

NUMBER: 21-016-16

GROUP: Transmission and

Transfer Case

DATE: April 21, 2016

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THIS BULLETIN SUPERSEDES SERVICE BULLETINS 21-043-15, DATED JUNE 19, 2015, AND 21-051-15 DATED AUGUST 21, 2015, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS** AND INCLUDE ADDITIONAL DIAGNOSTIC TROUBLE CODES, SYMPTOM/CONDITIONS, AND A NEW LABOR OP.

FOR HELP WITH USING WITECH FOR ECU FLASH REPROGRAMMING, CLICK ON THE APPLICATION'S "HELP" TAB.

THE WITECH SOFTWARE IS REQUIRED TO BE AT THE LATEST RELEASE BEFORE PERFORMING THIS PROCEDURE.

SUBJECT:

Flash: Transmission Diagnostic And Shift Enhancements

OVERVIEW:

This bulletin involves reprogramming the Transmission Control Module (TCM) with the latest available software.

MODELS:

2014 (KL) Jeep Cherokee

NOTE: This bulletin applies to NAFTA vehicles equipped with a **2.4L I4 MultiAir Engine (Sales Code ED6)** and a 948TE 9-Speed Transmission (Sales Codes DFJ or DFH).**

NOTE: This bulletin applies to EMEA and NAFTA vehicles equipped with a **3.2L V6 24V VVT Engine (Sales Code EHB)** and a 948TE 9-Speed Transmission (Sales Codes DFJ or DFH).**

SYMPTOM/CONDITION:

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

- **P0887-00 TCM Power Control Circuit High (Sales Codes ED6 and EHB).
- P061B-00 Internal Control Module Torque Calculation Performance (Sales Codes ED6 and EHB).**
- P0711-00 Transmission Fluid Temperature Sensor A Circuit Range-Performance.
- P072F-00 Stuck In Gear 4.
- P076F-00 Gear 7 shift Incorrect Ratio.
- P0810-00 Clutch Position Control Error.
- P1CC9-00 Unable To Engage Gear.
- P0734-00 Gear 4 Shift Incorrect Ratio.

In addition, the following transmission shift and performance improvements are included in this software release:

- **2-1 downshift quality when using Electronic Range Shifter (ERS) mode.
- Garage shifts (Park to Reverse or Drive) (Sales Code EHB).
- Poor 3-1 downshift quality when coasting to a stop (Sales Code ED6).**
- 3-2 downshift delay while driving on inclines.
- Overall coastdown shift quality.
- Throttle response and performance feel.
- Management and prevention of busy shifting.
- Lift foot/change mind shift quality.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine 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 above 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. Using the wiTECH, record the Clutch Fill and Fast Fill counter information.
- 2. 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.
- 3. Using wiTECH, Perform the TCM "VIN Verification" routine located in the TCM "Misc Functions" menu and follow the on-screen prompts.
- 4. Using wiTECH, perform a "PROXI Configuration Alignment" routine located in the "Vehicle Preparations" tab on the main vehicle view screen.

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- 5. Turn the ignition off and disconnect wiTECH for 1 minute. Open and close the driver's door and let all modules go to sleep.
- 6. Turn the ignition back on and reconnect wiTECH.
- 7. From the vehicle view screen, select "PROXI Configuration Alignment" routine again in the "Vehicle Preparations" tab and verify all modules are properly aligned.
- 8. 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.

NOTE: The Powertrain Control Module (PCM) must be updated to the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the PCM software.

- 9. Using wiTECH, compare the current Clutch Fill and Fast Fill counter information and compare that to the values recorded in Step #1. Did all fill counters reset to 0?
 - a. YES >>> Perform the 9-Speed Adaptation Drive Learn Procedure. Refer to all applicable published service bulletins regarding the 9-Speed Adaptation Drive Learn procedure for detailed repair procedures and labor times.
 - b. NO >>> Procedure is complete. No further action is required.
- 10. Perform the 9-Speed Adaptation Drive Learn Procedure. Refer to all applicable published service bulletins regarding the 9-Speed Adaptation Drive Learn procedure for detailed repair procedures and labor times.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-05-D5	Module, Transmission Control (TCM) - Reprogram (1 - Semi-Skilled)	2 - Automatic Transmission	0.3 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 4 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

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FAILURE CODE:

The dealer must choose which failure code to use. If the customer came in with an issue and if the dealer finds a software update to correct that issue, use failure code CC, for all other use failure code RF.

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- If the customer's concern matches the SYMPTOM/CONDITION identified in the Service Bulletin, failure code CC is to be used.
- If an available flash is completed while addressing a different customer concern, failure code RF is to be used.

CC	Customer Concern
RF	Routine Flash