle connection and network capabilities.

## FAILURE CODE:

The dealer must choose which failure code to use depending on if this is a Rapid Response Transmittal (RRT)/Rapid Service Update (RSU) or Technical Service Bulletin.

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- The "RF" failure code is required for essential module flash/reprogramming and can only be used after confirmation that the VIN is included on the RRT/RSU.
- The failure code "RF" (Required Flash) can no longer be used on Technical Service Bulletin flashes. The "RF" failure code must be used on an RRT/RSU.
- 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 must be supplied.

RF	Required Flash - RRT/RSU
CC	Customer Concern