

- **GROUP:** 21 Transmission and Transfer Case
  - DATE: May 31, 2017

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-016-16 REV. A DATED OCTOBER 28, 2016, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDES AN ADDITIONAL DIAGNOSTIC TROUBLE CODE (DTC), FAILURE STATEMENT AND LOP.

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 vehicles within the following markets/countries: NAFTA and EMEA.
- NOTE: This bulletin applies to vehicles equipped with a 3.2L V6 24V VVT Engine (Sales Code EHB) or a 2.4L I4 MultiAir Engine (Sales Code ED6) 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 DTCs have been set:

- \*\*P0887-00 TCM Power Control Circuit High.\*\*
- P061B-00 Internal Control Module Torque Calculation Performance.
- 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:

- Transmission shift quality enhancement in conjunction with Powertrain Control Module (PCM) reprogram.
- 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 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 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.
- 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-FB	Module, Transmission Control (TCM) - Reprogram (Includes VIN Verification & Proxi-Align) (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.

## 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	
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