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GROUP: 08 - Electrical

DATE: November 30, 2022

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This bulletin supersedes Technical Service Bulletin (TSB) 08-103-22 REV. A, date of issue June 18, 2022, which should be removed from your files. All revisions are highlighted with **asterisks**** and include note updates, additional repair procedure steps and LOP.**

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 21-099, date of issue July 24, 2021. 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: Drivetrain Control Module (DTCM) Updates

OVERVIEW:

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

MODELS:

2021 (WL) Jeep Grand Cherokee

NOTE: This bulletin applies to vehicles within the following markets/countries: North America, India/Asia Pacific, Enlarged Europe and Middle East/Africa.

NOTE: The TSB portion of this bulletin applies to vehicles built on or before December 01, 2021 (MDH 1201XX) equipped with Quadra-Trac I (R) 4wd System (Sales Code DHY).

NOTE: The RSU portion of this bulletin applies to vehicles built on or before July 15, 2021 (MDH 0715XX) equipped with Quadra-Trac II (R) 4wd System (Sales Code DKA) or Quadra-Trac I (R) 4wd System (Sales Code DHY).

SYMPTOM/CONDITION:

Customers may experience a "Service 4WD message" illumination. Upon further investigation the technician may find one or more of the following DTCs have been set:

- C1472-92 - Transfer Case Clutch Control-Performance Or Incorrect Operation (**Sales Code DHY only**).

NOTE: If DTC C1472-92 is present (Sales Code DHY only), proceed to [Step 4](#) of the Repair Procedure.

- C1463-94 - Front Axle Disconnect Control-Unexpected Operation.

The customer may also experience the following:

- Service 4WD light illuminated.
- Front axle does not engage when selected.

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 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:**(Sales Code DHY)**

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, **Check DTCM part number. If the flash part number can be read, the flash should be restarted.**

CAUTION! The supplier of this DTCM ECU has determined this DTCM may not be abort recoverable if the flash process is interrupted or aborted during the flash reprogramming process. This is an DTCM ECU issue and should not be mistaken for a wiTECH tool issue.

1. ****Is the vehicle on the 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 (18-19-07-90) to close the active RSU.
 - NO>>> Proceed to [Step 3](#).
3. Using wiTECH create a vehicle scan report.
4. With the engine running, run the DTCM routine "DTCM Replacement with Value Transfer" using the option "Save values from the Original DTCM". Choose the "1-speed Transfer case".
5. 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.
6. Perform a sleep cycle. Make sure all accessories are off, turn the ignition off and close all doors. The key fob must be at least 20 feet from the vehicle, while monitoring the PRNDL lights to ensure they have turned off, this will indicate that the bus is in a sleep cycle.

NOTE: wiTECH tool must be removed from OBD port.

7. Run the DTCM routine "DTCM Replacement with Value Transfer using the option "Write values to the New DTCM" to restore the values saved in [Step 4](#). Choose the "1-speed Transfer case".

NOTE: If [Step 4](#) is missed or fails, run the DTCM "Program Transfer case Classification Code" routine instead. If a wi-TECH time out or negative response occurs, please refer to available SOL for additional guidance.

8. Run the "PROXI Configuration Alignment" routine, in Guided Diagnostics.

9. Perform a sleep cycle to ensure the module is updated correctly. **Make sure all accessories are off, turn the ignition off and close all doors. The key fob must be at least 20 feet from the vehicle, while monitoring the PRNDL lights to ensure they have turned off, this will indicate that the bus is in a sleep cycle.**

NOTE: wiTECH tool must be removed from OBD port.

10. Run the DTCM “First Calibration” routine for the “1-speed Transfer case”. If this function has timed out, please request (or repeat) the function again with engine RUNNING and Transmission in Neutral with the EPB (Electronic park Brake) ON.
11. 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. This bulletin has been completed. Ensure the EPB is released.
12. If the flashing process is unsuccessful and DTCM is not responsive, replace the DTCM; if DTCM is not available, replaced the Transfer case.
13. To perform the mechanical verification check in wiTECH, run the DTCM routine “Power Down Calibration”.
14. If C1472-92 code returns, then proceed with standard DTCM Diagnostics.**

REPAIR PROCEDURE (For C1463-94):

(Sales Code DKA)

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.

CAUTION! The supplier of this DTCM ECU has determined this DTCM may not be abort recoverable if the flash process is interrupted or aborted during the flash reprogramming process. This is an DTCM ECU issue and should not be mistaken for a wiTECH tool issue.

1. Is the vehicle on the 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 (18-19-07-90) to close the active 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. Run the” PROXI Configuration Alignment” routine, in Guided Diagnostics.
5. Perform a sleep cycle to ensure the module is updated correctly. Make sure all accessories are off, turn the ignition off and close all doors. The key fob must be at least 20 feet from the vehicle, while monitoring the PRNDL lights to ensure they have turned off, this will indicate that the bus is in a sleep cycle.
6. 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.

7. Perform a sleep cycle to ensure the module is updated correctly. **Make sure all accessories are off, turn the ignition off and close all doors. The key fob must be at least 20 feet from the vehicle, while monitoring the PRNDL lights to ensure they have turned off, this will indicate that the bus is in a sleep cycle.** This bulletin has been completed.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-07-90	Module, Drive Train Control (DTCM) - Inspect (0 - Introduction)	3 - Driveline	0.2 Hrs.
18-19-07-AF	Module, Drive Train Control (DTCM) - Inspect and Reprogram (Sales Code DHY only) (0 - Introduction)	3 - Driveline	0.5 Hrs.
18-19-07-9E	Module, Drive Train Control (DTCM) - Inspect and Reprogram (Sales Code DKA only) (0 - Introduction)	3 - Driveline	0.3 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 2 minutes. 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 Service Update (RSU) or Technical Service Bulletin.

- 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 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 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 - RSU
CC	Customer Concern